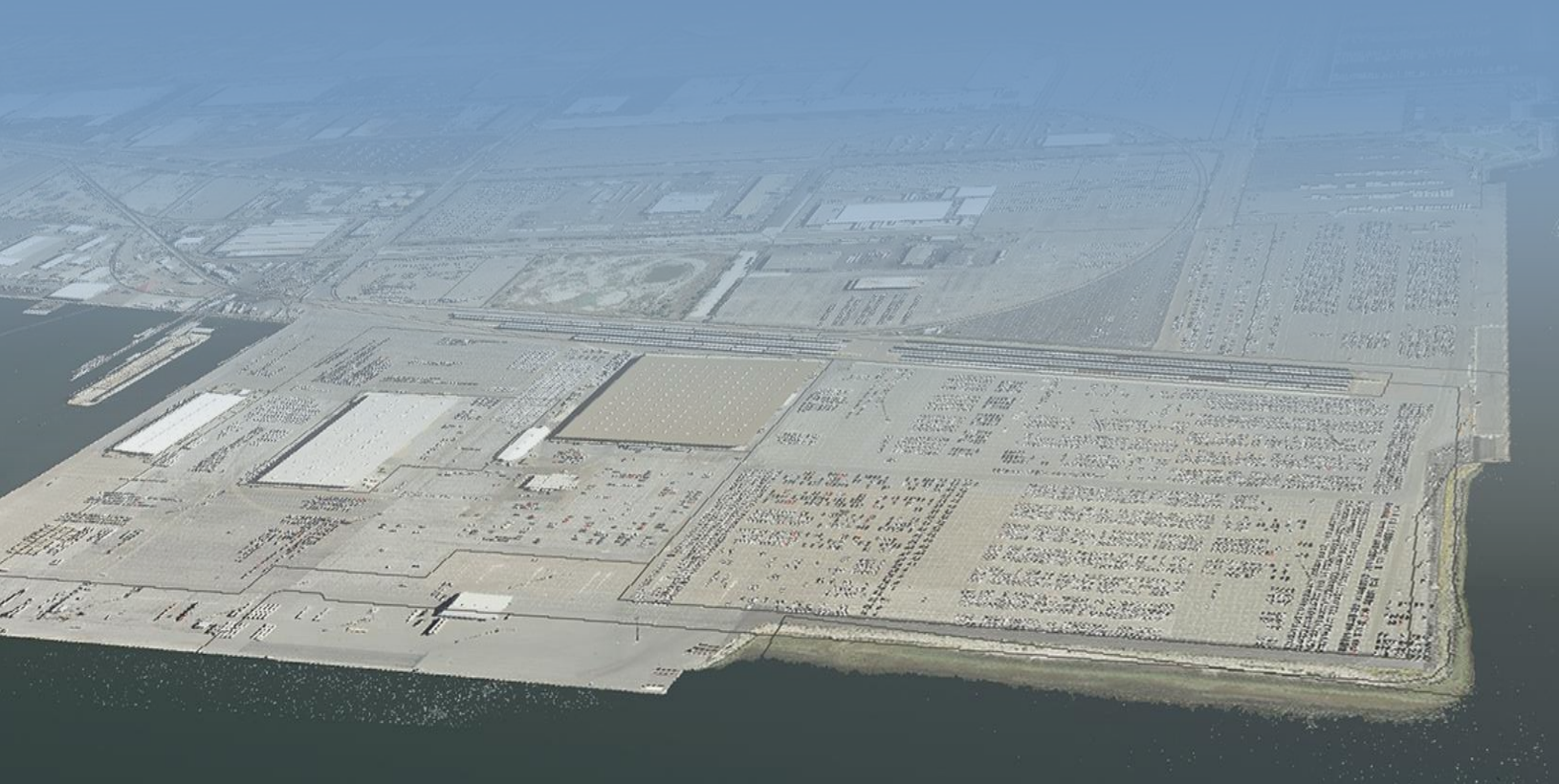


# **Draft Environmental Impact Report National City Marine Terminal Tank Farm Paving and Street Closures Project & Port Master Plan Amendment**

UPD #EIR-2014-188; SCH# 2014121046



April 2016



Volume I of II





**DRAFT**

**ENVIRONMENTAL IMPACT REPORT  
NATIONAL CITY MARINE TERMINAL TANK  
FARM PAVING AND STREET CLOSURES PROJECT  
& PORT MASTER PLAN AMENDMENT**

**VOLUME I OF II**

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**April 2016**



ICF International. 2016. Environmental Impact Report  
National City Marine Terminal Tank Farm Paving and Street Closures  
Project & Port Master Plan Amendment. Draft. April. (ICF 172.14.) San  
Diego, CA. Prepared for San Diego Unified Port District, San Diego, CA .

# Contents

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List of Tables .....	vi
List of Figures.....	xi
List of Acronyms and Abbreviations.....	xiii
<b>Executive Summary .....</b>	<b>ES-1</b>
Introduction.....	ES-1
Project Description .....	ES-1
Overview .....	ES-1
Project Site Locations.....	ES-2
Project Components .....	ES-2
Incorporation of District-Owned Uplands into the Port Master Plan and Port Master Plan Amendment Component .....	ES-4
Project Operations .....	ES-6
Vehicle Processing .....	ES-7
Vessels.....	ES-9
Rail .....	ES-9
Project Construction.....	ES-9
Project Objectives.....	ES-10
Areas of Known Controversy/Issues Raised by Agencies and the Public .....	ES-10
Issues to be Resolved .....	ES-11
Summary of Project Impacts.....	ES-11
Summary of Project Alternatives .....	ES-12
<b>Chapter 1      Introduction .....</b>	<b>1-1</b>
1.1      Overview .....	1-1
1.2      Purpose of the California Environmental Quality Act and the Environmental Impact Report .....	1-2
1.3      Intended Uses of the Environmental Impact Report.....	1-3
1.3.1      Agencies Expected to Use this Draft Environmental Impact Report .....	1-3
1.4      Scope and Content of the Draft Environmental Impact Report .....	1-5
1.4.1      Comments Received in Response to the Notice of Preparation/Initial Study.....	1-6
1.5      Organization of the Draft EIR.....	1-13
<b>Chapter 2      Environmental Setting .....</b>	<b>2-1</b>
2.1      Introduction .....	2-1
2.1.1      Project Site Locations.....	2-2

2.2	Background Setting.....	2-2
2.2.1	San Diego Unified Port District .....	2-2
2.2.2	National City Bayfront Planning District 5 of the PMP .....	2-3
2.2.3	Harbor District Specific Area Plan.....	2-3
2.2.4	Project Area .....	2-4
2.3	Existing Setting.....	2-4
2.3.1	Surrounding Conditions .....	2-4
2.3.2	Existing Site Conditions.....	2-5
2.3.3	Existing Port Master Plan Designation.....	2-7
2.3.4	Existing Operations .....	2-8
<b>Chapter 3</b>	<b>Project Description .....</b>	<b>3-1</b>
3.1	Introduction .....	3-1
3.2	Purpose and Need for the Proposed Project.....	3-1
3.3	Project Objectives .....	3-2
3.4	Project Components and Features .....	3-3
3.4.1	Former Tank Farm Component.....	3-3
3.4.2	Street Closures Component.....	3-4
3.4.3	Short-Term Use Permit Sites Component.....	3-4
3.4.4	Former Weyerhaeuser Site Component.....	3-5
3.4.5	Incorporation of District-Owned Uplands into the Port Master Plan and Port Master Plan Amendment Component.....	3-5
3.5	Project Operations .....	3-7
3.5.1	Vehicle Processing .....	3-8
3.5.2	Vessels.....	3-9
3.5.3	Rail .....	3-10
3.6	Project Construction .....	3-10
<b>Chapter 4</b>	<b>Environmental Analysis .....</b>	<b>4-1</b>
	Introduction.....	4-1
	Potential Environmental Impacts .....	4-1
	Format of the Environmental Analysis .....	4-1
	Overview 4-1	
	Existing Conditions .....	4-2
	Applicable Laws and Regulations .....	4-2
	Project Impact Analysis .....	4-2
4.1	Air Quality and Health Risk .....	4.1-1
4.1.1	Overview .....	4.1-1
4.1.2	Existing Conditions.....	4.1-2



4.1.3	Applicable Laws and Regulations.....	4.1-11
4.1.4	Project Impact Analysis.....	4.1-22
4.2	Greenhouse Gas Emissions, Climate Change, and Energy Use.....	4.2-1
4.2.1	Overview .....	4.2-1
4.2.2	Existing Conditions.....	4.2-2
4.2.3	Applicable Laws and Regulations.....	4.2-8
4.2.4	Project Impact Analysis.....	4.2-17
4.3	Hazards and Hazardous Materials .....	4.3-1
4.3.1	Overview .....	4.3-1
4.3.2	Existing Conditions.....	4.3-1
4.3.3	Applicable Laws and Regulations.....	4.3-4
4.3.4	Project Impact Analysis.....	4.3-10
4.4	Hydrology and Water Quality .....	4.4-1
4.4.1	Overview .....	4.4-1
4.4.2	Existing Conditions.....	4.4-1
4.4.3	Applicable Laws and Regulations.....	4.4-3
4.4.4	Project Impact Analysis.....	4.4-11
4.5	Land Use and Planning.....	4.5-1
4.5.1	Overview .....	4.5-1
4.5.2	Existing Conditions.....	4.5-1
4.5.3	Applicable Laws and Regulations.....	4.5-5
4.5.4	Project Impact Analysis.....	4.5-8
4.6	Noise and Vibration .....	4.6-1
4.6.1	Overview .....	4.6-1
4.6.2	Existing Conditions.....	4.6-6
4.6.3	Applicable Laws and Regulations.....	4.6-7
4.6.4	Project Impact Analysis.....	4.6-11
4.7	Transportation, Circulation, and Parking.....	4.7-1
4.7.1	Overview .....	4.7-1
4.7.2	Existing Conditions.....	4.7-1
4.7.3	Applicable Laws and Regulations.....	4.7-13
4.7.4	Project Impact Analysis.....	4.7-14
<b>Chapter 5</b>	<b>Cumulative Impacts .....</b>	<b>5-1</b>
5.1	Introduction .....	5-1
5.2	Cumulative Methodology .....	5-3
5.2.1	Cumulative Projects List.....	5-3
5.3	Cumulative Impact Analysis.....	5-8

5.3.1	Air Quality and Health Risk .....	5-8
5.3.2	Greenhouse Gas Emissions, Climate Change, and Energy Use.....	5-11
5.3.3	Hazards and Hazardous Materials .....	5-15
5.3.4	Hydrology and Water Quality .....	5-17
5.3.5	Land Use and Planning.....	5-19
5.3.6	Noise and Vibration .....	5-20
5.3.7	Transportation, Circulation, and Parking.....	5-24
<b>Chapter 6</b>	<b>Additional Consequences of Project Implementation .....</b>	<b>6-1</b>
6.1	Introduction .....	6-1
6.2	Significant Irreversible Environmental Changes .....	6-1
6.3	Growth-Inducing Impacts .....	6-2
6.3.1	Economic Growth .....	6-2
6.3.2	Population Growth.....	6-3
6.3.3	Construction of Additional Housing.....	6-4
6.3.4	Removal of Obstacles to Population Growth .....	6-4
6.3.5	Summary of Growth-Inducing Impacts.....	6-4
6.4	Effects Not Found to be Significant .....	6-5
6.4.1	Aesthetics.....	6-5
6.4.2	Agriculture and Forestry Resources.....	6-7
6.4.3	Biological Resources .....	6-8
6.4.4	Cultural Resources .....	6-12
6.4.5	Geology and Soils.....	6-15
6.4.6	Hazards and Hazardous Materials .....	6-18
6.4.7	Hydrology and Water Quality .....	6-20
6.4.8	Land Use and Planning.....	6-22
6.4.9	Mineral Resources .....	6-23
6.4.10	Noise .....	6-24
6.4.11	Population and Housing Resources .....	6-24
6.4.12	Public Services.....	6-25
6.4.13	Recreation.....	6-27
6.4.14	Transportation/Traffic .....	6-27
6.4.15	Utilities .....	6-28
<b>Chapter 7</b>	<b>Alternatives to the Proposed Project .....</b>	<b>7-1</b>
7.1	Overview .....	7-1
7.2	Requirements for Alternatives Analysis.....	7-1
7.3	Selection of Alternatives .....	7-1
7.4	Alternatives Considered.....	7-3

7.4.1	Alternatives Considered but Rejected .....	7-3
7.4.2	Alternatives Selected for Analysis.....	7-5
7.5	Analysis of Alternatives.....	7-7
7.5.1	Analysis of Alternative 1—Redevelop NCMT Tank Farm Only (No Renewal of Short-Term Use Permits) .....	7-9
7.5.2	Analysis of Alternative 2—Short-Term Use Permits Only (No NCMT Tank Farm or Street Closures) .....	7-10
7.5.3	Analysis of Alternative 3—Remove Port Parcel 028-007 from Project .....	7-12
7.5.4	Analysis of Alternative 4— No Marine Related Industrial Overlay and No Renewal of Short-term Agreements on Overlay Sites .....	7-14
7.5.5	Analysis of Alternative 5—No Project.....	7-16
7.5.6	Environmentally Superior Alternative .....	7-17
<b>Chapter 8</b>	<b>List of Preparers and Agencies Consulted .....</b>	<b>8-1</b>
8.1	Lead Agency—San Diego Unified Port District .....	8-1
8.2	EIR Preparation—ICF International.....	8-1
8.3	Traffic Report—Chen Ryan Associates.....	8-2
8.4	Agencies, Organizations, and Persons Consulted .....	8-2
<b>Chapter 9</b>	<b>References .....</b>	<b>9-1</b>
<b>Appendix A</b>	<b>Comments Received on the Notices of Preparation</b>	
<b>Appendix B-1</b>	<b>Revised Notice of Preparation/Initial Study, August 2015</b>	
<b>Appendix B-2</b>	<b>Notice of Preparation/Initial Study, December 2014</b>	
<b>Appendix C</b>	<b>Draft Port Master Plan Amendment</b>	
<b>Appendix D</b>	<b>Excerpt of Coastal Commission Report for National City Local Coastal Program</b>	
<b>Appendix E</b>	<b>Air Quality and Greenhouse Gas Calculations</b>	
<b>Appendix F</b>	<b>Noise Modeling</b>	
<b>Appendix G</b>	<b>Transportation and Parking Study</b>	
<b>Appendix H</b>	<b>Train Information and Projections</b>	

# Tables

ES-1	Short-Term Use Permit Parcels, Area, and Current Uses .....	ES-4
ES-2	Pasha Non-Vehicle Throughput for Year 2013 .....	ES-6
ES-3	Pasha Vehicle Throughput for Year 2013 .....	ES-7
ES-4	Criteria to Determine Theoretical Capacity .....	ES-7
ES-5	Comparison of Existing and Proposed Vehicle Throughput for Project Site .....	ES-8
ES-6	Project Impacts and Mitigation Measures.....	ES-15
1-1	List of Required Project Approvals.....	1-4
1-2	Summary of NOP Comments Received.....	1-7
1-3	Document Organization and CEQA Requirements .....	1-13
2-1	Short-Term Use Permit Parcels, Area, and Current Uses .....	2-6
2-2	Land Use Designations for Short-Term Permit Sites.....	2-8
2-3	Pasha Non-Vehicle Throughput for Year 2013 .....	2-9
2-4	Pasha Vehicle Throughput for Year 2013 .....	2-9
2-5	Pasha Vehicle Throughput from 2006–2013 .....	2-10
3-1	Criteria to Determine Theoretical Capacity .....	3-8
3-2	Comparison of Existing and Proposed Vehicle Throughput for Project Site .....	3-9
4.1-1	Summary of Significant Impacts and Mitigation Measures.....	4.1-1
4.1-2	Federal and State Attainment Status for San Diego County.....	4.1-4
4.1-3	Ambient Background Concentrations from Nearby Monitoring Stations .....	4.1-5
4.1-4	Health Effects Summary of the Major Criteria Air Pollutants.....	4.1-9
4.1-5	Estimate of Existing Conditions at the Project Site (pounds per day) .....	4.1-11
4.1-6	Federal and State Ambient Air Quality Standards .....	4.1-13
4.1-7	San Diego County Screening-Level Thresholds .....	4.1-29
4.1-8	Estimate of Construction Emissions (pounds per day) .....	4.1-36
4.1-9	Estimate of Operational Emissions under Unmitigated Project Conditions (pounds per day) .....	4.1-37



4.1-10	Estimate of Operational Emissions under Mitigated Project Conditions (pounds per day) .....	4.1-38
4.1-11	Estimate of Health Risk at Nearby Receptors .....	4.1-43
4.1-12	Modeled CO Levels Measured at Receptors in the Vicinity of the Affected Intersection .....	4.1-43
4.2-1	Summary of Significant Impacts and Mitigation Measures .....	4.2-1
4.2-2	Lifetimes, GWPs, and Abundances of Significant GHGs .....	4.2-4
4.2-3	Global, National, State, and Local GHG Emissions Inventories.....	4.2-5
4.2-4	Estimate of Existing GHG Emissions at the Project Site (metric tons per year).....	4.2-8
4.2-5	GHG Emissions (Metric Tons per Year) by Activity Shown in the CAP .....	4.2-17
4.2-6	Estimate of Construction GHG Emissions (Total Metric Tons) .....	4.2-35
4.2-7	Existing Plus Project-Related GHG Emissions (Metric Tons per Year) with State Measures .....	4.2-36
4.2-8	Existing Plus Project-Related GHG Emissions (Metric Tons per Year) with Mitigation Measures .....	4.2-36
4.2-9	Project Consistency with Applicable Port CAP Measures for 2020 .....	4.2-38
4.2-10	Project Consistency with AB 32 Scoping Plan and Other Measures for 2020 .....	4.2-40
4.2-11	Project Consistency with Port CAP Strategies Beyond 2020 .....	4.2-47
4.2-12	Project Consistency with AB 32 Scoping Plan Strategy Beyond 2020 .....	4.2-51
4.2-13	Project Consistency with Sustainable Freight Strategy and other ARB Strategies Post-2020 .....	4.2-53
4.2-14	Sea Level Rise Elevation and Projections (feet) .....	4.2-57
4.2-15	Estimated Construction Energy Consumption.....	4.2-59
4.2-16	Estimated Annual Operational Energy Consumption .....	4.2-59
4.2-17	Proposed Project Comparison to State CEQA Guidelines Appendix F .....	4.2-60
4.3-1	Summary of Significant Impacts and Mitigation Measures .....	4.3-1
4.3-2	Contamination Sites Within 0.25 Mile of the Project Sites .....	4.3-3
4.4-1	Project Vicinity Hydrologic Unit, Hydrologic Areas, and Hydrologic Subareas.....	4.4-2
4.4-2	Beneficial Uses for Surface Waters of Water Bodies with Potential to be Affected by the Project.....	4.4-2

4.4-3	Water Quality Impairments within the Project Alignment.....	4.4-2
4.4-4	Minimum BMPs For Construction Sites .....	4.4-10
4.5-1	Project Site Land Use Designations/Allowed Uses .....	4.5-2
4.5-2	Short-Term Use Permit Parcels, Area, and Current Uses .....	4.5-4
4.5-3	Existing and Proposed Land Use Designations .....	4.5-11
4.5-4	Proposed Land Use Designation Acre Changes within the Project Sites .....	4.5-11
4.5-5	Project Consistency with Relevant Goals, Objectives, and Policies .....	4.5-14
4.6-1	Summary of Significant Impacts and Mitigation Measures.....	4.6-1
4.6-2	Definitions of Acoustical Terms .....	4.6-2
4.6-3	Typical Noise Levels in the Environment .....	4.6-3
4.6-4	Summary of Noise Measurements .....	4.6-7
4.6-5	Municipal Code Standards for Non-Construction Noise.....	4.6-10
4.6-6	Municipal Code Standards for Construction Noise.....	4.6-11
4.6-7	Construction Equipment Noise Emission Levels.....	4.6-12
4.6-8	Construction Phasing, Equipment, and Noise Levels.....	4.6-16
4.6-9	Tank Farm Site, Quay Avenue, and 28th Street Construction Noise Levels by Phase at Sensitive Receptors.....	4.6-17
4.6-10	32nd Street Closure Site Construction Noise Levels by Phase at Sensitive Receptors.....	4.6-17
4.6-11	Weyerhaeuser Site Construction Noise Levels by Phase at Sensitive Receptors .....	4.6-17
4.6-12	Estimated Traffic Noise Levels .....	4.6-19
4.6-13	Noise Levels at Sensitive Receptors Due to Onsite Operations.....	4.6-21
4.6-14	Combined Noise Levels at Sensitive Receptors Due to Onsite Operations .....	4.6-22
4.7-1	Summary of Significant Impacts and Mitigation Measures.....	4.7-1
4.7-2	Level of Service Definitions.....	4.7-4
4.7-3	Roadway Classifications and LOS Standards.....	4.7-5
4.7-4	Existing Conditions at Study Area Roadway Segments.....	4.7-6
4.7-5	Signalized Intersection LOS Criteria .....	4.7-7
4.7-6	Unsignalized Intersection LOS Criteria.....	4.7-7
4.7-7	Existing Intersection Operations.....	4.7-8

4.7-8	Traffic Flow Conditions at Ramp Intersections at Various Levels of Operation .....	4.7-9
4.7-9	Existing Ramp Intersection Capacity Analysis .....	4.7-9
4.7-10	Existing Off-Ramp Queueing Analysis .....	4.7-9
4.7-11	Freeway Segment LOS Definitions .....	4.7-10
4.7-12	Existing Freeway (I-5) Segment LOS Conditions .....	4.7-10
4.7-13	Measure of Significant Project Traffic Impacts .....	4.7-15
4.7-14	Project Construction Trip Generation.....	4.7-16
4.7-15	Project Trip Generation .....	4.7-17
4.7-16	Peak Hour Roadway Segment LOS Results – Existing Plus Project .....	4.7-20
4.7-17	Peak Hour Intersection LOS Results – Existing Plus Project.....	4.7-21
4.7-18	Peak Hour Intersection LOS Results – Existing Plus Project.....	4.7-22
4.7-19	Ramp Intersection Capacity Analysis – Existing Plus Project .....	4.7-22
4.7-20	Freeway Segment LOS – Existing Plus Project .....	4.7-23
4.7-21	NCMT Existing On-Street Parking Demand.....	4.7-28
4.7-22	Pepper Park and Pier 32 Existing Parking Demand.....	4.7-28
5-1	Summary of Significant Cumulative Impacts and Mitigation Measures.....	5-1
5-2	Cumulative Projects List.....	5-4
5-3	Estimated Traffic Noise Levels .....	5-23
5-4	Measure of Significant Project Traffic Impacts .....	5-24
5-5	Cumulative Projects Vehicular Trip Generation .....	5-25
5-6	Roadway Segment LOS – 2016 Plus Project Conditions .....	5-29
5-7	Peak Hour Intersection LOS Results – 2016 Plus Project Conditions.....	5-31
5-8	Ramp Intersection Capacity Analysis – 2016 Plus Project Conditions .....	5-31
5-9	Off-Ramp Queueing Analysis – 2016 Plus Project Conditions .....	5-32
5-10	Freeway (I-5) Segment Level of Service – 2016 Plus Project Conditions .....	5-32
5-11	Roadway Segment LOS – 2016 Plus Project Conditions .....	5-33
5-12	Peak Hour Intersection LOS Results – 2030 Plus Project Conditions.....	5-34
5-13	Ramp Intersection Capacity Analysis – 2030 Plus Project Conditions .....	5-35

5-14	Off-Ramp Queuing Analysis – 2030 Plus Project Conditions .....	5-35
5-15	Freeway (I-5) Segment Level of Service – 2030 Plus Project Conditions .....	5-35
5-16	Roadway Segment LOS – 2030 Plus Project Conditions .....	5-37
5-17	Peak Hour Intersection LOS Results – 2030 Plus Project Conditions.....	5-38
5-18	Ramp Intersection Capacity Analysis – 2030 Plus Project Conditions (Tidelands Avenue Closed) .....	5-39
5-19	Off-Ramp Queuing Analysis – 2016 Plus Project Conditions (Tidelands Avenue Closed) .....	5-39
5-20	Freeway (I-5) Segment Level of Service – 2030 Plus Project Conditions (Tidelands Avenue Closed) .....	5-39
7-1	Summary of Significant Effects of the Proposed Project .....	7-3
7-2	Summary Impacts of Alternatives Relative to the Proposed Project .....	7-8



# Figures

	Follows Page
ES-1 Project Sites .....	ES-2
2-1 Regional Location.....	2-2
2-2 Local Vicinity Map .....	2-2
2-3 Project Sites .....	2-2
2-4 Project Sites and Surrounding Land Uses .....	2-4
2-5 Former Tank Farm Site Existing Conditions .....	2-6
2-6 Site Map and Existing Conditions at the Tank Farm Site, Quay Avenue and 28th Street Closure Locations .....	2-6
2-7 Street Closures Sites' Existing Conditions .....	2-6
2-8 Former Weyerhaeuser Site Existing Conditions .....	2-6
2-9 Existing Land Use Designations.....	2-8
3-1 Paving and Drainage Plan for the Tank Farm Site, Quay Avenue, and 28th Street Locations .....	3-4
3-2 Striping Plan for the Tank Farm Site, Quay Avenue, and 28th Street Locations. ....	3-4
3-3 Demolition Plan for the Tank Farm Site, Quay Avenue, and 28th Street Locations.....	3-4
3-4 Drainage and Fencing Detail for the Tank Farm Site and Street Closure Sites .....	3-4
3-5 Proposed Commercial Recreation Parcels and Parcels with Marine Related Industrial Overlay .....	3-6
4.3-1 Hazardous Materials Site Locations .....	4.3-4
4.4-1 Regional Watershed and Nearby Tributaries.....	4.4-2
4.5-1 Port Master Plan Planning District 5 with Subareas .....	4.5-2
4.5-2 Existing Land Use Designations.....	4.5-2
4.5-3 Former Tank Farm Site Existing Conditions .....	4.5-4
4.5-4 Street Closures Sites' Existing Condition .....	4.5-4
4.5-5 Project Sites .....	4.5-4
4.5-6 Former Weyerhaeuser Site Existing Conditions .....	4.5-4

4.5-7	Project Sites and Surrounding Land Uses .....	4.5-6
4.5-8	Proposed Commercial Recreation Parcels and Parcels with Marine Related Industrial Overlay .....	4.5-10
4.6-1	Noise Monitoring Locations.....	4.6-6
4.6-2	National City Land Use: Noise Compatibility Guidelines .....	On page 4.6-9
4.6-3	Noise-Sensitive Receptor Locations.....	4.6-16
4.7-1	Transportation Study Area.....	4.7-2
4.7-2	Existing Roadway and Intersections .....	4.7-4
4.7-3	Existing Traffic Volumes.....	4.7-6
4.7-4	Project Trip Distribution.....	4.7-18
5-1	Cumulative Project Locations .....	5-8
5-2	Cumulative Project Trip Assignments (Year 2016) .....	5-24
5-3	Cumulative Baseline Traffic Volumes (Year 2016).....	5-26
5-4	Cumulative Baseline Traffic Volumes (Year 2030).....	5-26
5-5	Cumulative Baseline Traffic Volumes with Tidelands Avenue Closed (Year 2030).....	5-28
5-6	Cumulative Traffic Volumes with Project (Year 2016).....	5-28
5-7	Cumulative Project Traffic Volumes with Project (Year 2035) .....	5-32
5-8	Cumulative Traffic Volumes with Project and Tidelands Avenue Closed (Year 2030).....	5-36

## Acronyms and Abbreviations

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°F	degrees Fahrenheit
µg/m <sup>3</sup>	micrograms per cubic meter
AB	Assembly Bill
ACC	Advanced Clean Cars
ACM	asbestos containing materials
ADT	average daily traffic
AMECS	Advanced Maritime Emissions Control System
AMSL	above mean sea level
APN	Assessor Parcel Number
AQIA	Air Quality Impact Analysis
AR4	IPCC Fourth Assessment Report
ARB	California Air Resources Board
AST	above-ground storage tank
BACT	best available control technology
Basin Plans	water quality control plans
BAU	business-as-usual
BMP	Best Management Practice
BNSF	Burlington Northern Santa Fe
BPC	Board of Port Commissioners
BTU	British thermal unit
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	Clean Air Program
CCA	California Coastal Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane

City	City of National City
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
Coastal Commission	California Coastal Commission
CO-CAT	California Climate Action Team
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted sound level
DEH	Department of Environmental Health
District	San Diego Unified Port District
DOC	Department of Conservation
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
ECA	Emission Control Area
EDD	Employment Development Department
EIR	environmental impact report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRMs	Flood Insurance Rate Maps
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
g/hp-hr	grams per horsepower-hour
GHG	greenhouse gas
GVWR	Gross Vehicle Weight Rating
GWP	global warming potential
HA	Hydrologic Area
HC	hydrocarbons
HFCs	hydrofluorocarbons
HMD	Hazardous Materials Division
HPD	Harbor Police Department
HSA	Hydrologic Subarea
HSWA	Hazardous and Solid Waste Act
HU	hydrologic unit



Hz	Hertz
I-	Interstate
ICF	ICF International
ILV	Intersection Lane Volume
IMO	International Maritime Organization
in/s	inches per second
INRMP	Integrated Natural Resource Management Plan
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
IS	Initial Study
JRMP	Jurisdictional Runoff Management Plan
kW	kilowatt
kWh	kilowatt hour
LCFS	Low Carbon Fuel Standard
LCP	Local Coastal Program
L <sub>dn</sub>	day/night noise level
L <sub>eq</sub>	equivalent noise level
LID	Low Impact Development
L <sub>max</sub>	maximum sound pressure level
L <sub>min</sub>	minimum sound level
LOS	level of service
LUC	Land Use Code
L <sub>xx</sub>	percentile-exceeded sound level
MARPOL	International Convention for the Prevention of Pollution from Ships
MBTA	Migratory Bird Treaty Act
MGD	million gallons per day
MICR	maximum incremental cancer risk
MOU	Memorandum of Understanding
mpg	miles per gallon
mph	miles per hour
MS4	Municipal Separate Storm Sewer System
MS4 permit	Waste Discharge Requirements for Discharges from MS4s Draining the Watersheds within the San Diego Region
MSL	mean sea level
MTCO <sub>2e</sub>	metric tons of carbon dioxide equivalent
MTS	Metropolitan Transit System
MWD	Metropolitan Water District
MWh	megawatt hours
N <sub>2</sub> O	nitrous oxide
NAAQS	national ambient air quality standards
NB	northbound
NCMT	National City Marine Terminal

NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO <sub>2</sub>	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRC	National Research Council
NSR	New Source Review
O <sub>3</sub>	ozone
OAEOC	Operational Area Emergency Operations Center
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OGV	ocean-going vessel
OSHA	Occupational Safety and Health Act
Overlay	Marine Related Industrial Overlay
Pasha	Pasha Automotive Services
PCE	passenger car equivalent
PDPs	priority development projects
PFCs	perfluorinated carbons
PLWTP	Point Loma Wastewater Treatment Plant
PM	particulate matter
PM <sub>10</sub>	particulate matter less than or equal to 10 microns in diameter
PM <sub>2.5</sub>	particulate matter less than or equal to 2.5 microns in diameter
PMP	Port Master Plan
PMPA	Port Master Plan Amendment
Port Act	San Diego Unified Port District Act
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts per million
ppt	parts per trillion
PPV	peak particle velocity
RAQS	Regional Air Quality Strategy
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act of 1976
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RSPA	Research and Special Programs Administration
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SB	southbound

SB	Senate Bill
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse and Planning Unit
SCIC	South Coastal Information Center
SCS	sustainable communities strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SF <sub>6</sub>	sulfur hexafluoride
SIP	State Implementation Plan
SLR	sea-level rise
SLTs	screening-level thresholds
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxide
SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
ST	short-term
SUSMP	Standard Urban Stormwater Management Program
SWA	Sweetwater Authority
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TDS	Total Dissolved Solids
TIA	Transportation Impact Analysis
TRU	Transport Refrigeration Unit
UDC	Unified Disaster Council
UP	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
V/C	volume-to-capacity
VdB	vibration decibel
VOC	volatile organic compound
VSR	vessel speed reduction
Weyerhaeuser	Weyerhaeuser Lumber Company
WQIP	Water Quality Improvement Plan
WURMP	Watershed Urban Runoff Management Plan

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## Introduction

This Environmental Impact Report (EIR) has been prepared for the National City Marine Terminal Tank Farm (NCMT) Paving and Street Closures Project & Port Master Plan Amendment (PMPA) (collectively “proposed project” or “project”), in compliance with the California Environmental Quality Act (CEQA). The San Diego Unified Port District (District) is the CEQA Lead Agency for the EIR and, as such, has the primary responsibility for evaluating the environmental effects of the proposed project and considering whether to approve or disapprove the proposed project in light of these effects.

As required by CEQA, this EIR does the following: (1) describes the proposed project, including its location, objectives, and features; (2) describes the existing conditions at the project site and nearby environs; (3) analyzes the direct, indirect, and cumulative adverse physical effects that would occur on the existing conditions should the proposed project be implemented; (4) identifies feasible means of avoiding or substantially lessening the significant adverse effects; (5) provides a determination of significance for each impact after mitigation is incorporated; and (6) evaluates a reasonable range of feasible alternatives to the proposed project that would meet the basic project objectives and reduce a project-related significant impact.

This Executive Summary covers the following topics: (1) Project Description; (2) Areas of Controversy/Issues Raised by Agencies and the Public; and (3) Issues to Be Resolved, including significant environmental effects and the consideration of alternatives to the proposed project.

## Project Description

### Overview

The District is considering an application by Pasha Automotive Services (Pasha) for a Coastal Development Permit (CDP), Tidelands Use and Occupancy Permit/Tidelands Use Permit (short-term use permits) renewals, one new real estate agreement,<sup>1</sup> and a PMPA to increase the amount of area used for vehicle storage by Pasha in order to meet existing and anticipated future market demands. Pasha is the project applicant/project proponent. These discretionary approvals, which are required to implement the proposed project, would entail the following.

- Grade and pave the approximately 5.71-acre former NCMT tank farm.
- Permanently close and re-pave approximately 5 acres of portions of Quay Avenue, 28th Street, and 32nd Street (street closures).
- Renew four existing short-term use permits on approximately 47.32 acres (42.32 of which is usable for vehicle storage) in the vicinity of the NCMT for a 5-year period.

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<sup>1</sup> Agreement includes a Tideland Use and Occupancy Permit, Tideland Use Permit, or Amendment to Terminal Operating Agreement.

- Enter into a new 5-year real estate agreement (i.e., a Tideland Use and Occupancy Permit or a lease) to use the street closures and the approximately 6.14-acre Port Parcel 027-029 (former Weyerhaeuser site<sup>2</sup>) for vehicle storage, which could include demolishing two existing structures and repaving a portion of the former Weyerhaeuser site.

In addition, the proposed project includes a PMPA to change the street closures land use designation from “Street” to “Marine Related Industrial,” add two District-owned Uplands Properties (eastern half of Lot K<sup>3</sup> and Port Parcel 027-047) to the Port Master Plan, and apply a Commercial Recreation land use designation those areas; and add a Marine Related Industrial Overlay (Overlay) to the eastern half of Lot K and Port Parcel 028-007, both of which are currently used for vehicle storage. The Overlay would allow for the same uses specified in the Marine Related Industrial land use designation for a maximum of 7 years or the Overlay would expire if development(s) consistent with the Commercial Recreation land use designation are approved by the Board of Port Commissioners (BPC), whichever occurs first. The Overlay would also be considered by the California Coastal Commission when reviewing the PMPA for certification.

## Project Site Locations

The proposed project location includes the former tank farm site, the street closure sites, the short-term use permit sites, the former Weyerhaeuser site, and District-owned Uplands Properties planned for incorporation into the Port Master Plan (PMP). Figure ES-1 provides an aerial view of all of the project sites. Quay Avenue, 28th Street, and 32nd Street are non-dedicated streets that serve principally as circulation roads for operations associated with NCMT. Bay Marina Drive is the primary access road to and from Interstate 5 (I-5) and the project sites.

## Project Components

### Former Tank Farm Site

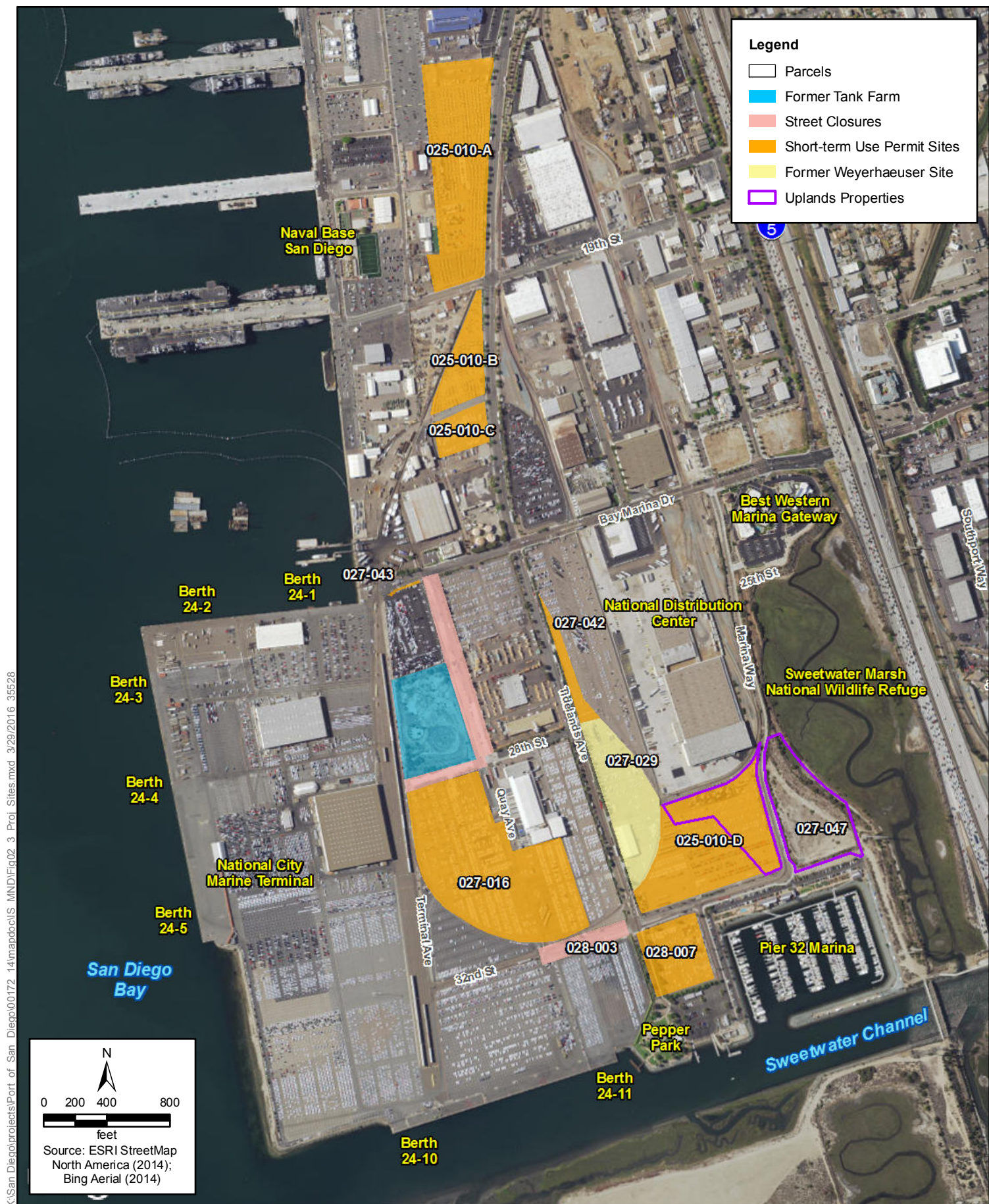
The former tank farm site would be graded and paved. Approximately 22,500 cubic yards of excess dirt from grading the site would be used as fill on the adjacent Quay Avenue and 28th Street to match the surrounding grade. The site would then be striped, followed by installation of pole-mounted and perimeter light fixtures and security fencing. The proposed project would also include improvements to the onsite drainage, such as bioswales to treat the surface drainage, new stormwater inlets, and modification of existing stormwater inlets. Minor demolition activities would include removal of fencing, curbs, gutters, and asphalt. Implementation of this project component would not include the construction of any buildings, and the site would remain designated as Marine Related Industrial by the PMP. Construction is anticipated to begin in 2016 and would be completed within 7 weeks. The former tank farm site is currently in Pasha’s Terminal Operating Agreement, which expires in 2040.

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<sup>2</sup> This site is referred to as the “former Weyerhaeuser site” because it was most recently leased to the Weyerhaeuser Lumber Company.

<sup>3</sup> Lot K is located north of 32nd Street, west of Marina Way, south of the National Distribution Center, and east of Tidelands Avenue and the balloon rail track. It is the eastern half of Port Parcel 025-010-D on Figure ES-1.





**Figure ES-1**  
**Project Sites**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





## Street Closures Sites

The proposed project also proposes closure of Quay Avenue between Bay Marina Drive and 28th Street, 28th Street west of Quay Avenue, and 32nd Street west of Tidelands Avenue. The streets are between active terminal areas and, due to tenant consolidation and reconfiguration, are no longer necessary for access in this area of the NCMT. However, some marine terminal employees utilize these roadways for parking their personal vehicles during business hours. The roads proposed for closure are non-dedicated District streets.

Some of the excess soil from grading on the tank farm would be diverted as export and used to raise the elevation of the portions of Quay Avenue and 28th Street that are proposed to be closed. Quay Avenue and 28th Street would be repaved. Approximately 1,200 cubic yards of demolished concrete and asphalt from the roadways would be exported off site to an approved facility for recycling. The railroad tracks on the west side of Quay Avenue and the existing above-ground San Diego Gas and Electric Company distribution lines (i.e., utility poles) would remain in place and be incorporated into the paved area. A minimum 10-foot clearance from the centerline of the railroad tracks would remain. Maintaining the railroad tracks would also require paving the rail area with asphalt per Burlington Northern Santa Fe (BNSF) Railway Company Design Guidelines for Industrial Track Projects.

Closure of 32nd Street would require minor demolition and construction activities including the removal of the median, curbs, and gutter; relocation of the backflow valve; minor grading, repaving, and striping; and relocation of the guard shack to the east. Specific activities would include the removal of approximately 1,300 linear feet of curbs and gutters and approximately 2,200 square feet of median, and approximately 6,100 square feet of grading.

Implementation of this project component would not include the construction of any buildings; however, proposed land use changes from the Street land use designation to the Marine Related Industrial land use designation at these locations would require an amendment to the PMP as described under Section 3.4.5, *Incorporation of District-Owned Uplands into the Port Master Plan and Port Master Plan Amendment Component*. Use of these street closure sites would involve potential new real estate agreement(s), which are anticipated to be for terms of up to 5 years; however, to provide a more conservative analysis, this EIR assumes that Pasha would use the street closure sites for the duration of the existing Terminal Operating Agreement—until 2040. The allowable use for these sites is proposed to be import, export, handling, and storage of motor vehicles and cargo.

## Short-Term Use Permit Sites

The proposed project also includes the potential renewal of short-term use permits on the lots identified in Table ES-1 and Figure ES-1, which all expired in 2015 and are now held on holdover pursuant to the terms of the short-term use permits. These lots are currently in use by Pasha, and potential renewal of the use permits would continue the existing uses and operations, as indicated in Table ES-1. Any proposed renewals of the existing short-term use permits would take effect following expiration or termination of the existing short-term use permits and would likely include a term of no more than 5 years. Furthermore, the Overlay, discussed in more detail further below, proposes an overlay at two sites for a maximum of 7 years, at which point the sites would revert back to the Commercial Recreation land use designation only. The term of the renewals of the short-term use permits for these sites would be coterminous with this 7-year time period or could be terminated by the District upon delivery of a 30-day written notice. However, to provide a more

conservative analysis, this EIR assumes that Pasha would use the existing short-term use permit sites for the duration of the existing Terminal Operating Agreement—until 2040. Any renewals of the existing short-term use permits would not change Pasha’s uses on the sites, but an increase in throughput is anticipated; therefore, the analysis in this EIR assumes a worst case scenario of the maximum practical throughput. No buildings or improvements are proposed on the short-term use permit sites.

**Table ES-1. Short-Term Use Permit Parcels, Area, and Current Uses**

Port Parcel #	Area	Use
027-016	739,409 sf (16.97 acres)	Import/export, handling, storage of vehicles, cargo transported by Pasha vessels, and other general cargo.
025-010-A, -B, -C, and -D and 027-042 <sup>b</sup>	1,174,904 sf (26.97 acres)	Import/export, handling, storage of vehicles, cargo transported by Pasha vessels, and other general cargo. A portion can be used for vehicle sales.
027-043	1,459 sf (0.03 acre)	Maintenance of landscaping, irrigation, and signage.
028-007	145,811 sf (3.35 acres)	Preferential, non-exclusive use for temporary storage of vehicles.
Total	2,061,583 sf (47.32 acres <sup>a</sup> )	--

Note: Any discrepancy in the conversion of square feet (sf) to acres is due to rounding of numbers for ease of presentation. The square foot value is closer to the actual area.

<sup>a</sup> Approximately 5 acres of short-term use permit sites are not usable for vehicle storage (Mercator 2013) because they have other uses (i.e., maintenance, haul-away operations).

<sup>b</sup> Port Parcels 025-010 and 027-042 are part of one short-term use permit.

## Former Weyerhaeuser Site

The proposed project includes a potential new real estate agreement (i.e., a Tideland Use and Occupancy Permit or a lease) for the approximately 6.14-acre former Weyerhaeuser site, as shown on Figure ES-1. This site is paved and contains two buildings, which may be demolished as part of the proposed project; one is an approximately 1,800-square-foot, 1-story office building and the other is an approximately 20,000-square-foot shed structure. This potential new real estate agreement is anticipated to be for a term of up to 5 years; however, to provide a more conservative analysis, this EIR assumes that Pasha would use the former Weyerhaeuser site for the duration of the existing Terminal Operating Agreement—until 2040. The allowable use for this site is proposed to be import, export, handling, and storage of motor vehicles and cargo.

## Incorporation of District-Owned Uplands into the Port Master Plan and Port Master Plan Amendment Component

There are multiple actions related to the PMPA. The proposed PMPA would change the associated PMP maps, text, and tables to include the following changes in land use designations. The proposed PMPA is included in Appendix C of this Draft EIR.

## Incorporation of District-Owned Uplands into the PMP

A PMPA is required to incorporate two District-owned Uplands Properties into the PMP.<sup>4</sup> Both Uplands Properties are located north of the marina—the eastern portion of Lot K is west of Marina Way; Port Parcel 027-047 is east of Marina Way. These properties were incorporated into the City of National City's Local Coastal Program (LCP) and designated as Tourist Commercial pursuant to an expired Memorandum of Understanding (MOU) with the District. Pursuant to terms of the MOU and the California Coastal Commission's record on the LCP amendment that incorporated the properties into the LCP, the City agreed that the properties could be incorporated into the PMP after expiration of the MOU (see Appendix D). Additionally, a latter MOU between the District and City contemplated that a PMPA would be processed to incorporate all District-acquired properties within the City into the PMP. The incorporation of these two properties into the PMP would apply PMP land use designations to District-owned properties similar to the land use designation in the City's LCP. Both Uplands Properties would be designated as Commercial Recreation.

## Marine Related Industrial Overlay

The project proposes a Marine Related Industrial Overlay for the eastern portion of Lot K as well for Port Parcel 028-007. Both of these areas are currently used by Pasha for vehicle storage on site through short-term use permits, as discussed above.

The Overlay would be placed temporarily on the two sites to clarify the continued use of the properties by the project proponent or another operator, and the sites would revert back to only the Commercial Recreation designation, the earlier of 7 years from the time the PMPA is finalized<sup>5</sup> or one or more development projects, consistent with the Commercial Recreation designation, are proposed and approved<sup>6</sup> by the BPC<sup>7</sup>. The Overlay would better accommodate current maritime operations and is consistent with the existing uses on the two sites. At the time the revised NOP was issued for scoping input (August 2015), no commercial developments were proposed for the sites.

## Redesignation of Streets to Marine Related Industrial

A PMPA would also be required to convert Quay Avenue between Bay Marina Drive to the north and 28th Street to the south, 28th Street west of Quay Avenue, and 32nd Street west of Tidelands Avenue from their current land use designation of Street to a land use designation of Marine Related Industrial. Quay Avenue south of 28th Street, 28th Street east of Quay Avenue, and 32nd Street east

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<sup>4</sup> Section 5 of the Port Act requires the District to exercise its land management authority and power over property it acquires, and Section 19 of the Port Act requires the District incorporate such lands into the PMP. Additionally, Section 56 of the Port Act gives the District exclusive police power over property and development subject to its jurisdiction.

<sup>5</sup> For this purpose, "finalized" means the California Coastal Commission's acceptance of the District's approval of the California Coastal Commission's certification of the PMPA pursuant to Section 13632 of the Coastal Commission's regulations. 14 Cal. Code of Reg. § 13632.

<sup>6</sup> For this purpose, "approved" means issuance of a CDP.

<sup>7</sup> As a separate project with independent utility, the District and City are collectively studying a land use plan for the parcels and adjacent areas, commonly known as the "Marina District Land Use Plan," which may supersede the proposed Overlay if and when the District and the Coastal Commission approve/certify a PMPA after appropriate CEQA analysis is conducted. Such CEQA analysis would include incorporation of all feasible mitigation measures, consideration and adoption (if required) of alternatives, including the no project alternative and a statement of overriding consideration is adopted, if applicable. The Marina District Land Use Plan is in its preliminary stages and the BPC directed staff on April 14, 2016 to proceed with CEQA review.

of Tidelands Avenue are not part of the proposed project and would remain open as District roadways.

Implementation of the improvements to the street closures would require a coastal development permit(s) from the District. The coastal development permit(s) to close the streets could not be issued until after certification of the PMPA by the California Coastal Commission.

## Project Operations

The tank farm, street closures, existing short-term use permit, and former Weyerhaeuser sites are located adjacent to or near the NCMT and are proposed to be used primarily for vehicle throughput operations. Non-vehicle throughput (i.e., breakbulk and *other* general cargo) is handled on the NCMT, adjacent to Berth 24-1. On occasion, non-vehicle throughput may be handled on the tank farm, street closures, short-term use permit, or former Weyerhaeuser sites, but such use is anticipated to be minimal given that, historically, the existing short-term use permit sites have been used solely for vehicle throughput and all non-vehicle throughput is handled on the NCMT. These sites are not used for non-vehicle cargo primarily because of their distance from Berth 24-1, which makes them better suited to vehicle cargo. This division of goods storage is anticipated to continue in the future given it is a practical logistical consideration.

As shown in Tables ES-2 and ES-3, the amount of non-vehicle throughput is relatively minimal in Pasha's overall operations and, as discussed above, is currently primarily handled on the NCMT. Moreover, some of the existing short-term use permits restrict the allowable use to only vehicle storage. As such, the project assumptions consider the reasonably foreseeable worst case scenario for the project site based on the maximum theoretical vehicle throughput.

**Table ES-2. Pasha Non-Vehicle Throughput for Year 2013**

Product	Metric Tons	Cubic Meters	Units
Containers	15,484	--	1,038
Breakbulk			
Forest Products	--	234	--
Household Goods	9,870	--	17,524
Machinery	9,586	--	--
Manufactured Products	7,341	--	2
Metals	5,977	--	--
Recreational Trailers	1,620	--	6
Trailers	2,901	--	353
Vessels (Yachts)	--	10,340	129
<b>Total</b>	<b>52,779</b>	<b>10,574</b>	<b>19,052</b>
Source: Port District Maritime Division, May 2014			

**Table ES-3. Pasha Vehicle Throughput for Year 2013**

Month	Number of Vehicles
January 2013	30,997
February 2013	29,964
March 2013	31,039
April 2013	31,870
May 2013	28,211
June 2013	31,995
July 2013	30,364
August 2013	24,413
September 2013	25,845
October 2013	29,718
November 2013	32,256
December 2013	34,700
<b>Total</b>	<b>361,372</b>
Source: Pasha Automotive Services 2014	

## Vehicle Processing

If Pasha continued vehicle imports at the 2013 volumes, the addition of the tank farm, street closures, and the former Weyerhaeuser sites, which total approximately 17.3 acres, could result in a potential increase of 39,565 vehicles per year and 136,351 vehicles for all of the project sites.<sup>8,9,10</sup> However, this would assume zero growth in Pasha's operations, which is unlikely. Therefore, to estimate the maximum theoretical capacity associated with the proposed project, the information in Table ES-4 was utilized.

**Table ES-4. Criteria to Determine Theoretical Capacity**

Criteria	Factor	Source
Vehicles per acre	154 vehicles/acre <sup>a</sup>	Mercator 2013:47
Average dwell time in 2013	14.68 days	Pasha
Average estimated dwell time <sup>b</sup>	10.9 days	Mercator 2013:42
Total area in 2013	158 acres	District
<sup>a</sup> This is the maximum number of vehicles that could physically fit on an acre of land.		
<sup>b</sup> The average dwell time from 2008 to 2013 was 20.67 days. The average dwell time for the first 4 months of 2014 was 19.08 days. However, to be conservative, the analysis uses the projected average dwell time stated in Mercator (2013), which was less dwell time, resulting in greater throughput.		

<sup>8</sup> 17.35 acres x 2,287 vehicles/acre/year (361,372 vehicles ÷ 158 acres = 2,287 vehicles per acre) = 39,679 vehicles per year.

<sup>9</sup> 42.32 acres x 2,287 vehicles/acre/year = 96,786 vehicles per year on short-term use permit sites.

<sup>10</sup> 39,565 vehicles/year + 96,786 vehicles/year = 136,351 vehicles per year.

The area of the project site that is proposed to include project operations covers approximately 64.65 acres (tank farm + street closures + former Weyerhaeuser + existing short-term use permit sites), of which approximately 59.65 acres are usable for vehicle throughput.<sup>11</sup> The maximum amount of vehicles that can be parked on 1 acre is 154 vehicles (Mercator 2013). Therefore, the maximum amount of vehicles that would fit on the 59.65 acres would be 9,186.<sup>12</sup>

Using the very conservative estimate of average dwell time from the Mercator report, the average projected dwell time would be 10.9 days for each vehicle. Therefore, based on the average projected dwell time, the maximum amount of vehicles on 59.65 acres would be 307,604 per year,<sup>13</sup> or 5,157 vehicles per acre per year.<sup>14</sup>

As noted in Table ES-5, when compared to the existing operational conditions of 96,740 vehicles per year being processed on the tank farm site the proposed project would result in a potential throughput increase of 210,818 vehicle imports per year, for a total of 307,604.<sup>15</sup>

**Table ES-5. Comparison of Existing and Proposed Vehicle Throughput for Project Site<sup>a</sup>**

<b>Project Component</b>	<b>Usable Acreage</b>	<b>Existing Vehicle Throughput</b>	<b>Proposed Vehicle Throughput</b>	<b>Potential Net Increase with Project</b>
Tank Farm and Quay Avenue/28th Street Closures Sites <sup>b</sup>	9.7	0	50,023	50,023
32nd Street Closure Site	1.51	0	7,787	7,787
Short-Term Use Permit Sites	42.3 <sup>c</sup>	96,740	218,141	121,401
Former Weyerhaeuser Site	6.14	0	31,664	31,664
<b>Total</b>	<b>59.65</b>	<b>96,740</b>	<b>307,604</b>	<b>210,818</b>

<sup>a</sup> Calculations have been rounded up and may not total correctly.

<sup>b</sup> Approximately 5 acres of short-term use permit sites are not usable for vehicle storage (Mercator 2013:39) because they have other uses (i.e., maintenance, haul-away operations).

<sup>c</sup> Quay Avenue and 28th Street are included with the tank farm site here because they are located adjacent to one another.

<sup>11</sup> This acreage does not include the Uplands Properties located east of Marina Way as no project operations currently exist nor are any proposed to exist on that site.

<sup>12</sup> 59.65 acres x 154 maximum vehicles/acre = 9,186 maximum vehicles for 59.65 acres at one time.

<sup>13</sup> (9,186 vehicles x 365 days/year) ÷ 10.9 days dwell time = 307,604 vehicles per year.

<sup>14</sup> 307,604 vehicles/year ÷ 59.65 acres = 5,157 vehicles/acre/year.

<sup>15</sup> 307,604 maximum vehicles on the tank farm, street closures, and short-term use permit sites – 96,786 vehicles on the short-term use permit sites = 210,818 annual increase in vehicles with the proposed project. Note the total amount is slightly off due to rounding; however, the difference is within the margin of error as this is a maximum theoretical capacity forecast and unlikely to be achieved on the number of acres analyzed in this EIR.

## Vessels

Vessel calls at the NCMT are an existing condition, and the quantity of vessel calls is not expected to change as a result of the project. The size of vessels calling at the terminal has increased over the years such that more vehicles can be transported with fewer ships. The average capacity of vessels that currently call on NCMT is 5,282 cars. On average the vessels that called in National City in year 2013 were only partially full, averaging 1,578 autos per vessel call, based on the 2013 throughput of 361,372 cars and 229 auto-carrier calls at the terminal ( $361,372 / 229 = 1,578$ ). Existing vessels range in size from 3,200 car capacity up to 6,700 car capacity, and larger class roll-on/roll-off carriers are entering the market that can carry over 8,000 autos. Therefore, because existing vessels are only loaded at a fraction of their capacity, existing vessel calls would have sufficient capacity to handle the additional throughput associated with the project. Thus, the frequency of vessel calls associated with the existing plus project future condition is anticipated to be similar to the existing condition, while loading and unloading would require a longer hotelling period—increasing from approximately 15.1 hours per vessel call to 21.6 hours with the project. A more detailed discussion of vessel calls and hoteling time is included in Section 4.1, *Air Quality and Health Risk*.

## Rail

Trains servicing the NCMT and the surrounding marine related industrial land uses are operated by BNSF. Based on historical data, it is assumed that approximately 45% of the cars imported by vessel at NCMT would be transported via rail and the remainder would be transported by truck. Existing trains run 6 days per week (Monday through Saturday), and the project could result in a new train on Sunday.

Pasha is currently in the process of adding a mobile railcar mover<sup>16</sup> to provide switching work to break down and assemble trains at the NCMT. The railcar mover would handle some of the loading and switching duty at NCMT, which would reduce the hours locomotives are active at NCMT.

## Project Construction

Construction activities associated with the proposed project are generally minor and would be limited to the tank farm site and street closures sites, and within an approximately 1-acre portion of the 6.14-acre former Weyerhaeuser site where the two structures are located. No construction would take place on the short-term use permit sites or the Uplands Properties.

Construction activities are anticipated to take place in 2016 and would last approximately 7 weeks. Phasing would consist of site demolition of concrete and asphalt at all three locations; demolition of the 20,000-square-foot warehouse and 1,800-square-foot office at the former Weyerhaeuser site; soil excavation, compaction, and grading; utility infrastructure (e.g., storm drains and bioswales) at the tank farm and street closure sites; site paving; and finishing (e.g., striping, fencing, and lighting). Equipment that would be used includes a water truck, skip loader, large wheel loader, dozer, excavator with breaker, mechanical auger, small truck mounted crane, small loader with forks, and dump and haul trucks. Implementation of the project may be completed all at once, or the project

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<sup>16</sup> A railcar mover is a road-rail vehicle (capable of traveling on both roads and rail tracks) designed for moving small numbers of railroad cars around in a rail siding or small yard. Compared with locomotives, railcar movers are smaller and can provide cost (reduced fuel consumption) and emission savings.

may be completed in two phases beginning with the tank farm and former Weyerhaeuser site components, followed by the street closure sites.

## Project Objectives

To achieve the purpose and need of the proposed project, the District has identified the following objectives.

1. Implement a project that allows the District's tenant to meet current and anticipated future market demand for imports and exports in an effort to ensure the District remains competitive in the already highly competitive marketplace of water-dependent commerce.
2. Implement a project that provides tangible economic benefits to the District and the greater San Diego region to help ensure continued prosperity for the District and region.
3. Implement a project that helps to minimize the need for new marine terminals within the District's jurisdiction by maximizing the operating efficiency of the NCMT and surrounding areas, thereby helping to minimize environmental impacts across the region while ensuring waterborne commerce continues to thrive within the San Diego Bay.
4. Implement the District's mission to permit land uses consistent with the Public Trust and the Coastal Act, specifically water-dependent uses and marine-dependent commerce, fisheries, navigation, ecological preservation, and recreation.
5. Incorporate District properties into the PMP that are not currently regulated by the PMP to ensure consistency with the Public Trust Doctrine and Port Act and allow for flexibility of land uses to facilitate meeting current and future needs.
6. Be consistent with the District's Climate Action Plan, Clean Air Program, and Jurisdictional Runoff Management Program, to ensure that the proposed project does not adversely affect the District's ability to attain its long-range environmental and sustainability goals.

## Areas of Known Controversy/Issues Raised by Agencies and the Public

Section 15123 of the State CEQA Guidelines requires the summary of an EIR to include areas of controversy known to the Lead Agency, including issues raised by agencies and the public. The District circulated an NOP to solicit agency and public comments on the scope and content of the environmental analysis for a total of 33 days, beginning on December 12, 2014, and ending on January 15, 2015. The District also held a public scoping meeting on December 18, 2014, at 4:30 p.m. at the San Diego Unified Port District Administration Building, Training Room, 3165 Pacific Highway, San Diego, CA 92101. Free public parking was available for attendees.

Subsequent to this scoping period, the project proponent modified the project application to include closure and repaving of a portion of 32nd Street and use of Port Parcel 027-029 (former Weyerhaeuser site). In addition, in response to comments received during the scoping period, the District included the Uplands Properties, as part of the PMPA, as well as the Marine Related Industrial Overlay at Port Parcel 028-007 and the portion of Lot K (Port Parcel 025-010-D) located



east of the mean high tide line. In response to requests by stakeholders to hold another round of scoping for the EIR, the District elected to conduct a second scoping period, including a second public scoping meeting.

On August 20, 2015, the District posted the revised NOP with the County Clerk in accordance with Section 15082 of the State CEQA Guidelines. Comments were initially accepted until September 21, 2015, but interested parties requested an extended scoping period. Consequently, the District extended the deadline to September 28, 2015. As with the original NOP, the revised NOP was emailed and mailed to public agencies, organizations, and other interested individuals. The District also held a public scoping meeting on September 9, 2015, from 5 p.m. to 7 p.m. at the San Diego Unified Port District Administration Building, Training Room, 3165 Pacific Highway, San Diego, CA 92101. Free public parking was available for attendees.

A total of 16 comment letters were received during the two NOP public review periods. The primary issues raised included the project's effects on air quality, its contribution to climate change from its greenhouse gas emissions, and land use consistency with the various planning documents. Additionally, concerns were raised about noise, hazardous materials, wildlife impacts, traffic and transportation-related impacts, loss of on-street parking, and vector control. A summary of all comments received is included in Table 1-2 of Chapter 1, *Introduction*, and all NOP comment letters are included in Appendix A.

## Issues to be Resolved

### Summary of Project Impacts

This EIR examines the potential environmental effects of the proposed project, including information related to existing site conditions, analyses of the types and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. In accordance with Appendix G of the State CEQA Guidelines, the potential environmental effects of the proposed project were analyzed for the following areas.

- Air Quality
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Transportation, Circulation, and Parking

Table ES-6, presented at the end of this chapter, provides a summary of the environmental impacts that could result from implementation of the proposed project and feasible mitigation measures that would reduce or avoid the impacts. For each impact, Table ES-6 identifies the significance of the impact before mitigation, applicable mitigation measures, and the level of significance of the impact after the implementation of the mitigation measures. Impacts on aesthetics, agriculture and forest resources, biological resources, cultural resources, geology and soils, mineral resources, population

and housing, public services, recreation, and utilities and service systems are considered to be “Effects Found Not to be Significant,” in accordance with Section 15128 of the State CEQA Guidelines. These issues are discussed further in Chapter 6, *Additional Consequences of Project Implementation*.

## Summary of Project Alternatives

The following alternatives are analyzed in detail in Chapter 7 of this EIR. The objective of the alternatives analysis is to consider a reasonable range of potentially feasible alternatives to foster informed decision-making and public participation. The alternatives to the proposed project are summarized below.

### Alternative 1—Redevelop NCMT Tank Farm Only (No Renewal of Short-Term Use Permits)

Alternative 1 would include paving of the former NCMT tank farm, but would not include the street closures, use of the former Weyerhaeuser site, the Marine Related Industrial Overlay for Lot K and Port Parcel 028-007, or an extension of the short-term use permits. Because incorporation of the two Uplands Properties as Commercial Recreation does not affect annual vehicle throughput, this component of the PMPA would still occur, but without the Overlay.

Alternative 1 would substantially reduce the number of vehicles that could be processed at the terminal and the surrounding marine industrial lands compared to the proposed project. Without the short-term use permits, future annual vehicle throughput would be less than the current throughput. No buildings or operational facilities would be constructed, and it is assumed all 5.71 acres would be used for vehicle storage. Therefore, Alternative 1 would provide for a maximum annual throughput increase of 29,446 vehicles on the NCMT tank farm site.<sup>17</sup> However, because the short-term use permits would be allowed to expire, the annual vehicle throughput for the Pasha facility would decrease by 96,740 vehicles.<sup>18</sup> Therefore, Alternative 1 would actually result in a net decrease in throughput of 67,294 vehicles compared to existing conditions.

### Alternative 2—Short-Term Use Permits Only (No NCMT Tank Farm or Street Closures)

Alternative 2 would involve renewing the short-term use permits only, which would include the PMPA to add the Marine Related Industrial Overlay. Unlike the proposed project, under Alternative 2 the NCMT tank farm would not be redeveloped, and Quay Avenue, 28th Street, and 32nd Street would remain open. Use of the former Weyerhaeuser site would be part of this alternative. The Uplands Properties would be incorporated into the PMP as Commercial Recreation; however, only the eastern half of Lot K, through the addition of the Marine Related Industrial Overlay, would affect throughput, as no marine terminal operations are proposed on the Upland Properties east of Marina Way. No buildings or operational facilities would be constructed under this alternative. The project area would be reduced to approximately 53.44 acres (because the acreage associated with the tank farm and street closures sites is removed under this alternative), with approximately 48.44 acres

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<sup>17</sup> See Mercator (2013). Approximately 5,157 vehicles can be parked per acre per year. Therefore, 5.71 acres x 5,157 = 29,446 maximum vehicles per year.

<sup>18</sup> Existing annual vehicle throughput on short-term use permit sites (see Chapter 3).

dedicated to vehicle storage and the remaining 5 acres for maintenance and haul-way operations.<sup>19</sup> Therefore, Alternative 2 would provide for a maximum annual throughput of 218,129 on the short-term use permit sites.<sup>20</sup> However, because the existing annual throughput on the short-term use permit sites is 96,740 vehicles, Alternative 2 would result in a net annual throughput increase of 153,065 vehicles (or 73% of the proposed project).

### **Alternative 3—Remove Port Parcel 028-007 from Project**

This alternative was developed based on a scoping comment received. Alternative 3 would grade and pave the tank farm site and street closures sites, and demolish the two structures at the former Weyerhaeuser site and enter into the new real estate agreement for vehicle storage at the former Weyerhaeuser site. It would also include all of the short-term use permit sites except for Port Parcel 028-007. It would still incorporate the eastern portion of Lot K and Port Parcel 027-047 east of Marina Way into the PMP as Commercial Recreation. This alternative would not allow for a Marine Related Industrial Overlay to be placed on Port Parcel 028-007 (3.35 acres), but the eastern half of Lot K could still have the Overlay. Thus, throughput would be reduced by 17,276 vehicles per year,<sup>21</sup> which would equal a total throughput of approximately 193,542 vehicles per year (or 92% of the proposed project).

### **Alternative 4—No Marine Related Industrial Overlay**

The No Marine Related Industrial Overlay Alternative would involve no overlay on the eastern half of Lot K or Port Parcel 028-007. Under this alternative, the tank farm and street closures sites would still be graded and paved, the two structures on the former Weyerhaeuser site would still be demolished, and a new real estate agreement for vehicle storage would still be proposed. It would also include most of the short-term use permit sites except for Port Parcel 028-007 and the portion of Lot K east of the mean high tide line. Under this alternative, the Uplands Properties (the eastern half of Lot K and Port Parcel 027-047 [east of Marina Way]) would still be incorporated into the PMP as Commercial Recreation land uses. This alternative would not allow for maritime uses to continue, even on a short-term temporary basis on the eastern half of Lot K or Port Parcel 028-007, and these sites would be placed in a vacant, unused state until an unknown future Commercial Recreation-related project is proposed, approved, and implemented. Thus, throughput would be reduced by 40,379 vehicles per year,<sup>22</sup> which would equal a total throughput of approximately 170,439 vehicles per year (or 81% of the proposed project).

### **Alternative 5—No Project**

The No Project Alternative is required by CEQA to discuss and analyze potential impacts that would occur if the proposed project was not implemented. Under Alternative 5, the NCMT tank farm would remain vacant land, the short-term use permits would be allowed to expire, and there would be no real estate agreement for or use of the former Weyerhaeuser site. Quay Avenue, 32nd Street, and 28th Street would also remain open and a PMPA would not be required. As a result of the short-term

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<sup>19</sup> Approximately 5 acres of short-term use permit sites are not usable for vehicle storage (Mercator 2013:39) because they have other uses.

<sup>20</sup> See Mercator (2013). Approximately 5,157 vehicles can be parked per acre per year. Therefore, 48.44 acres x 5,157 = 249,805 maximum vehicles per year.

<sup>21</sup> 3.35 acres x 5,157 vehicles = 17,276 maximum vehicles per year.

<sup>22</sup> 5,157 vehicles per acre x 7.83 acres (4.48 acres + 3.35 acres) = 40,379 maximum vehicles per year.

use permits not being renewed, the annual vehicle throughput for the Pasha facility would decrease by 96,740 vehicles. This alternative would not meet any of the proposed project objectives.

## **Environmentally Superior Alternative**

Pursuant to CEQA, the EIR is required to identify the environmental superior alternative. Although the No Project Alternative reduces the greatest number of significant impacts, CEQA requires that when the environmentally superior alternative is the No Project Alternative, another alternative should be identified. Therefore, Alternative 1, Redevelop NCMT Tank Farm Only (No Renewal of Short-Term Use Permits), would be the environmentally superior alternative. Alternative 1 would reduce impacts on air quality and greenhouse gases by resulting in the lowest vehicle throughput numbers, but would not meet the project's basic objectives. However, all the alternatives would have reduced air quality and GHG impacts as compared to the project because such emissions are linked to increases in throughput, and the project would provide the capacity for the highest vehicle throughput of all the alternatives.

**Table ES-6. Project Impacts and Mitigation Measures**

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
<b>4.1 Air Quality and Health Risk</b>				
<b>Project Impacts</b>				
Conflict with an Air Quality Management Plan	<b>Impact-AQ-1: New Land Use Designations Not Accounted for in the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP).</b> The proposed project would re-designate Streets to Marine Related Industrial and would add a temporary Marine Related Industrial Overlay onto two parcels that are not currently designated as Marine Related Industrial. As these two land use changes were not known at the time the RAQS and SIP were last updated, this would result in a conflict with the applicable state and regional air quality plan.	PS	<b>MM-AQ-1: Update the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP) with New Growth Projections.</b> Prior to the San Diego Air Pollution Control District's (SDAPCD) next triennial review of the RAQS, the District shall coordinate with the SDAPCD to amend the growth assumptions using the Port Master Plan Amendment. This includes changing the designation of Streets to Marine Related Industrial and adding a Marine Related Industrial Overlay to two parcels within the proposed project site.	LS
Violate an Air Quality Standard	<b>Impact-AQ-2: Emissions in Excess of NO<sub>x</sub> Thresholds During Operations.</b> Project emissions during operations, before mitigation, would exceed the San Diego County SLTs for NO <sub>x</sub> at maximum capacity. While the incremental contribution to health effects from NO <sub>x</sub> cannot be traced solely to the proposed project, the contribution of project-related emissions is considered significant because the project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and	PS	<b>MM-AQ-2: Implement Diesel-Reduction Measures During Construction and Operations.</b> The project proponent shall implement the following measures during project construction and operations. i. The project proponent shall limit all construction equipment, drayage, and delivery truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and shall submit quarterly reports of violators to the San Diego Unified Port District. This measure shall be enforced by Pasha supervisors, and repeat	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	CAAQS, the purpose of which is to provide for the protection of public health.		<p>violators shall be subject to penalties pursuant to California airborne toxics control measure 13 California Code of Regulations Section 2485. The project proponent shall submit evidence of the use of diesel reduction measures to the San Diego Unified Port District through annual reporting with the first report due one year from the date of project completion and each report due exactly one year after, noting all violations with relevant identifying information of the vehicles and drivers in violation of these measures.</p> <p>i. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, the project proponent shall verify that all equipment has been checked by a certified mechanic and determined to be running in proper condition prior to admittance into any Pasha leasehold. The project proponent shall submit a report by the certified mechanic of the condition of the construction equipment to the San Diego Unified Port District prior to construction.</p> <p><b>MM-AQ-3: Comply with San Diego Unified Port District Climate Action Plan Measures.</b> Effective opening day, the project proponent shall implement the following measures to be consistent with the Climate Action Plan.</p> <ul style="list-style-type: none"> <li>• Vessels shall comply with the San Diego Unified Port District's voluntary vessel speed reduction program, which targets 80% compliance.</li> <li>• The project proponent shall decrease onsite movements where practicable.</li> </ul>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<ul style="list-style-type: none"> <li>• No drive-through shall be implemented.</li> <li>• Comply with Assembly Bill 939 by recycling at least 50% of solid waste. This measure shall be applied during construction and operation of the proposed project.</li> <li>• Light fixtures shall be replaced with lower energy bulbs such as fluorescent, Light-Emitting Diodes (LEDs), or Compact Fluorescent Lights (CFLs).</li> </ul> <p>Implementation of Climate Action Plan measures will be included in all new real estate agreements and Coastal Development Permit(s) associated with this project. Evidence of implementation and compliance with this mitigation measure shall be provided to the San Diego Unified Port District on an annual basis through 2040 (the end year of Pasha's Terminal Operating Agreement).</p> <p><b>MM-AQ-4: Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance.</b></p> <p>Every quarter following approval of the first real estate agreement or issuance of the first Coastal Development Permit associated with the project, whichever occurs first, the project proponent shall provide a report of the annual vehicle throughput to-date, and the projected total throughput for the following 6 months to the District's Planning &amp; Green Port Department. Prior to the annual vehicle throughput reaching 480,337 vehicles, which is an increase of 119,065 vehicles over the 2013 vehicle throughput total (361,372 vehicles), the project proponent shall implement vessel speed reduction measures to reduce the project's net-new nitrogen oxide emissions. The program shall require that 90% of the vessels calling at National City Marine Terminal reduce their speeds to 12 knots starting at 40 nautical miles from Point Loma.</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			Implementation of this vessel speed reduction program will be included in all new real estate agreements and Coastal Development Permit(s) associated with this project. Evidence of implementation and compliance with this mitigation measure shall be provided to the District's Planning & Green Port Department on an annual basis through 2040 (the end year of Pasha's Terminal Operating Agreement).	
			<b>MM-AQ-5: Replace Gasoline/Diesel Passenger Van with Electric Passenger Van.</b> Prior to January 1, 2020, the project proponent shall purchase and operate an electric passenger shuttle to be used for yard movement associated with vehicle storage operations.	
Cumulatively Considerable Criteria Pollutant Contribution under an Ambient Air Quality Standard	<b>Impact-AQ-2: Cumulative Emissions in Excess of NO<sub>x</sub> Threshold during Operations.</b> Project emissions during operations, before mitigation, would exceed the San Diego County SLTs for NO <sub>x</sub> at maximum capacity, and when combined with other nearby past, present, and probable future projects, the project's contribution would be cumulatively considerable. While the incremental contribution to health effects from NO <sub>x</sub> cannot be traced solely to the proposed project, the contribution of project-related emissions is considered significant because the project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health.	PS	Implement <b>MM-AQ-2</b> through <b>MM-AQ-5</b>	LS



Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Sensitive Receptors	<b>Impact-AQ-2: Emissions in Excess of NO<sub>x</sub> Thresholds During Operations.</b> Project emissions during operations, before mitigation, would exceed the San Diego County SLTs for NO <sub>x</sub> at maximum capacity. While the incremental contribution to health effects from NO <sub>x</sub> cannot be traced solely to the proposed project, the contribution of project-related emissions is considered significant because the project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health.	PS	Implement <b>MM-AQ-2</b> through <b>MM-AQ-5</b>	LS
Objectionable Odors	Implementation of the proposed project would not create objectionable odors affecting a substantial number of people.	LS	No mitigation is required.	N/A
<b>Project Contribution to Cumulative Impacts</b>				
Conflict with an Air Quality Management Plan (Cumulative)	<b>Impact-C-AQ-1: New Land Use Designations Not Accounted for in the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP).</b> The proposed project would re-designate Streets to Marine Related Industrial and would add a Marine Related Industrial Overlay onto two parcels that are not currently designated as Marine Related Industrial. As these two land use changes were not known at the time the RAQS and SIP were last updated,	PS	Implement <b>MM-AQ-1</b>	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	this would result in a conflict with the applicable state and regional air quality plan.			
Consistency with Air Quality Standards (Cumulative)	<b>Impact-C-AQ-2: Emissions in Excess of Cumulative NO<sub>x</sub> Thresholds During Operations.</b> Emissions during operations would exceed the cumulative San Diego County SLTs for NO <sub>x</sub> at maximum capacity primarily due to vessel, train, and truck activity.	PS	Implement <b>MM-AQ-2</b> through <b>MM-AQ-5</b>	LS
<b>4.2 Greenhouse Gas Emissions, Climate Change, and Energy Use</b>				
<b>Project Impacts</b>				
Direct and Indirect Generation of GHGs by 2020	<b>Impact-GHG-1: Project GHG Emissions through 2020.</b> Project GHG during combined project construction and operational activities, before mitigation, the project would achieve a 3% reduction, which is inconsistent with the CAP's reduction target of 33%. Additionally, the proposed project would only partially comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs.	PS	<b>MM-GHG-1: Implement Diesel-Reduction Measures During Construction and Operations.</b> The project proponent shall implement the following measures during project construction and operations. i. The project proponent shall limit all construction equipment, drayage, and delivery truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and shall submit quarterly reports of violators to the San Diego Unified Port District. This measure shall be enforced by Pasha supervisors. The San Diego Unified Port District shall issue penalties pursuant to California airborne toxics control measure 13 California Code of Regulations Section 2485 for repeat violators. The project proponent shall submit evidence of the use of diesel reduction measures to the San Diego	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>Unified Port District through annual reporting with the first report due 1 year from the date of project completion and each report due exactly 1 year after, noting all violations with relevant identifying information of the vehicles and drivers in violation of these measures.</p> <p>ii. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, the project proponent shall verify that all equipment has been checked by a certified mechanic and determined to be running in proper condition prior to admittance into any Pasha leasehold. The project proponent shall submit a report by the certified mechanic of the condition of the construction equipment to the San Diego Unified Port District prior to construction.</p> <p><b>MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures.</b> Effective opening day, the project proponent shall implement the following measures to be consistent with the Climate Action Plan.</p> <ul style="list-style-type: none"> <li>• Vessels shall comply with the San Diego Unified Port District's voluntary vessel speed reduction program, which targets 80% compliance.</li> <li>• The project proponent shall decrease onsite movements where practicable.</li> <li>• No drive-through shall be allowed.</li> <li>• Assembly Bill 939 shall be complied with by recycling at least 50% of solid waste. This measure shall be applied during construction and operation</li> </ul>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>of the proposed project.</p> <ul style="list-style-type: none"> <li>Light fixtures at the project site shall be replaced with lower energy bulbs such as fluorescent, LEDs, or CFLs.</li> </ul> <p>Implementation of Climate Action Plan measures will be included in all real estate agreements associated with this project and the CDP. Evidence of implementation and compliance with this mitigation measure shall be provided to the San Diego Unified Port District on an annual basis through 2040 (the end year of Pasha's Terminal Operating Agreement).</p> <p><b>MM-GHG-3: Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance.</b></p> <p>Every quarter following approval of the first real estate agreement or issuance of the first Coastal Development Permit associated with the project, whichever occurs first, the project proponent shall provide a report of the annual vehicle throughput to date, and the projected total throughput for the following 6 months to the San Diego Unified Port District's Planning &amp; Green Port Department. Prior to the annual vehicle throughput reaching 480,337 vehicles, which is an increase of 119,065 vehicles over the 2013 vehicle throughput total (361,372 vehicles), the project proponent shall implement vessel speed reduction measures to reduce the project's net-new greenhouse gas emissions. The program shall require that 90% of the vessels calling at the National City Marine Terminal reduce their speeds to 12 knots starting at 40 nautical miles from Point Loma.</p> <p>Implementation of this vessel speed reduction program will be included in all new real estate agreements and Coastal Development Permit(s) associated with this project. Evidence of implementation and compliance</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>with this mitigation measure shall be provided to the San Diego Unified Port District's Planning &amp; Green Port Department on an annual basis through 2040 (the end year of Pasha's Terminal Operating Agreement).</p> <p><b>MM-GHG-4: Replace Gasoline/Diesel Passenger Van with Electric Passenger Van.</b> Prior to January 1, 2020, the project proponent shall purchase and operate an electric passenger shuttle to be used for yard movement associated with vehicle storage operations.</p> <p><b>MM-GHG-5: Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry.</b> The project proponent shall incorporate renewable energy into the leasehold or other areas within the San Diego Unified Port District or purchase greenhouse gas reduction credits as specified herein to achieve requisite reductions to meet the 2020 reduction target. This mitigation measure shall achieve at least 4,351 megawatt-hours per year (MWh/year) of renewable energy or the project proponent may purchase the equivalent amount of greenhouse gas offsets—an amount of 6,159 metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>). This requirement would result in an annual reduction of 1,231.8 MTCO<sub>2e</sub> by 2020 and running through the life of the project. In order to achieve 2020 annual reduction target of 1,231.8 MTCO<sub>2e</sub>, the project proponent shall install and operate a renewable energy project that would achieve at least 4,351 MWh/year of renewable energy. Otherwise, the project proponent shall purchase the equivalent amount of greenhouse gas offsets, which is 6,159 MTCO<sub>2e</sub>. The renewable energy project may be submitted to the San Diego Unified Port District as late</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>as January 1, 2018 (no later, but may be submitted sooner) in order to consider the latest advancements in energy technology and future regulatory requirements and must be operational by January 1, 2020.</p> <p>Because it is unknown how “solar ready” the available rooftop areas are within the leasehold, once at the design phase, the renewable energy project may be determined infeasible. Should this determination of infeasibility be made by the San Diego Unified Port District after considering evidence submitted by the project proponent related to any structural limitations (i.e., the rooftops cannot support a renewable energy system), then two additional options are available. The San Diego Unified Port District shall either require the renewable energy project to be built off site (i.e., at a location not within the proponent leaseholds but within the San Diego Unified Port District’s jurisdiction) or shall require the proponent to purchase the equivalent amount of greenhouse gas offsets from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the California Air Resources Board). The selected option or a combination must achieve a total annual reduction of 1,231.8 MTCO<sub>2</sub>e, which would amount to 6,159 MTCO<sub>2</sub>e over 5 years (relative to the projected San Diego Gas and Electric power mix in 2020).</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Direct and Indirect Generation of GHGs Beyond 2020	<b>Impact-GHG-2: Project GHG Emissions Beyond 2020.</b> Although proposed project emissions would be on a downward trajectory in the post-2020 period, the proposed project's reduction in GHG emissions during combined project construction and operational activities, before mitigation, may not contribute sufficiently to post-2020 progress toward statewide 2030 and 2050 reduction targets and would not always be in compliance with plans, policies, and regulatory programs adopted by ARB or other California agencies for post-2020 for the purpose of reducing the emissions of GHGs.	PS	<p><b>MM-GHG-6: Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry.</b> The project proponent shall incorporate renewable energy into the leasehold or other areas within the San Diego Unified Port District or purchase greenhouse gas reduction credits as specified herein to achieve requisite reductions to meet the 2030 and 2040 reduction targets. This mitigation measure shall combine with MM-GHG-5 to achieve at least 12,095 megawatt-hours per year (MWh/year) of renewable energy or the project proponent may purchase the equivalent amount of greenhouse gas offsets—an initial amount of 14,262 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) by 2030 and a final amount of 25,554 MTCO<sub>2</sub>e by 2040. This requirement would result in an annual reduction of 1,462.2 MTCO<sub>2</sub>e by 2030 and 2,555.4 MTCO<sub>2</sub>e by 2040.</p> <p><i>2030 Reduction Requirement.</i> In order to achieve 2030 annual reduction target of 1,462.2 MTCO<sub>2</sub>e, the project proponent shall install and operate a renewable energy project that, combined with MM-GHG-5, would achieve at least 6,750 MWh/year of renewable energy (i.e., First Phase). Otherwise, the project proponent shall purchase the equivalent amount of greenhouse gas offsets, which is 7,131 MTCO<sub>2</sub>e. The First Phase of the renewable energy project may be submitted to the San Diego Unified Port District as late as January 1, 2023 (but no later) in order to consider the latest advancements in energy technology and future regulatory requirements, but may be submitted sooner and must be operational by January 1, 2025.</p> <p><i>2040 Reduction Requirement.</i> In order to achieve 2040 annual reduction target of 2,555.4 MTCO<sub>2</sub>e, the project proponent shall install and operate a renewable energy</p>	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>project that, combined with MM-GHG-5 and the First Phase, would achieve at least 12,095 MWh/year of renewable energy (i.e., Second Phase). Otherwise, the project proponent shall purchase the equivalent amount of greenhouse gas offsets, which is 25,554 MTCO<sub>2e</sub>. The Second Phase of the renewable energy project may be submitted to the San Diego Unified Port District as late as December 31, 2028 (but no later) in order to consider the latest advancements in energy technology and future regulatory requirements, but may be submitted sooner and must be operational by January 1, 2030.</p> <p>Because it is unknown how “solar ready” the available rooftop areas are within the leasehold, once at the design phase, the renewable energy project may be determined infeasible. Should this determination of infeasibility be made by the San Diego Unified Port District after considering evidence submitted by the project proponent related to any structural limitations (i.e., the rooftops cannot support a renewable energy system), then two additional options are available. The San Diego Unified Port District shall either require the renewable energy project to be built off site (i.e., at a location not within the proponent leaseholds but within the San Diego Unified Port District’s jurisdiction) or shall require the proponent to purchase the equivalent amount of greenhouse gas offsets from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the California Air Resources Board). The selected option or a combination of the above-mentioned options must achieve a total annual reduction of 1,426.2 MTCO<sub>2e</sub> beginning on January 1, 2025 and lasting until December 31, 2029. Beginning on January 1, 2030, the annual reductions must increase to 2,555.4 MTCO<sub>2e</sub> until the end of the project life in 2040. The aggregated</p>	



Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			annual reductions between 2025 and 2030 would amount to 7,131 MTCO <sub>2</sub> e (relative to the projected San Diego Gas and Electric power mix in 2030) and would increase to an aggregated amount of 25,554 MTCO <sub>2</sub> e between 2030 and 2040 (relative to the projected San Diego Gas and Electric power mix in 2040).	
Effects from Climate Change on Project	Implementation of the proposed project would not place people or structures at substantial risk of harm due to predicted climate change effects, including sea level rise.	LS	No mitigation is required.	N/A
Wasteful, Inefficient, and Unnecessary Usage of Direct or Indirect Energy	Implementation of the proposed project would not result in the wasteful, inefficient, and unnecessary usage of direct or indirect energy	LS	No mitigation is required, though MM-GHG-1 through MM-GHG-6 reduces the project's energy demand for fossil fuels.	N/A
<b>Project Contribution to Cumulative Impacts</b>				
Direct and Indirect Generation of GHGs Contributing to a Cumulative GHG Impact out to 2020 (cumulative)	<b>Impact-C-GHG-1: Project GHG Emissions through 2020.</b> Project GHG emissions during combined project construction and operational activities, before mitigation, would not achieve the CAP's reduction target of 33% below unmitigated levels in 2020 and would only partially comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs.	PS	Implement <b>MM-GHG-1 through MM-GHG-5.</b>	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Direct and Indirect Generation of GHGs Contributing to a Cumulative GHG Impact Post-2020 (cumulative)	<b>Impact-C-GHG-2: Project GHG Emissions Beyond 2020.</b> Although proposed project emissions would be on a downward trajectory in the post-2020 period, the proposed project's reduction in GHG emissions during combined project construction and operational activities, before mitigation, may not contribute sufficiently to post-2020 progress toward statewide 2030 and 2050 reduction targets and would be in non-compliance with plans, policies, and regulatory programs adopted by ARB or other California agencies for post-2020 for the purpose of reducing the emissions of GHGs.	PS	Implement <b>MM-GHG-1 through MM-GHG-6.</b>	SU
<b>4.3 Hazards and Hazardous Materials</b>				
<b>Project Impacts</b>				
Release of Hazardous Materials	<b>Impact-HAZ-1: Potential of Encountering Burn Ash from Former National City Dump.</b> Because the exact boundaries of the former National City Dump are unknown, it is possible that during ground-disturbing activities at the tank farm site, street closures sites, or former Weyerhaeuser site, burn ash may be encountered. Without proper precautions and a safety and health plan in place, the disturbance of burn ash may result in inhalation or direct contact by construction workers.	PS	<b>MM-HAZ-1: Prepare a Site-Specific Site Safety and Health Plan to Address Potential Burn Ash Presence and Other Contaminants.</b> Prior to the commencement of ground-disturbing activities, a site-specific site safety and health plan (prepared in accordance with CFR 1910.120 Appendix C) and a soil and groundwater management plan (prepared in accordance with CCR Title 22 and Title 27) is required to ensure that all soil disturbed or excavated at the site is screened for the presence of hazardous materials and appropriately characterized and disposed of or reused on site if determined to be suitable for reuse. These plans would be submitted to the District's Planning and Green Port Department, and approval would be required prior to the commencement of ground-disturbing activities. The plans shall specify that in the event indicators of burn	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			ash material are encountered during ground-disturbing activities, work shall cease and the San Diego County Department of Environmental Health's Local Enforcement Agency shall be notified immediately and prior to any continuation of ground or soil work.	
<b>Project Contribution to Cumulative Impacts</b>				
The proposed project's contribution to cumulative hazards and hazardous materials impacts would be less than cumulatively considerable.				
<b>4.4 Hydrology and Water Quality</b>				
<b>Project Impacts</b>				
Water Quality Standards and Requirements	Implementation of the proposed project would not violate any water quality standards or waste discharge requirements.	LS	No mitigation is required	N/A
Degrade Water Quality	Implementation of the proposed project would not otherwise substantially degrade water quality.	LS	No mitigation is required	N/A
<b>Project Contribution to Cumulative Impacts</b>				
The proposed project's contribution to cumulative hydrology and water quality impacts would be less than cumulatively considerable.				
<b>4.5 Land Use and Planning</b>				
<b>Project Impacts</b>				
Conflict with Land Use Plans, Policies, and Regulations	Implementation of the proposed project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.	LS	No mitigation is required	N/A
<b>Project Contribution to Cumulative Impacts</b>				
The proposed project's contribution to cumulative land use and planning impacts would be less than cumulatively considerable.				

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
<b>4.6 Noise and Vibration</b>				
<b>Project Impacts</b>				
Generate noise levels in excess of established standards	<b>Impact-NOI-1: Heavy Truck Idling Near Sensitive Noise Receptors.</b> Trucks from the NCMT and its related operations are known to park and idle along residential streets in the project vicinity, causing a noise nuisance and potentially violating provisions of Chapter 11.34 of the City's municipal code, <i>Truck Idling and Parking Maneuvers near a School or Residence</i> .	PS	<b>MM-NOI-1: Notify Trucks from NCMT and Related Operations that Idling on Residential Streets is Illegal.</b> Signs shall be prominently posted, at all truck entrances and exits serving the various project sites (or otherwise placed strategically for maximum awareness), stating that truck parking and/or idling is prohibited on any residential street or within 100 feet of any school in the City of National City. Such prohibition shall also be included as part of any future agreements (e.g., short-term use permit) or Coastal Development Permits related to the proposed project.	LS
Groundborne Noise	Implementation of the proposed Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	LS	No mitigation required	N/A
Permanent Increase in Ambient Noise Levels	Implementation of the proposed Project would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	LS	No mitigation required	N/A
Substantial Temporary or Periodic Increase in Ambient Noise Levels	Implementation of the proposed Project would not result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.	LS	No mitigation required	N/A
<b>Project Contribution to Cumulative Impacts</b>				
The proposed project's contribution to cumulative noise and vibration impacts would be less than cumulatively considerable.				

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
<b>4.7 Transportation, Circulation, and Parking</b>				
<b>Project Impacts</b>				
Conflict with an Applicable Plan, Ordinance, or Policy	Implementation of the proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.	LS	No mitigation is required.	N/A
Hazards Because of a Design Feature or Incompatible Uses	Implementation of the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LS	No mitigation required	N/A
Conflict with Emergency Access	Implementation of the proposed project would not result in inadequate emergency access.	LS	No mitigation required	N/A
Conflict with Alternative Transportation	Implementation of the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	LS	No mitigation required	N/A
Insufficient Parking	<b>Impact-TRA-1: Insufficient On-Terminal Employee Parking.</b>	PS	<b>MM-TRA-1. Reconfigure I-Lot to Accommodate 455 Striped Parking Spaces.</b> Prior to implementation of	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Parking is currently provided at the I-Lot on the NCMT; however, the current configuration would not provide sufficient parking for all employees across three shifts.		any project component (i.e., renewal of an existing short-term use permit, approval of the CDP for the tank farm, or issuance of a new real estate agreement for the former Weyerhaeuser site), the project proponent shall restripe I-Lot to accommodate 455 standard vehicle parking spaces. Once completed, evidence indicating the completion of the striping shall be provided by the contractor or Project Applicant to the District, and the District shall be permitted to confirm the parking area is being used as designed and consistent with this mitigation measure. Should the I-Lot be used for anything other than employee parking, such as vehicle/cargo storage, the project proponent shall present a parking study, created by a qualified transportation planner or engineer, to the District showing that such uses are not resulting in a shortage of employee parking within the National City Marine Terminal boundaries and no employees are parking outside the terminal as a consequence.	
<b>Project Contribution to Cumulative Impacts</b>				
The proposed project's contribution to cumulative transportation, circulation, and parking impacts would be less than cumulatively considerable.				
Notes: PS = Potentially significant; LS = Less than significant; SU = Significant and Unavoidable; N/A = Not applicable				

### 1.1 Overview

The San Diego Unified Port District (District) is considering an application by Pasha Automotive Services (Pasha) for a Coastal Development Permit (CDP), four Tidelands Use and Occupancy Permit/Temporary Use Permit (short-term use permits) renewals, a new real estate agreement(s),<sup>1</sup> and a Port Master Plan Amendment (PMPA) to increase the amount of area used for vehicle storage by Pasha in order to meet existing and anticipated future market demands. These discretionary approvals, which are required to implement the National City Marine Terminal (NCMT) Tank Farm Paving and Streets Closures & Port Master Plan Amendment project (proposed project), would entail of the following.

- Grade and pave the former NCMT tank farm site.
- Permanently close and pave over portions of Quay Avenue, 28th Street, and 32nd Street (street closures) and issue a new real estate agreement to lease these closed street areas.
- Renew four existing Tidelands Use and Occupancy Permits and Temporary Use Permits (short-term use permits) in the vicinity of the NCMT for a 5-year period.
- Enter into a new real estate agreement (i.e., Tideland Use and Occupancy Permit, Temporary Use Permit, or a lease) to lease Port Parcel 027-029 (former Weyerhaeuser site<sup>2</sup>), which may include demolishing and repaving two existing structures.

In addition, the District is proposing to apply land use designations to two District-owned properties located east of the mean high tide line. Specifically, the proposed project would implement the following.

- Incorporate into the Port Master Plan (PMP), through the PMPA, District-owned properties, located east of the mean high tide line but still within the coastal zone (collectively described as “Uplands Properties”), and designate the Uplands Properties as Commercial Recreation. These properties include the portion of Lot K<sup>3</sup> that is located east of the mean high tide line (the part of Port Parcel 025-010-D, as shown on Figure 2-3 of Chapter 2, *Environmental Setting*, that is east of the mean high tide line) and Port Parcel 027-047 that is east of Marina Way and north of Pier 32 Marina.
- Apply a Marine Related Industrial Overlay (Overlay) land use designation on the portion of Lot K east of the mean high tide line and Port Parcel 028-007 (referred to as the “Marine Related

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<sup>1</sup> The potential real estate agreement could be a Tideland Use and Occupancy Permit, Temporary Use Permit, or lease.

<sup>2</sup> This site is referred to as the “former Weyerhaeuser site” because it was most recently leased to the Weyerhaeuser Lumber Company.

<sup>3</sup> Lot K is located north of 32nd Street, west of Marina Way, south of the National Distribution Center, and east of Tidelands Avenue and the balloon rail track.

Industrial Overlay”). The Overlay would be temporarily placed on the areas over their underlying Commercial Recreation land use designation. The properties would revert back to the Commercial Recreation designation without the Overlay within 7 years from the time the PMPA is finalized<sup>4</sup> or a development project, consistent with the Commercial Recreation designation, is proposed and approved<sup>5</sup> by the Board of Port Commissioners (BPC).<sup>6</sup>

The complete project description is provided in Chapter 3, *Project Description*, of this Draft Environmental Impact Report (EIR).

The District is the Lead Agency as defined under California Environmental Quality Act (CEQA) Guidelines Section 15050 because it has the principal responsibility for carrying out and approving the proposed project. As the Lead Agency, the District also has the primary responsibility for complying with CEQA. As such, the District has analyzed the environmental effects of the proposed project, and the results of that analysis are presented in this Draft EIR. In addition, the California Coastal Commission (Coastal Commission) will be using this document for PMPA certification purposes. Therefore, the Coastal Commission is considered a Responsible Agency, as defined by State CEQA Guidelines Section 15381.

This chapter briefly discusses (1) the purpose of CEQA and the EIR, (2) the intended uses of this EIR, (3) the scope and content of the Draft EIR, and (4) the organization of the Draft EIR.

## 1.2 Purpose of the California Environmental Quality Act and the Environmental Impact Report

This EIR evaluates the environmental effects of the proposed project and has been prepared in compliance with CEQA (Public Resources Code Section 21000, et seq.) and the procedures for implementation of CEQA set forth in the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.). This EIR has also been prepared in compliance with the District’s Guidelines for Compliance with CEQA (Resolution 97-191).

CEQA was enacted by the California Legislature in 1970. As noted under State CEQA Guidelines Section 15002, CEQA has four basic purposes.

1. Inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities.

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<sup>4</sup> For this purpose, “finalized” means the California Coastal Commission’s acceptance of the District’s approval of the California Coastal Commission’s certification of the PMPA pursuant to Section 13632 of the Coastal Commission’s regulations. 14 Cal. Code of Reg. § 13632.

<sup>5</sup> For this purpose, “approved” means issuance of a CDP.

<sup>6</sup> As a separate project with independent utility, the District and City are collectively studying a land use plan for the parcels and adjacent areas, commonly known as the “Marina District Land Use Plan,” which may supersede the proposed Overlay if and when the District and the Coastal Commission approve/certify a PMPA after appropriate CEQA analysis is conducted. Such CEQA analysis would include incorporation of all feasible mitigation measures, consideration and adoption (if required) of alternatives, including the No Project Alternative and a statement of overriding consideration is adopted, if applicable. The Marina District Land Use Plan is in its preliminary stages and the BPC directed staff on April 14, 2016, to proceed with CEQA review.



2. Identify ways in which environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An EIR is an informational document, the purpose of which is to inform members of the public and agency decision-makers of the significant environmental effects of a proposed project, identify feasible ways to reduce the significant effects of the proposed project, and describe a reasonable range of feasible alternatives to the project that would reduce one or more significant effects and still meet the proposed project's objectives. In instances where significant impacts cannot be avoided or mitigated, the proposed project may nonetheless be carried out or approved if the approving agency finds that economic, legal, social, technological, or other benefits outweigh the unavoidable significant environmental impacts.

## 1.3 Intended Uses of the Environmental Impact Report

This section discusses the intended uses of the EIR in accordance with Section 15124(d) of the State CEQA Guidelines, and includes (1) a list of agencies that are expected to use the EIR for decision-making and (2) a list of required permits and other approvals required to implement the proposed project. Environmental review and consultation requirements of federal, state, or local laws, regulations, or policies that are in addition to CEQA are discussed in the applicable individual resource sections within Chapter 4, *Environmental Analysis*.

### 1.3.1 Agencies Expected to Use this Draft Environmental Impact Report

Agencies expected to use this Draft EIR include the District as Lead Agency and the Coastal Commission as a Responsible Agency per State CEQA Guidelines Section 15381. The California Department of Fish and Wildlife (CDFW) is a "Trustee Agency" as defined in State CEQA Guidelines Section 15386, and is anticipated to have interest in the proposed project; however, approval or permits from CDFW would not be required in order to implement the proposed project.

The BPC, in its role as the decision-making body of the District, is responsible for certifying the Final EIR, approving the PMPA, issuing CDPs, and approving Findings of Fact and a Statement of Overriding Considerations pursuant to Sections 15090–15093 of the State CEQA Guidelines. A CDP for the improvements to the former tank farm site may be issued after certification of the Final EIR and approval of Findings of Fact and a Statement of Overriding Considerations, if applicable. After BPC approval of the PMPA, the Coastal Commission will consider whether to certify the PMPA, and, if it is certified, the District will then be able to issue CDPs for closure of portions of Quay Avenue, 28th Street, and 32nd Street. The Final EIR will be used to inform the BPC of the environmental effects of the proposed project and the Coastal Commission of the environmental effects of certifying the PMPA.

Two District-owned properties are currently located outside the District's CDP jurisdictional boundaries. One of the sites (the eastern half of Lot K) is seeking renewal of its short-term use permit. This site is owned by the District, and a portion of it is governed by the PMP; however, the portion east of the mean high tide line is not within the PMP. The proposed project would incorporate this portion of the property into the PMP as Commercial Recreation. No physical changes are proposed at this site and no discretionary permits are required from the City of National City (City) as it is a matter of updating the PMP to include a District-owned property; provided, however, the City may desire to amend its Local Coastal Program (LCP) to remove the property for clarification purposes.

The second site, Port Parcel 027-047, is also owned by the District and is not in the PMP. The proposed project would add the site to the PMP with a Commercial Recreation designation. No discretionary approval would be required from the City to implement this change as it is a matter of updating the PMP to include a District-owned property; provided, however, the City may desire to amend its LCP to remove the property for clarification purposes.

Implementation of the Marine Related Industrial Overlay would need to be incorporated into the PMPA as part of the project and would be subject to certification by the Coastal Commission.

Therefore, because the City of National City would not have any discretionary approval authority over the proposed project, the City is not considered a Responsible Agency under CEQA unless it desires to update its LCP to remove the Uplands Properties.<sup>7</sup> The Coastal Commission does have discretionary approval over the PMPA portion of the project, and is therefore considered a responsible agency. Table 1-1 provides a summary list of the approvals and permits required.

**Table 1-1. List of Required Project Approvals**

<b>Discretionary Action</b>	<b>District</b>	<b>Coastal Commission</b>
Certification of Final EIR	X	
Adoption of Mitigation Monitoring and Reporting Program	X	
Adoption of Findings of Fact	X	
Adoption of Statement of Overriding Considerations	X	
Approval of Port Master Plan Amendment for streets closures, Marine Related Industrial overlay, and inclusion of the Uplands Properties into PMP as Commercial Recreation	X	
Certification of Port Master Plan Amendment for streets closures, Marine Related Industrial overlay, and inclusion of the Uplands Properties into PMP as Commercial Recreation		X
Issuance of the Coastal Development Permit(s)	X	

<sup>7</sup> Paving of the tank farm site will require issuance of a grading permit from the City; however, issuance of a grading permit is considered a ministerial approval and not a discretionary action.

<b>Discretionary Action</b>	<b>District</b>	<b>Coastal Commission</b>
Renewal of the short-term use permits (i.e., Tidelands Use and Occupancy Permits, and Temporary Use Permits)	X	
New Real Estate Agreement for the former Weyerhaeuser site and street closures	X	

## 1.4 Scope and Content of the Draft Environmental Impact Report

As the Lead Agency, the District is responsible for determining the scope and content of this Draft EIR, a process referred to as *scoping*. As part of the scoping process, the District considered the environmental resources present on the project site and in the surrounding area, and identified the probable environmental effects of the proposed project. On December 12, 2014, the District posted a Notice of Preparation (NOP) with the County Clerk in accordance with Section 15082 of the State CEQA Guidelines. Comments were accepted until January 15, 2015. The NOP was emailed and mailed to public agencies, organizations, and other interested individuals. The District also held a public scoping meeting on December 18, 2014, at 4:30 p.m. at the San Diego Unified Port District Administration Building, Training Room, 3165 Pacific Highway, San Diego, CA 92101. Free public parking was available for attendees.

Subsequent to this scoping period, the project proponent modified the project application to include closure and repaving of a portion of 32nd Street and use of Port Parcel 027-029 (former Weyerhaeuser site). In addition, in response to comments received during the scoping period, the District included the Uplands Properties, as part of the PMPA, as well as the Marine Related Industrial Overlay at Port Parcel 028-007 and the portion of Lot K (Port Parcel 025-010-D) located east of the mean high tide line. In response to requests by stakeholders to hold another round of scoping for the EIR, the District elected to conduct a second scoping period, including a second public scoping meeting.

On August 20, 2015, the District posted the revised NOP with the County Clerk in accordance with Section 15082 of the State CEQA Guidelines. Comments were initially accepted until September 21, 2015, but interested parties requested an extended scoping period. Consequently, the District extended the deadline to September 28, 2015. As with the original NOP, the revised NOP was emailed and mailed to public agencies, organizations, and other interested individuals. The District also held a public scoping meeting on September 9, 2015, from 5 p.m. to 7 p.m. at the San Diego Unified Port District Administration Building, Training Room, 3165 Pacific Highway, San Diego, CA 92101. Free public parking was available for attendees.

Comments received in response to the NOPs and during the public scoping meetings were used to determine the scope of this Draft EIR and are summarized in Table 1-2. Based on the District's preliminary evaluation of the probable effects from the proposed project and a thorough review of the comments received on the NOPs, the Draft EIR analyzes the effects associated with the following resources.

- Air Quality and Health Risk
- Greenhouse Gas Emissions, Climate Change, and Energy Use
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Transportation, Circulation, and Parking

The Revised Initial Study (IS) conducted for the proposed project (Appendix B-1) determined that the project would not result in potentially significant impacts related to aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, mineral resources, population and housing, public services, recreation, and utilities and service systems (except for energy use). Chapter 6, *Additional Consequences of Project Implementation*, includes a brief analysis as to why impacts on these environmental resources would not be significant.

### **1.4.1 Comments Received in Response to the Notice of Preparation/Initial Study**

Several specific environmental issues were raised in the comments received on the NOPs. A summary of these comments and the location of where they are addressed in the Draft EIR are provided in Table 1-2. Only comments that pertain to the environmental scope of the EIR are summarized. The NOPs, which each included an IS, are provided as Appendices B-1 and B-2 of this Draft EIR, and copies of all IS/NOP comment letters are provided as Appendix A.

**Table 1-2. Summary of NOP Comments Received**

<b>Commenter</b>	<b>Environmental Topic(s) Raised</b>	<b>Location Addressed in EIR</b>
State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (SCH), August 20, 2015	<ul style="list-style-type: none"> <li>Provides SCH# 2014121046</li> <li>Notes which state agencies received a copy of the NOP</li> <li>Notes the extension to the scoping period</li> </ul>	N/A
State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (SCH), December 12, 2014	<ul style="list-style-type: none"> <li>Provides SCH# 2014121046</li> <li>Notes which state agencies received a copy of the NOP</li> </ul>	N/A
Department of the Navy, Ya-chi Huang, Community Planning & Liaison Officer, Naval Base San Diego; received January 15, 2015	Effects on ingress/egress to Gate 13 on 19th Street.	Section 4.7, <i>Transportation, Circulation, and Parking</i>
United States Fish and Wildlife Service, Sandy Vissman, September 28, 2015	Consider a habitat buffer for Sweetwater Marsh and address potential lighting from marine industrial operations on habitat	Chapter 3, <i>Project Description</i> Chapter 6, <i>Additional Consequences of Project Implementation</i> , under <i>Effects Found Not to be Significant</i> .
California Department of Fish and Wildlife, Paul Schlitt, Senior Environmental Scientist, January 7, 2015	Indicates CDFW is a trustee agency Effects on and avoidance measures for nesting birds pursuant to the Migratory Bird Treaty Act	Chapter 1, <i>Introduction</i> Chapter 6, <i>Additional Consequences of Project Implementation</i> , under <i>Effects Found Not to be Significant</i> .
California Coastal Commission, Kanani Brown, Coastal Program Analyst III, January 15, 2015	Incorporate policies of the Coastal Act into environmental review Identify how various development activities will be processed through regulatory review Removal of on-street parking along road closures Long-term evaluation of the circulation needs of the marine terminal and maritime industry and broader public access	Section 4.5, <i>Land Use and Planning</i> Chapter 1, <i>Introduction</i> Section 4.5, <i>Land Use and Planning</i> Section 4.7, <i>Transportation, Circulation, and Parking</i> Section 4.5, <i>Land Use and Planning</i> Section 4.7, <i>Transportation, Circulation, and Parking</i>
California Department of Transportation, District 11, Jacob Armstrong, Chief, August 26, 2015	Indicates a traffic study is necessary Provides guidance on the study area Provides guidance on the scope of the analysis	Section 4.7, <i>Transportation, Circulation, and Parking</i>

<b>Commenter</b>	<b>Environmental Topic(s) Raised</b>	<b>Location Addressed in EIR</b>
	Provides guidance on determining significance and related mitigation	
San Diego Association of Governments, Susan B. Baldwin, Senior Regional Planner, September 23, 2015	Consider the resulting reduction in vehicle miles traveled (VMT) from consolidating storage space within the National City Bayfront Planning District	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i> Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Consider suggested mitigation strategies for train operations and air quality and greenhouse gas (GHG) impacts	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>
	Consider suggested mitigation strategies for truck operations and air quality and GHG impacts	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>
	Consider shore power for mitigation of air quality and GHG impacts	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>
	Clarify how there would not be an increase in vessel calls	Chapter 3, <i>Project Description</i>
	Clarify if a greater percent of rail can be used for additional vehicles	Chapter 3, <i>Project Description</i> Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Guidance is provided on the federal congestion management process	Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Effects from possible mosquito breeding sources created by the project	Section 4.4, <i>Hydrology and Water Quality</i>
County of San Diego, Department of Environmental Health, Erin McCowen, Environmental Health Specialist, Vector Control Program, September 28, 2015		
County of San Diego, Department of Environmental Health, Rebecca Lafreniere, Chief, Vector Control Program, December 18, 2014	Effects from possible mosquito breeding sources created by the project	Section 4.4, <i>Hydrology and Water Quality</i>

<b>Commenter</b>	<b>Environmental Topic(s) Raised</b>	<b>Location Addressed in EIR</b>
County of San Diego, Department of Environmental Health, Karilyn A. Merlos, Supervising Environmental Health Specialist, Solid Waste Local Enforcement Agency, January 9, 2015	Encountering burnash from historical dump site located 0.4 mile east of the project sites	Section 4.3, <i>Hazards and Hazardous Materials</i>
City of National City, Police Department, Jose Tellez, Captain, December 22, 2014	Security officer on site during construction phase	Chapter 3, <i>Project Description</i>
	Traffic control during construction	Section 4.7, <i>Transportation, Circulation, and Parking</i>
City of National City, no contact name provided, January 15, 2015	Consistency with applicable land use plans	Section 4.5, <i>Land Use and Planning</i>
	Effects from the proposed street closures	Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Project-related changes to train and truck traffic including truck idling and parking, overnight parking, noise, emissions, intersection and crossing activity/delays	Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Effects on pedestrian, bicycle, and other transportation modes	Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Effects on recreational and coastal access	Section 4.5, <i>Land Use and Planning</i> Section 4.7, <i>Transportation, Circulation, and Parking</i> Appendix A, <i>Initial Study</i> — Section XV, <i>Recreation</i> Chapter 6, <i>Additional Consequences of Project Implementation</i> , under <i>Effects Found Not to be Significant</i>
	Describe entitlements required for land use consistency	Chapter 1, <i>Introduction</i> Section 4.5, <i>Land Use and Planning</i>
City of National City, no contact name provided, September 28, 2015	Consistency with applicable land use plans	Section 4.5, <i>Land Use and Planning</i>
	National City would be a responsible agency under CEQA	Chapter 1, <i>Introduction</i>
	Challenges the notion that Quay Avenue, 28th Street, and 32nd Street are not public rights of way and are controlled by the City	Chapter 2, <i>Environmental Setting</i> Chapter 3, <i>Project Description</i>
	Address change in train and truck traffic	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.2, <i>Greenhouse Gas Emissions, Climate Change,</i>

<b>Commenter</b>	<b>Environmental Topic(s) Raised</b>	<b>Location Addressed in EIR</b>
		<i>and Energy Use</i> Section 4.6, <i>Noise and Vibration</i>
	Address impacts on pedestrian, bicycle, and other transportation modes, including access to recreational and coastal access	Section 4.5, <i>Land Use and Planning</i> Section 4.7, <i>Transportation, Circulation, and Parking</i>
	List National City plans that would require amendment	Chapter 1, <i>Introduction</i>
National City Chamber of Commerce, Jacqueline Reynoso, President/CEO, September 28, 2015	Land use consistency with Marine Related Industrial Overlay on Port Parcel 028-007 and Pepper Park	Section 4.5, <i>Land Use and Planning</i>
Environmental Health Coalition, Kayla Race, Policy Advocate, Joy Williams, Research Director, January 15, 2015	Analyze maximum potential impacts from project or limit cargo throughput	Chapter 3, <i>Project Description</i> Chapter 4, <i>Environmental Analysis</i>
	Use prior land use at short-term use sites as baseline condition; analyze 5 years of past use at sites	Chapter 3, <i>Project Description</i> Chapter 4, <i>Environmental Analysis</i>
	Air emissions from additional vessel calls	Chapter 3, <i>Project Description</i> Section 4.1, <i>Air Quality and Health Risk</i>
	Analyze effects of additional ships as their own project and consider as a cumulative project for the current project analysis	Chapter 5, <i>Cumulative Impacts</i>
	Effects from non-vehicle cargo	Chapter 3, <i>Project Description</i> Chapter 4, <i>Environmental Analysis</i>
	Air quality effects from car body work	Section 4.1, <i>Air Quality and Health Risk</i>
	Health impacts on sensitive receptors from operations	Section 4.1, <i>Air Quality and Health Risk</i>
	Air quality, traffic, and safety hazard effects from mobile sources	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Threshold choice for criteria pollutants	Section 4.1, <i>Air Quality and Health Risk</i>
	Mitigation in the form of alternative ship emission control technology, electric or hybrid trucks, and truck stop	Section 4.1, <i>Air Quality and Health Risk</i>



<b>Commenter</b>	<b>Environmental Topic(s) Raised</b>	<b>Location Addressed in EIR</b>
	on terminal	
	GHG and air quality emissions associated with autobody work	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>
	Voluntary policies should not be used in assumptions for air emission reductions	Section 4.1, <i>Air Quality and Health Risk</i>
	Secondary effects from mitigation measures (e.g., requiring shore power would increase electrical use)	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>
	Consider renewable energy as mitigation	Section 4.1, <i>Air Quality and Health Risk</i> Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>
	Threshold choice for greenhouse gases	Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>
	Effects from sea level rise related to release of hazardous materials	Section 4.3, <i>Hazards and Hazardous Materials</i>
	Hazardous materials associated with autobody work	Section 4.3, <i>Hazards and Hazardous Materials</i>
	Design recommendations for project drainage system	Chapter 3, <i>Project Description</i> Section 4.4, <i>Hydrology and Water Quality</i>
	Effect related to land use designation and recreation as a result of project's proposed use	Section 4.5, <i>Land Use and Planning</i>
	Effects on parking and consideration of more efficient parking, project alternative	Section 4.5, <i>Land Use and Planning</i> Section 4.7, <i>Transportation, Circulation, and Parking</i> Chapter 7, <i>Alternatives to the Proposed Project</i>
	Noise effects from mobile sources on sensitive receptors	Section 4.6, "Noise and Vibration"
	Ensure compliance with noise regulations	Section 4.6, <i>Noise and Vibration</i>
	Effects on intersection between Bay Marina Drive and Interstate 5 on and off ramps	Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Effects on pedestrian and bicyclist safety attempting to reach pepper park	Section 4.7, <i>Transportation, Circulation, and Parking</i>

<b>Commenter</b>	<b>Environmental Topic(s) Raised</b>	<b>Location Addressed in EIR</b>
	Include additional ships and expanding cargo as part of project or as cumulative project	Chapter 3, <i>Project Description</i> Chapter 5, <i>Cumulative Impacts</i>
	Include NCMT master plan as a cumulative project	Chapter 5, <i>Cumulative Impacts</i>
	Consider cumulative air quality and health risk impacts on National City in context of existing vulnerability ranking in region	Section 4.1, <i>Air Quality and Health Risk</i> Chapter 5, <i>Cumulative Impacts</i>
Environmental Health Coalition, Carolina Martinez, Policy Advocate, Joy Williams, Research Director, September 17, 2015	Consider potential increases in non-vehicle throughput and all impacts associated with additional vehicle imports, including ships, vehicle processing, and additional truck traffic, parking, and idling	Chapter 3, <i>Project Description</i> Chapter 4, <i>Environmental Analysis</i> Chapter 5, <i>Cumulative Impacts</i> Chapter 6, <i>Additional Consequences of Project Implementation</i> , under <i>Effects Found Not to be Significant</i>
	Mitigation in the form of alternative ship emission control technology, electric or hybrid trucks, and truck stop on terminal	Section 4.1, <i>Air Quality and Health Risk</i> Chapter 5, <i>Cumulative Impacts</i>
	Increase storage efficiency, such as a stacked parking structure as a project alternative	Chapter 7, <i>Alternatives to the Proposed Project</i>
GB Capital Holdings, LLC, John Grimstad, Principal, September 28, 2015	Identifies two additional projects: Closure of Tidelands Avenue and Port Master Plan Update	Chapter 5, <i>Cumulative Impacts</i>
	Loss of parking along 32nd Street, Quay Ave and 28th Street; parking should be contained on terminal	Section 4.7, <i>Transportation, Circulation, and Parking</i>
	Land use consistency between Marine Related Industrial and Commercial Recreation/Park land	Section 4.5, <i>Land Use and Planning</i>
San Diego Audubon Society, Jim Peugh, September 9, 2015	Consider the effects of increased vessel activity on water quality and marine habitat, providing mitigation as necessary	Chapter 3, <i>Project Description</i> Section 4.4, <i>Hydrology and Water Quality</i> Chapter 6, <i>Additional Consequences of Project Implementation</i> , under <i>Effects Found Not to be Significant</i>
R. Mitchel Beauchamp, September 4, 2015	Provides comments regarding the scope of the project description	Chapter 3, <i>Project Description</i>

## 1.5 Organization of the Draft EIR

The content and format of this Draft EIR are designed to meet the requirements of CEQA and State CEQA Guidelines Article 9. Table 1-3 summarizes the organization and content of the Draft EIR.

**Table 1-3. Document Organization and CEQA Requirements**

<b>EIR Chapter</b>	<b>Contents</b>
<i>Summary</i>	Briefly summarizes the proposed project; identifies each significant effect, with proposed mitigation measures and alternatives that would reduce or avoid that effect; identifies the areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and summarizes the issues to be resolved, including the choice among alternatives and how to mitigate the significant effects (State CEQA Guidelines Section 15123).
Chapter 1 <i>Introduction</i>	Provides the purpose of CEQA and the EIR, the scope and content of the Draft EIR, the organization of the Draft EIR, and the intended uses of the EIR, including a list of project approvals required to implement the project (State CEQA Guidelines Section 15124(d)).
Chapter 2 <i>Environmental Setting</i>	Describes the overall existing physical conditions in the vicinity of the proposed project. In addition, the specific existing conditions for each resource area are contained in the applicable resource section under Chapter 4, <i>Environmental Analysis</i> . A discussion of any inconsistencies between the proposed project and the applicable regional plans is provided in the applicable resource sections of Chapter 4, <i>Environmental Analysis</i> .
Chapter 3 <i>Project Description</i>	Contains maps of the precise location and boundaries of the proposed project and its location relative to the region, lists the proposed project's central objectives and underlying purpose, and provides a detailed description of the proposed project's characteristics (State CEQA Guidelines Section 15124(a), (b), (c)).
Chapter 4 <i>Environmental Analysis</i>	Describes the existing physical conditions for each resource area, lists the applicable laws and regulations germane to the specific resource, describes the impact assessment methodology, lists the criteria for determining whether an impact is significant, identifies the direct and indirect significant impacts that would result from implementation of the proposed project, and identifies feasible mitigation measures that would eliminate or reduce the identified significant impacts (State CEQA Guidelines Sections 15125–15126.4).
Chapter 5 <i>Cumulative Impacts</i>	Defines the cumulative study area for each resource; determines the effects of past, present, and reasonably foreseeable future projects within each study area; and evaluates the proposed project's incremental contribution to any identified cumulatively significant impacts with the objective of determining if the project's contribution is cumulatively considerable. This chapter also lists feasible mitigation measures that would eliminate or reduce the project's contribution to significant cumulative impacts to a level found to be less than cumulatively considerable (State CEQA Guidelines Section 15130).

<b>EIR Chapter</b>	<b>Contents</b>
Chapter 6 <i>Additional Consequences of Project Implementation</i>	Discusses the way the proposed project could foster economic or population growth, either directly or indirectly, in the surrounding environment; describes the significant irreversible changes associated with the proposed project's implementation; and presents a brief discussion of the environmental resource impacts that were found not to be significant during the preparation of the Draft EIR and the rationale for these findings (State CEQA Guidelines Sections 15126.2(c), (d), 15127, and 15128).
Chapter 7 <i>Alternatives to the Proposed Project</i>	Describes a reasonable range of alternatives to the proposed project, including the "No Project" Alternative; compares and contrasts the significant environmental impacts of alternatives to the proposed project; and identifies the environmentally superior alternative (State CEQA Guidelines Section 15126.6).
Chapter 8 <i>List of Preparers and Agencies Consulted</i>	Lists the individuals and agencies involved in preparing the Draft EIR (State CEQA Guidelines Section 15129).
Chapter 9 <i>References</i>	Provides a comprehensive listing by chapter of all sources cited in the Draft EIR (State CEQA Guidelines Section 15148).
<i>Acronyms and Abbreviations</i>	Lists acronyms and abbreviations for the reader's reference (located immediately following the list of tables and figures in the Table of Contents).
Appendices	Presents additional background information and technical detail for several of the resource areas. Also includes the initial study/NOP and any comments received during the scoping process, and the draft PMPA.

## 2.1 Introduction

This chapter provides a description of the overall physical environmental conditions in the vicinity of the project, from both a local and regional perspective, as they existed at the time the Notice of Preparation was published. Resource-specific existing conditions are provided within each individual resource section of Chapter 4, *Environmental Impact Analysis*. Chapter 4 also describes any inconsistencies with applicable plans.

State CEQA Guidelines Section 15125 states that an EIR must include “a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will *normally* constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives” (emphasis added).

The Draft EIR analysis uses cargo throughput numbers from 2013, as the analysis was initiated in 2014 and complete 2014 numbers were not yet available at the time the first Notice of Preparation was released in December 2014. However, using a 2013 baseline year provides a more conservative analysis because the cargo throughput numbers were lower in 2013 than in 2014 and project impacts under CEQA are based on the changes a project would have on existing conditions. The greater net throughput that could be achieved with the proposed project, the greater the project’s potential operational impact. Therefore, using a lower cargo throughput baseline effectively maximizes the project’s net cargo throughput because of the greater cargo throughput potential associated with beginning with less intensely used project sites (i.e., more room and capacity require a greater increase in throughput to reach the maximum practical storage capacity on the project sites that is analyzed within this EIR). Therefore, by using a 2013 baseline for throughput, the Draft EIR presents a worst-case scenario.

The project sites, the existing conditions for which are described below, consist of the former NCMT tank farm site, portions of Quay Avenue, 28th Street, and 32nd Street planned for closure, the short-term use permit sites, the “former Weyerhaeuser site,”<sup>1</sup> the District-owned Uplands Properties planned for incorporation into the PMP,<sup>2</sup> and the Marine Related Industrial Overlay sites.<sup>3</sup>

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<sup>1</sup> As part of the project, the project proponent is seeking a potential new real estate agreement for a site that was most recently leased to Weyerhaeuser Lumber Company. For ease of identification, this site is referred to as the “former Weyerhaeuser site.”

<sup>2</sup> The Uplands Properties are the portion of Port Parcel 025-010-D (also known as Lot K) east of the mean high tide line, and Port Parcel 027-047. That portion of Port Parcel 025-010-D is also included as one of the four short-term use permit sites.

## 2.1.1 Project Site Locations

The proposed project location includes the former tank farm site, the street closure sites, the short-term use permit sites, the former Weyerhaeuser site, and District-owned Uplands Properties planned for incorporation into the PMP. Figure 2-1 shows the regional location, and Figure 2-2 shows a map of the project and its relation to the San Diego Bay. Figure 2-3 provides an aerial view of all of the project sites.

The former tank farm site is generally bounded by Bay Marina Drive on the north, Quay Avenue on the east, 28th Street on the south, and the NCMT on the west. Quay Avenue, 28th Street, and 32nd Street are non-dedicated streets that serve principally as circulation roads for operations associated with NCMT. Bay Marina Drive is also the primary access road to and from Interstate 5 (I-5).

The existing four short-term use permit sites are located in National City, generally north, south, and east of the former tank farm and Quay Avenue/28th Street street closures sites. The former Weyerhaeuser site, a new potential real estate agreement site, is generally located east of Tideland Avenue, north of 32nd Street, and west and southwest of the National Distribution Center.

The District-owned Uplands Properties that are proposed to be incorporated into the PMP are generally located north of Pier 32 Marina, south of the National Distribution Center, west of the Sweetwater Marsh National Wildlife Refuge, and east and west of Marina Way.

The Marine Related Industrial Overlay sites are located on two areas—the portion of Lot K east of the mean high tide line (is also one of the two Uplands Properties), and Port Parcel 028-007.

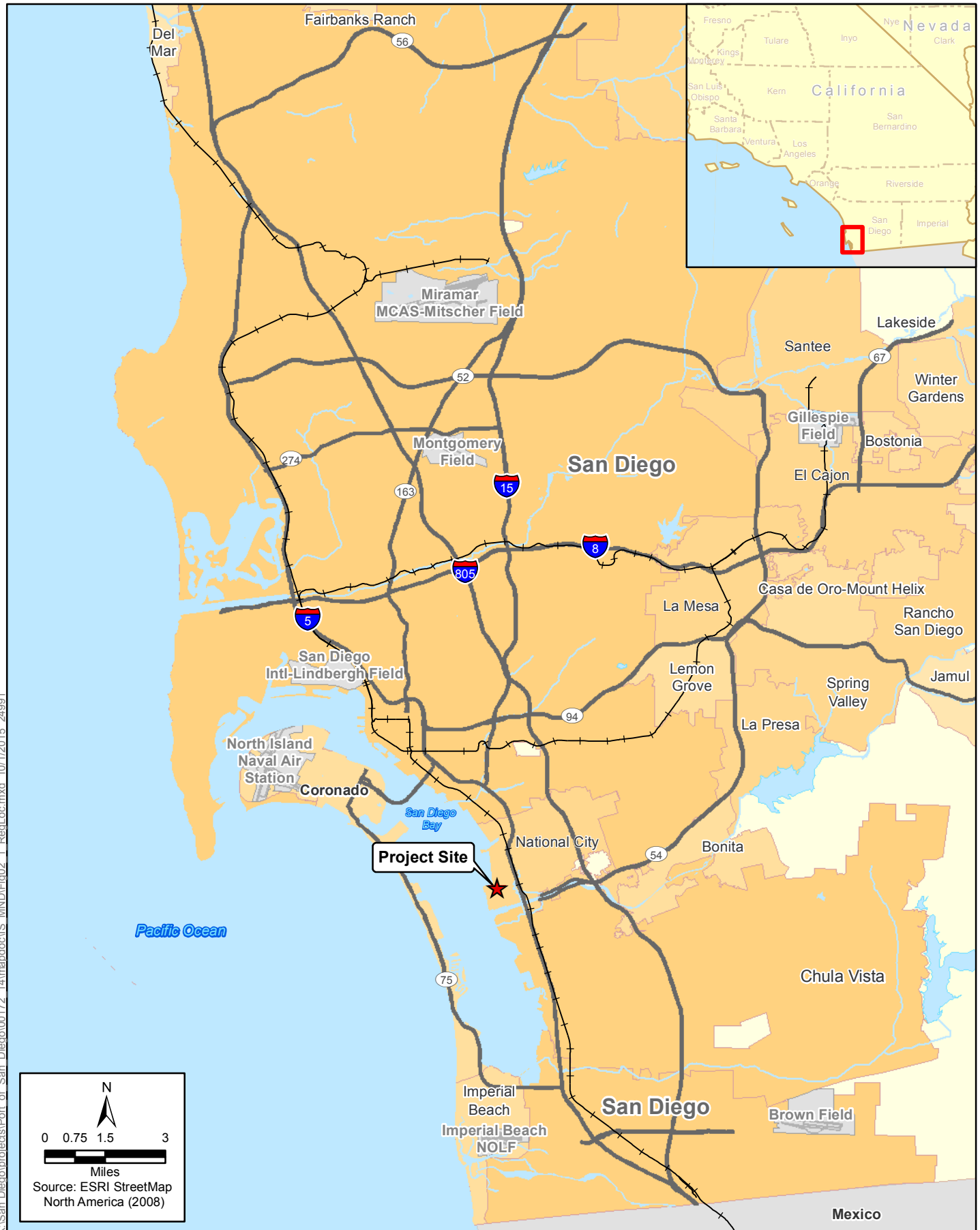
## 2.2 Background Setting

### 2.2.1 San Diego Unified Port District

The mission of the District is to manage granted tidelands and submerged waters, as well as acquired lands consistent with the Public Trust Doctrine by providing economic vitality and community benefit through a balanced approach to maritime industry, tourism, water and land recreation, environmental stewardship, and public safety. The District was created with the San Diego Unified Port District Act (Port Act), adopted by the California State Legislature in 1962, as amended through 2006. The Port Act is consistent with the Public Trust Doctrine and states that tidelands and submerged lands are to be used only for statewide public purposes. To this end, the District is charged with management of the tidelands, submerged waters, and acquired lands along San Diego Bay and promotes commerce, navigation, fisheries, and recreation within its jurisdiction; this includes the management and administration of the project site.

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<sup>3</sup> The Marine Related Industrial Overlay is proposed to be applied to the portion of Port Parcel 025-010-D east of the mean high tide line and Port Parcel 028-007.



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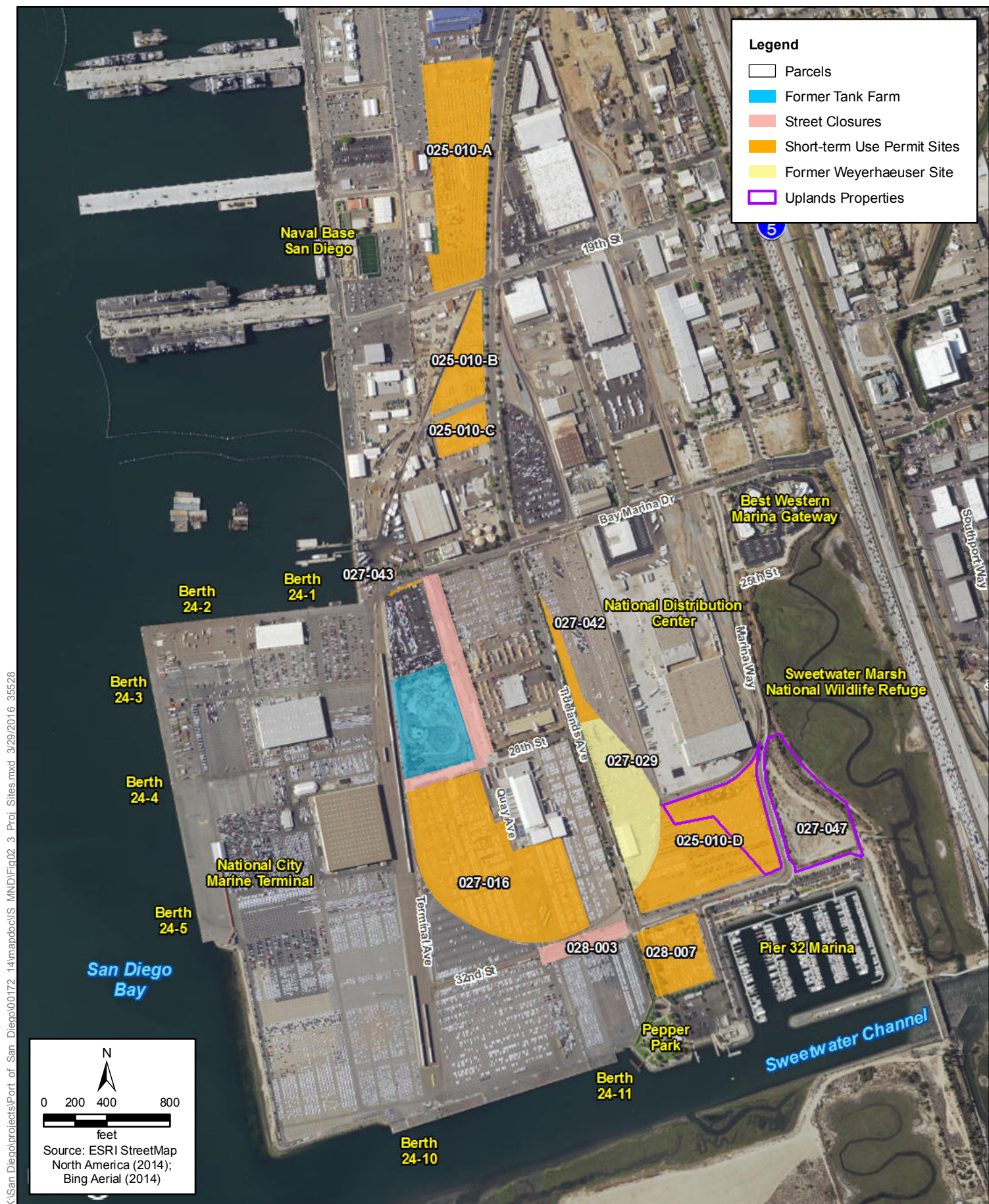
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**Figure 2-2**  
**Local Vicinity Map**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**







**Figure 2-3**  
**Project Sites**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**



## 2.2.2 National City Bayfront Planning District 5 of the PMP

The National City Bayfront, Planning District 5 of the PMP, is an established area developed with marine industrial, marine terminal, commercial recreation, and park/plaza uses. The PMP states that continued use and intensification of the Marine Related Industrial uses is anticipated within the planning district. Thousands of jobs are provided in this industrial area. More importantly, the NCMT and the Tenth Avenue Marine Terminal are the only areas in the entire San Diego region that provide established marine cargo facilities with railroad service, close freeway access, commercial port-related support functions, and deep-water berthing.

The 135-acre NCMT itself is paved filled land with seven berths and water depths that can accommodate cargo ships with drafts up to 35 feet. It is operated by Pasha and serves as the primary port of entry for one out of every eight cars imported to the United States, including brands such as Audi, Bentley, Honda, Isuzu, Mazda, Lotus, Mitsubishi Fuso, Porsche, Volkswagen, Hyundai, and Kia. Lumber and other large project cargo are handled occasionally as well at NCMT. Marine Related Industrial areas are located adjacent to the NCMT, as well as northwest of the existing Pier 32 Marina.

The District has implemented a number of measures to help reduce environmental impacts associated with terminal activity. These efforts include implementing the Clean Truck Program, Clean Air Program and voluntary Vessel Speed Reduction Program, elements of the Climate Action Plan, and the identification of alternative truck routes.

In 2005, the District partnered with the U.S. Army Corps of Engineers (USACE) to complete dredging along San Diego Bay's primary navigational channel, to accommodate commercial, cargo, and military vessels. The District invested approximately \$2 million to complete this improvement, and USACE invested upward of \$5 million. This significant investment in the navigational channel ensures that maritime uses consistent with the Port Act continue at NCMT. Increasing throughput capacity at NCMT, as well as the project sites, adjacent to NCMT, would be consistent with the Port Act.

## 2.2.3 Harbor District Specific Area Plan

The Harbor District Specific Area Plan (Harbor District Plan) is part of the City of National City's Local Coastal Program (LCP), which required the City to complete resource-based planning and development standards for the areas close to Paradise Marsh. The Harbor District Plan was approved by the City and California Coastal Commission in 1998. The District-owned Uplands Properties that are planned for incorporation into the PMP as part of the proposed project were incorporated into the Harbor District Plan as a "Tourist Commercial" land use pursuant to a Memorandum of Understanding (MOU) with the District. The MOU expired in 2005, and pursuant to the California Coastal Commission's record on the LCP amendment that incorporated the properties into the LCP, the City agreed that the properties could be incorporated into the PMP after expiration of the MOU.

The Uplands Properties are part of "Subarea B" of the Harbor District Plan, which covers approximately 16.4 acres and includes a major utility corridor on filled historic wetlands of Paradise Marsh and San Diego Bay, east and south of the Uplands Properties. Within Subarea B, Tourist Commercial development such as a lodging facility, boating and marina-related support uses, or

a restaurant are allowed. A combined 200-foot buffer and setback of buildings from the Wildlife Refuge boundary generally applies in Subarea B because of its flat topography. Permitted structures are required to present a maritime or traditional National City theme. In order to increase the aesthetic quality of Subarea B, the Harbor District Plan does not contemplate either a recreational vehicle park or campground.

## 2.2.4 Project Area

The tank farm site was previously a fuel farm operated by San Diego Gas & Electric (SDG&E). The former fuel farm consisted of three above-ground storage tanks (ASTs) and appurtenances for the storage and distribution of fuel oil and diesel. The fuel farm ceased operations in 1997, and the ASTs were removed in 2002. In 2009, soil excavation and remediation oversight activities were performed to demolish and remove the remaining AST steel bottoms and concrete rings, and remediate to below 100 milligrams per kilogram—the cleanup goal agreed on by SDG&E and the District. In 2009, the County of San Diego Department of Environmental Health issued a closure letter for the site.

The four existing short-term use permit sites have been in use by Pasha for marine terminal operations, including import, export, handling, and storage of motor vehicles, and cargo transported aboard a Pasha Hawaii Transport Lines vessel (with the exception of varying uses noted in Table 2-1 below) for several years. The former Weyerhaeuser site was leased by the Weyerhaeuser Lumber Company. Prior to be operated by Weyerhaeuser, this project site was part of the former Western Lumber property. This site was remediated for a Leaking Underground Storage Tank in 2000 and is now a closed case by the County's Department of Environmental Health.

Finally, in the early 1990s, the District purchased the two Uplands Properties (the eastern half of Port Parcel 025-010-D and Port Parcel 027-047) located north of 32<sup>nd</sup> Street, west and east of Marina Way. No notable historic background, as it relates to the environmental condition and the analysis herein, is present for these two locations.

## 2.3 Existing Setting

### 2.3.1 Surrounding Conditions

The project sites are surrounded by the NCMT and Marine Related Industrial uses. These industrial land uses include ProBuild/Dixieline Lumber, San Diego Cold Storage, National Distribution Center, Marine Group Boat Works, and several areas occupied by Pasha. Other industrial uses include a Burlington Northern Santa Fe (BNSF) rail facility on the eastern portion of the secure area of the NCMT. Commercial land uses include the Best Western Plus Marina Gateway Hotel and Goodies Pours & Grill. Recreational areas nearby consist of Pier 32 Marina, Pepper Park, and the National City Aquatic Center (construction is anticipated to be complete in 2016). Natural open space and important waterways include the Sweetwater Marsh National Wildlife Refuge and Sweetwater Channel, respectively. Figure 2-4 provides a vicinity map of the project sites and surrounding land uses.





**Figure 2-4**  
**Project Sites and Surrounding Land Uses**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





## 2.3.2 Existing Site Conditions

### Tank Farm

The tank farm portion of the project site is approximately 5.71 acres composed mainly of dirt with some remnant paving (from access roads). Vegetation on site consists of various ruderal weeds and landscape plantings, including ornamental shrubs and groundcovers. No habitable structures or buildings are present within the tank farm site boundaries. The tank farm site is surrounded by an earthen berm approximately 4–5 feet high and a chain-link fence. The existing elevation of the tank farm site is approximately 13.5 feet above mean sea level. Figure 2-5 shows an aerial of the tank farm site. Figure 2-6 shows the existing site map.

### Streets Closure Sites

Quay Avenue, 28th Street, and 32nd Street are District roads and are not dedicated city streets. The roads are between active industrial areas and, due to tenant consolidation and reconfiguration, are no longer necessary for access in this area of the NCMT. However, some marine terminal employees utilize these roadways, particularly Quay Avenue, for parking their personal vehicles during business hours. A BNSF rail spur also runs along the western side of Quay Avenue.<sup>4</sup> The existing elevation of Quay Avenue and 28th Street is approximately 12 feet above mean sea level (AMSL), whereas 32nd Street is approximately 14 feet AMSL. Figure 2-7 shows an aerial of the street closure sites.

### Existing Short-Term Use Permit Sites

Pasha has use of parcels near the NCMT through the current short-term use permits issued by the District. The allowable uses for these parcels are marine terminal operations, including import, export, handling, and storage of motor vehicles, and cargo transported aboard a Pasha Hawaii Transport Lines vessel (with the exception of varying uses as allowed under the use permits—see Table 2-1). However, under normal operations, these sites are primarily used for vehicle throughput. The use permits for these parcels are currently for durations of 5 years or less. The parcels, parcel sizes, and uses are summarized in Table 2-1. The locations of these short-term use permit sites are shown on Figure 2-3. All of the use permit parcels are located on District land in National City. Each of the short-term use permit sites is paved and does not contain vegetation other than ornamental vegetation along the sidewalks. In addition, no buildings are present.

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<sup>4</sup> A railroad spur is a type of secondary track used by railroads to allow customers at a location to load and unload railcars without interfering with other railroad operations.

**Table 2-1. Short-Term Use Permit Parcels, Area, and Current Uses**

Port Parcel #	Area	Use
027-016	739,409 sf (16.97 acres)	Import/export, handling, storage of vehicles, cargo transported by Pasha vessels, and other general cargo.
025-010-A, -B, -C, and -D and 027-042 <sup>b</sup>	1,174,904 sf (26.97 acres)	Import/export, handling, storage of vehicles, cargo transported by Pasha vessels, and other general cargo. A portion can be used for vehicle sales.
027-043	1,459 sf (0.03 acre)	Maintenance of landscaping, irrigation, and signage.
028-007	145,811 sf (3.35 acres)	Preferential, non-exclusive use for temporary storage of vehicles.
Total	2,061,583 sf (47.32 acres <sup>a</sup> )	--

Note: Any discrepancy in the conversion of square feet (sf) to acres is due to rounding of numbers for ease of presentation. The square foot value is closer to the actual area.

<sup>a</sup> Approximately 5 acres of short-term use permit sites are not usable for vehicle storage (Mercator 2013) because they have other uses (i.e., maintenance, haul-away operations).

<sup>b</sup> Port Parcels 025-010 and 027-042 are part of one short-term use permit.

## Former Weyerhaeuser Site

The proposed project includes a potential new real estate agreement (i.e., Tideland Use and Occupancy Permit, Temporary Use Permit, or lease) for the approximately 6.14-acre former Weyerhaeuser site, as shown on Figure 2-3. This site is paved and contains two buildings, which may be demolished as part of the proposed project. The buildings include a 1,800-square-foot office built in the 1990s and a 20,000-square-foot warehouse built after 1972, neither of which exceed the 50-year threshold for potentially significant historical structures. As of mid-2014, Pasha began storing vehicles on this site after the Weyerhaeuser lease expired. For purposes of this analysis, however, no existing operations are assumed because it predates the 2013 baseline year. Figure 2-8 shows an aerial of the former Weyerhaeuser site.

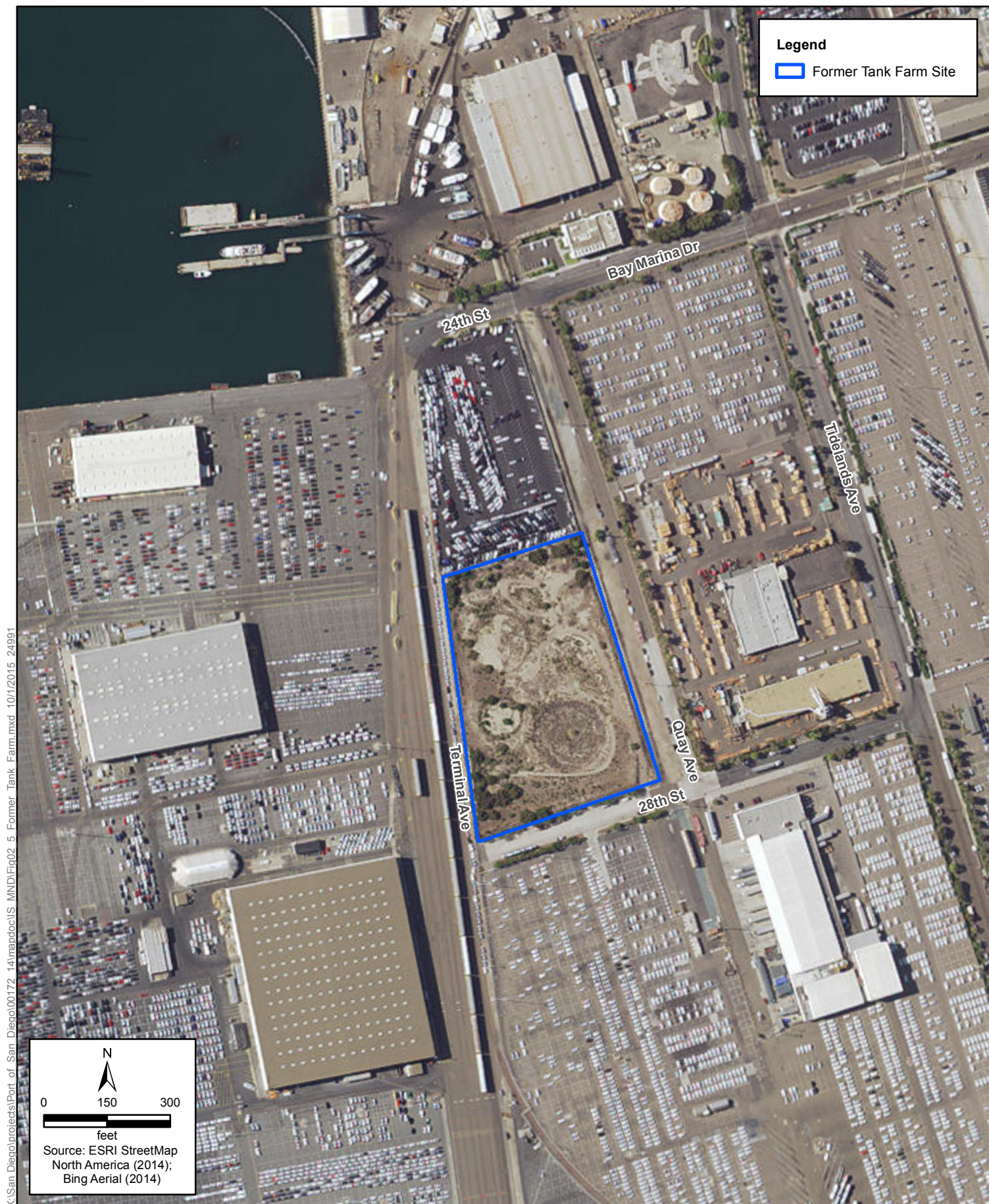
## Uplands Properties

The Uplands Properties consist of two sites—the eastern half of Lot K and the site east of Marina Way (Port Parcel 027-047). The eastern half of Lot K, which is described above as part of the *Existing Short-Term Use Permit Sites*, is paved and does not contain vegetation other than ornamental vegetation along the sidewalks, and no buildings are present. Port Parcel 027-047 is vacant and unpaved and no buildings are present. Ruderal vegetation is present on Port Parcel 027-047.

## Overlay Properties

The Marine Related Industrial Overlay would apply to two properties—the eastern half of Lot K and the parcel north of the boat launch ramp (Port Parcel 028-007). The eastern half of Lot K, which is described above as part of the *Existing Short-Term Use Permit Sites* and *Uplands Properties*, is paved and does not contain vegetation other than ornamental vegetation along the sidewalks, and no buildings are present. Port Parcel 028-007 is paved and no buildings are present.



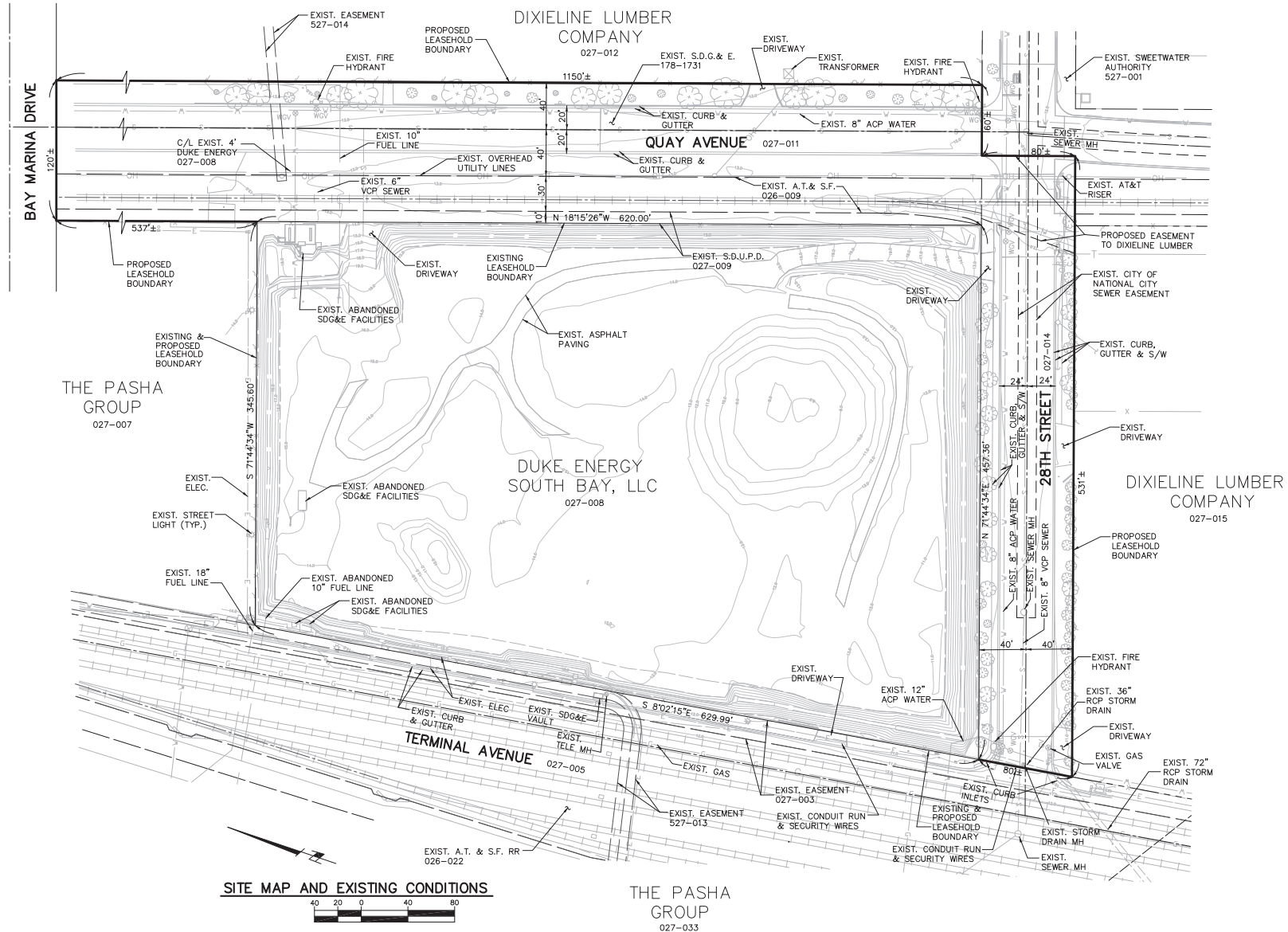


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**Figure 2-5**  
**Former Tank Farm Site Existing Conditions**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





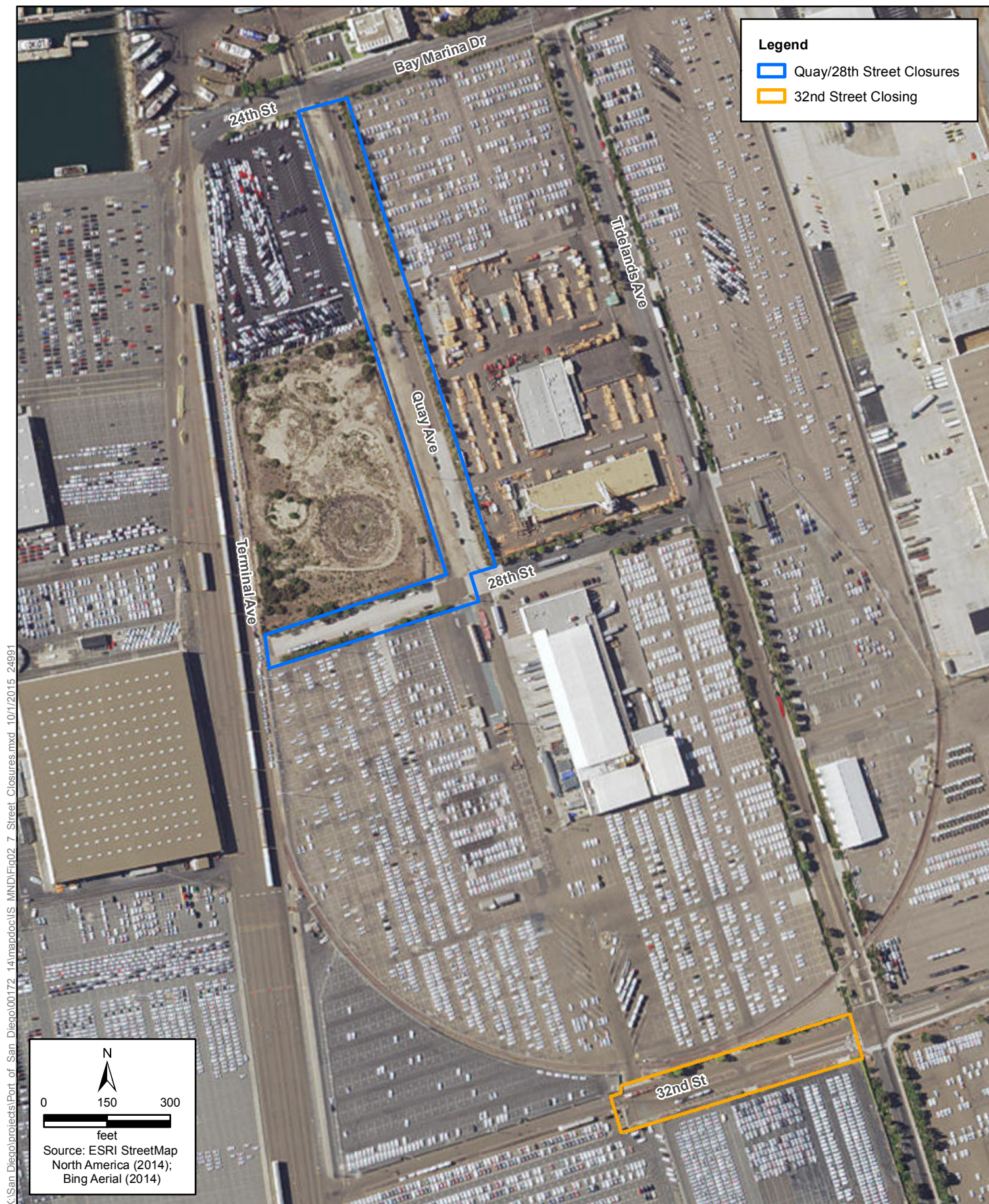


SOURCE: Koerner Engineering (2009)

**Figure 2-6**  
**Site Map and Existing Conditions at the Tank Farm Site, Quay Avenue and 28th Street Closure Locations**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**







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**Figure 2-7**  
**Street Closures Sites' Existing Conditions**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**







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**Figure 2-8**  
**Former Weyerhaeuser Site Existing Conditions**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





### 2.3.3 Existing Port Master Plan Designation

All the project sites are owned by the District.<sup>5</sup> Most of the project sites are incorporated into the District's PMP. However, the acquired Uplands Properties have not been incorporated into the PMP.<sup>6</sup> Specifically, these properties were incorporated into the City of National City's LCP as a "Tourist Commercial" land use pursuant to an expired MOU with the District. Pursuant to the California Coastal Commission's record on the LCP amendment that incorporated the properties into the LCP, the City agreed that the properties could be incorporated into the PMP after expiration of the MOU. A later MOU also specified that the District would process a PMPA to incorporate all District-acquired properties within the City into the PMP, including the Uplands Properties. These Uplands Properties (i.e., the eastern half of Lot K [Port Parcel 025-010-D], one of the properties that is proposed for the Marine Related Industrial Overlay, and Port Parcel 027-047—see Figure 2-3) are not within the PMP.

The former tank farm site and most of the short-term use permit sites are designated as Marine Related Industrial in the PMP. Sites designated as Marine Related Industrial require being close to water bodies because the industrial activities of such sites depend on direct access or linkages to waterborne products, processes, raw materials, or large volumes of water. The primary users of Marine Related Industrial areas are dependent upon large ships, deep water, and specialized loading and unloading facilities. Activities suitable for this land use designation include marine terminals, passenger terminals, railroad switching and spur tracks, cargo handling equipment, berthing facilities, warehouses, silos, and marine-related support and transportation facilities.

One of the short-term use permit sites (Port Parcel 028-007, one of the properties that is proposed for the Marine Related Industrial Overlay) is designated Commercial Recreation. The Commercial Recreation land use designation includes uses such as hotels, restaurants, convention center, recreational vehicle parks, specialty shopping, pleasure craft marinas, water dependent educational and recreational program facilities and activities, dock and dine facilities (public boat docks located in proximity to a restaurant or other retail use where boaters may tie up and disembark for a short period of time to dine, shop, or enjoy other recreational activities), and sport-fishing. Additionally, parking is allowed on the Commercial Recreation designation. Port Parcel 028-007 is located within the Launching Ramp Planning Subarea of Planning District 5 of the PMP.

Quay Avenue, 28th Street and 32nd Street are designated as Streets in the PMP.

The land use designations of the short-term permit sites are provided on Table 2-2. Figure 2-9 illustrates the land use designations of each of the project sites.

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<sup>5</sup> Section 5 of the Port Act requires the District to exercise its land management authority and power over property granted and acquired land and water areas. Additionally, Section 56 of the Port Act gives the District exclusive police power over property and development subject to its jurisdiction.

<sup>6</sup> The eastern half of Lot K (Port Parcel 025-010-D) is subject to a District short-term use permit.

**Table 2-2. Land Use Designations for Short-Term Permit Sites**

<b>Port Parcel #</b>	<b>Land Use Designation</b>
027-008 (former tank farm)	Marine Related Industrial
027-016	Marine Related Industrial
025-010 <sup>a</sup>	Marine Related Industrial and Undesignated
027-042 <sup>a</sup>	Marine Related Industrial
028-007	Commercial Recreation
027-029 (former Weyerhaeuser site)	Marine Related Industrial
027-043	Marine Related Industrial
Quay Avenue	Street
28 <sup>th</sup> Street	Street
West 32nd Street	Street
027-047	Undesignated in the PMP/Tourist Commercial in the City's LCP

<sup>a</sup> Port Parcels 025-010 and 027-042 are part of one short-term use permit.

## 2.3.4 Existing Operations

During 2013, Pasha processed 361,372 vehicles, 1,038 containers, and approximately 52,779 metric tons and 10,574 cubic meters of other breakbulk cargo at the NCMT (see Tables 2-3 and 2-4).<sup>7</sup> Although Pasha's operations at NCMT involve both vehicle and non-vehicle throughput, the vast majority of Pasha's operations involve vehicle throughput. In 2013, Pasha imported 361,372 vehicles using approximately 158 acres.<sup>8</sup> This equates to approximately 2,287 vehicles per acre per year.<sup>9, 10</sup> The short-term use permit sites accounted for approximately 42.32 acres (see notes a and b of Table 2-1) of the 158 acres. Based on a per acre per year calculation, it is estimated that approximately 96,786 vehicles of the 361,372 vehicles imported were placed on the short-term use permit sites.<sup>11</sup> Because the tank farm site is unpaved and Quay Avenue, 28th Street, and 32nd Street are roadways, they did not have any vehicle throughput in 2013 or previous years. The quantity of vehicle throughput for 2013 varied on a monthly basis, as shown in Table 2-4.

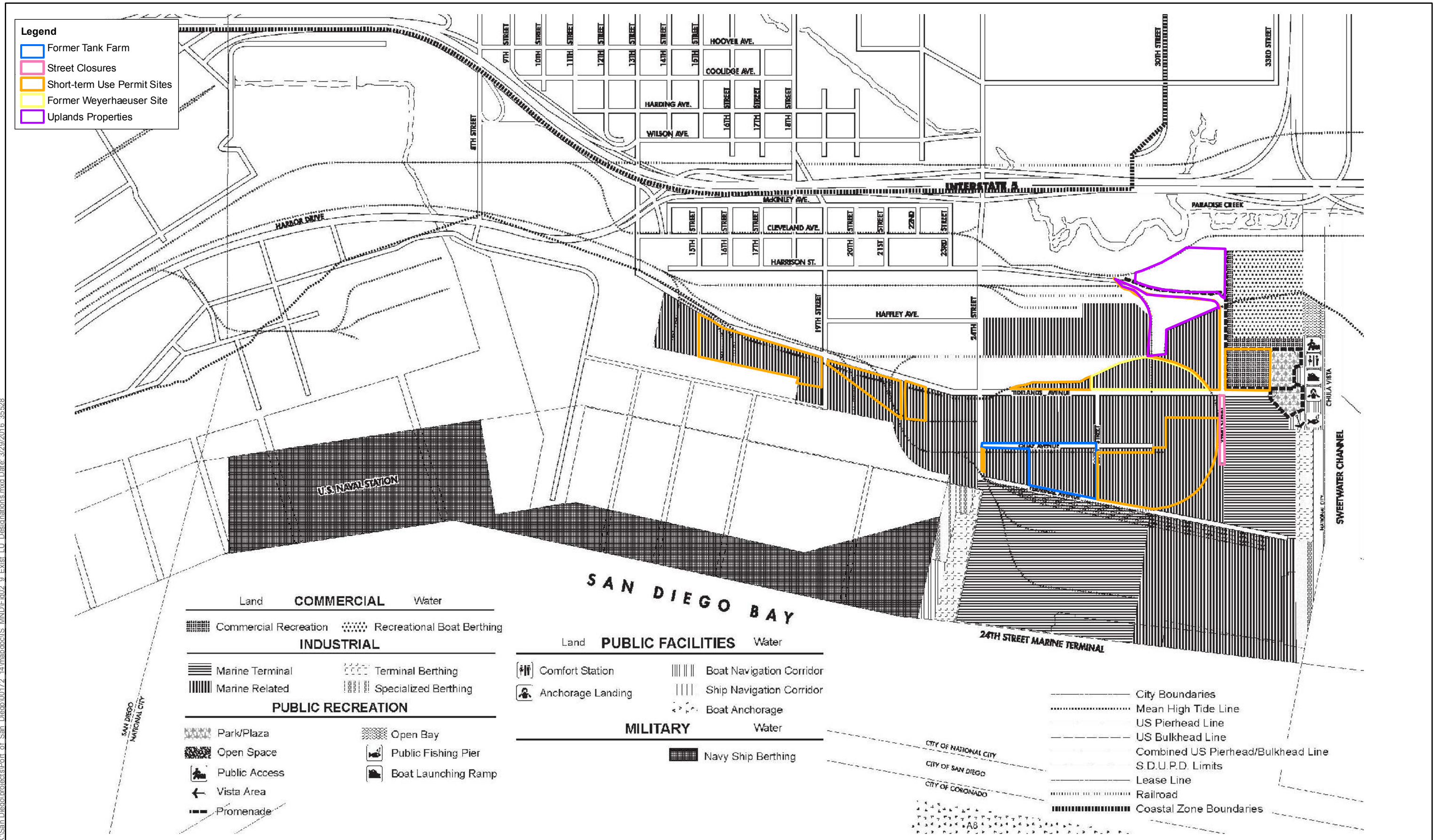
<sup>7</sup> For purposes of comparison, in 2014 Pasha processed 381,963 vehicles, 1,241 containers, and approximately 20,916 metric tons of other breakbulk cargo at the NCMT.

<sup>8</sup> Net acreage available for auto storage. Acreage with buildings or other uses (i.e., maintenance, landscaping) is not included in this total as indicated on page 39 of Mercator (2013).

<sup>9</sup> 361,372 vehicles ÷ 158 acres = 2,287 vehicles per acre.

<sup>10</sup> Some of the 158 acres may have been utilized for short periods for cargo and breakbulk operations when not in use by vehicle import operations.

<sup>11</sup> 2,287 vehicles/acre/year x 42.32 acres = 96,786 vehicles per year.



**Figure 2-9**  
**Existing Land Use Designations**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**



**Table 2-3. Pasha Non-Vehicle Throughput for Year 2013**

<b>Product</b>	<b>Metric Tons</b>	<b>Cubic Meters</b>	<b>Units</b>
Containers	15,484	--	1,038
Breakbulk			
Forest Products	--	234	--
Household Goods	9,870	--	17,524
Machinery	9,586	--	--
Manufactured Products	7,341	--	2
Metals	5,977	--	--
Recreational Trailers	1,620	--	6
Trailers	2,901	--	353
Vessels (Yachts)	--	10,340	129
<b>Total</b>	<b>52,779</b>	<b>10,574</b>	<b>19,052</b>
Source: Port District Maritime Division, May 2014			

**Table 2-4. Pasha Vehicle Throughput for Year 2013**

<b>Month</b>	<b>Number of Vehicles</b>
January 2013	30,997
February 2013	29,964
March 2013	31,039
April 2013	31,870
May 2013	28,211
June 2013	31,995
July 2013	30,364
August 2013	24,413
September 2013	25,845
October 2013	29,718
November 2013	32,256
December 2013	34,700
<b>Total</b>	<b>361,372</b>
Source: Pasha Automotive Services 2014	

In the last market cycle, vehicle throughput peaked in 2007 with 402,669 vehicles being imported through NCMT.<sup>12</sup> Table 2-5 shows the total vehicle throughput from 2006 through 2013 and the percentage change from the previous year.

**Table 2-5. Pasha Vehicle Throughput from 2006–2013**

<b>Year</b>	<b>Annual Vehicle Throughput</b>	<b>Percentage of Vehicles Change over Previous Year</b>
2006	362,149	--
2007	402,669	+11
2008	371,583	-8
2009	217,197	-41
2010	231,425	+7
2011	276,988	+20
2012	336,150	+21
2013	361,372	+7.5
Source: Pasha Automotive Services 2014		

<sup>12</sup> Calendar year 2013 was used to establish the existing environmental setting because the Notice of Preparation was issued in 2014 (State CEQA Guidelines Section 15125). Because the throughput numbers were lower in 2013 than in 2014, the 2013 year is more conservative and has remained the baseline. As described in the introduction, in this particular case, a lower throughput baseline is a more conservative analysis due to the larger project net throughput that results in order to reach the maximum practical capacity of the project sites.



### 3.1 Introduction

The proposed project involves (1) grading and paving the former NCMT tank farm; (2) closing, grading, and paving portions of Quay Avenue, 28th Street, and 32nd Street (street closures); (3) a new real estate agreement (i.e., a Tideland Use and Occupancy Permit, a Temporary Use Permit, or a lease) for the street closures and the former Weyerhaeuser site in the vicinity of the NCMT; (4) renewal of existing short-term use permits (i.e., Tideland Use and Occupancy Permits and Temporary Use Permits); and (5) a PMPA. The PMPA proposes to remove the street designations for the street closures from the PMP, redesignate the former streets as Marine Related Industrial, and incorporate District-owned Uplands Properties into the PMP. The PMPA proposes to designate the Uplands Properties as Commercial Recreation.

In addition, the proposed project includes an overlay for a portion of the Uplands Properties (the eastern half of Lot K) and Port Parcel 028-007. The Marine Related Industrial Overlay (Overlay) would allow for the same uses specified in the Marine Related Industrial land use designation for a maximum of 7 years or until Commercial Recreational developments are approved by the Board of Port Commissioners (BPC), whichever occurs first. The Overlay would also be considered by the Coastal Commission when reviewing the PMPA for certification.

A detailed description of the project site location and existing conditions is provided in Chapter 2, *Environmental Setting*, which includes a location map provided as Figure 2-1.

### 3.2 Purpose and Need for the Proposed Project

Demand for consumer vehicles continues to grow both in the United States and abroad since the recession of 2007 through 2009. To meet the increasing market demand, vehicle storage capacity at the NCMT and surrounding marine industrial areas will need to increase to allow for greater throughput.

Pasha currently uses 47.32 acres located on Port Parcels 027-016, 025-010, 027-042, 027-043, and 028-007 under short-term use permits (short-term use permits such as Tideland Use and Occupancy Permits and Temporary Use Permits) for vehicle storage as part of the import and export process. These short-term use permits expired at the end of 2015 and have been placed into a holdover period. Extension of these short-term use permits would help Pasha to maintain current throughput levels and potentially increase them some by improving efficiency on these lots.

Through new real estate agreements, Pasha would also seek to use Port Parcel 027-029 and converted portions of Quay Avenue/28th Street/32nd Street for vehicle storage areas. Use of these areas, and the former tank farm site, would increase the amount of space currently available for vehicle storage, which would allow for greater throughput to help meet market demand.

In addition, the District owns two Uplands Properties<sup>1</sup> that are currently not in the PMP. One of these properties, a portion of Lot K, is part of Port Parcel 025-010-D; the other is Port Parcel 027-047. These properties are designated for Tourist Commercial land uses under the City of National City's Harbor District Specific Area Plan. The Tourist Commercial land use allows uses such as hotels, motels, restaurants, marina, and marina-related uses, and dry boat storage. They are proposed to be added to the District's PMP, pursuant to the Port Act and California Coastal Act. The addition of these two properties into the PMP would provide them with District land use designation Commercial Recreation. The proposed Commercial Recreation land use designation is wholly consistent with the Tourist Commercial designation and also allows uses such as pleasure craft marinas, hotels, restaurants, specialty shopping, and dry boat storage. Thus, land uses proposed under the Commercial Recreation land use designation would also be consistent with the Tourist Commercial land use designation of the Harbor District Specific Area Plan, and Commercial Recreation would be a continuation of the types of uses allowed under the Tourist Commercial land use designation.

### 3.3 Project Objectives

To achieve the purpose and need of the proposed project, the District has identified the following objectives.

1. Implement a project that allows the District's tenant to meet current and anticipated future market demand for imports and exports in an effort to ensure the District remains competitive in the already highly competitive marketplace of water-dependent commerce.
2. Implement a project that provides tangible economic benefits to the District and the greater San Diego region to help ensure continued prosperity for the District and region.
3. Implement a project that helps to minimize the need for new marine terminals within the District's jurisdiction by maximizing the operating efficiency of the NCMT and surrounding areas, thereby helping to minimize environmental impacts across the region while ensuring waterborne commerce continues to thrive within the San Diego Bay.
4. Implement the District's mission to permit land uses consistent with the Public Trust and the Coastal Act, specifically water-dependent uses and marine-dependent commerce, fisheries, navigation, ecological preservation, and recreation.
5. Incorporate District properties into the PMP that are not currently regulated by the PMP to ensure consistency with the Public Trust Doctrine and Port Act and allow for flexibility of land uses to facilitate meeting current and future needs.
6. Be consistent with the District's Climate Action Plan, Clean Air Program, and Jurisdictional Runoff Management Program, to ensure that the proposed project does not adversely affect the District's ability to attain its long-range environmental and sustainability goals.

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<sup>1</sup> "Upland" properties are those that are located outside of the mean high tide line.

## 3.4 Project Components and Features

The former tank farm site is approximately 5.71 acres, the street closure sites comprise approximately 5.09 acres, the existing short-term use permit sites total approximately 47.3 acres, and the former Weyerhaeuser site is approximately 6.14 acres. The Uplands Properties total 11.46 acres. Combined, the overall project site covers approximately 71.24 acres,<sup>2</sup> with a useable area of 59.65 acres.<sup>3</sup>

Implementation of the proposed project would provide additional space on the former tank farm, street closures, and former Weyerhaeuser sites for marine terminal operations, which includes import, export, handling, and storage of motor vehicles primarily, although operations may also occasionally include other large cargo (generally roll-on/roll-off or breakbulk) transported aboard a Pasha Hawaii Transport Lines vessel in accordance with the land uses described in Table 2-2. However, the overwhelming amount of cargo imported and exported that is handled on the project site consists of motor vehicles. Moreover, vehicles are a more intensive use than general breakbulk and larger roll-on/roll-off cargo (such as military equipment) because they have short dwell<sup>4</sup> times, are relatively small individually and can quickly fill entire open areas several acres in size, and require a significant number of union labors to transport throughout the storage areas. Also, some vehicle maintenance and repair activities take place that are not present with other cargo types. Therefore, the project components and operations focus on maximum vehicle throughput from the proposed additional storage capacity. Therefore, both the physical changes and the potential operational changes are described below, consistent with the requirements of State CEQA Guidelines 15124(c).

### 3.4.1 Former Tank Farm Component

The former tank farm site would be graded and paved. Approximately 22,500 cubic yards of excess dirt from grading the site would be used as fill on the adjacent Quay Avenue and 28th Street to match the surrounding grade. The site would then be striped, followed by installation of pole-mounted and perimeter light fixtures and security fencing. The proposed project would also include improvements to the onsite drainage, such as bioswales to treat the surface drainage, new stormwater inlets, and modification of existing stormwater inlets. Minor demolition activities would include removal of fencing, curbs, gutters, and asphalt. Figures 3-1 through 3-4 show the conceptual paving and drainage plan, striping plan, demolition plan, and swale and fencing plan, respectively. Implementation of this project component would not include the construction of any buildings, and the site would remain designated as Marine Related Industrial by the PMP. Construction is anticipated to begin in 2016 and would be completed within 7 weeks. The former tank farm site is currently in Pasha's Terminal Operating Agreement, which expires in 2040.

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<sup>2</sup> The portion of Lot K that is part of the Uplands Properties is approximately 4.48 acres, and is accounted for in the 47.3 acres of existing short-term use permit sites.

<sup>3</sup> Approximately 5 acres of the short-term use permit sites are not usable for vehicle storage (Mercator 2013: 39) because they have other uses (i.e., maintenance, haul-away operations), and Port Parcel 027-047 is not proposed to be used for Marine Related Industrial operations.

<sup>4</sup> Vehicle throughput operations at the Pasha facility are composed of vehicle offloading, storage, and transporting of vehicles to their final destination. Additionally, while on the terminal, a vehicle may be processed (e.g., repairs, body work, installation of vehicle components). All of these steps result in an increase in the amount of time a vehicle remains on the terminal, which is referred to as "dwell time."

### 3.4.2 Street Closures Component

The proposed project also proposes closure of Quay Avenue between Bay Marina Drive and 28th Street, 28th Street west of Quay Avenue, and 32nd Street west of Tidelands Avenue. The streets are between active terminal areas and, due to tenant consolidation and reconfiguration, are no longer necessary for access in this area of the NCMT. However, some marine terminal employees utilize these roadways for parking their personal vehicles during business hours. The roads proposed for closure are non-dedicated District streets.

Some of the excess soil from grading on the tank farm would be diverted as export and used to raise the elevation of the portions of Quay Avenue and 28th Street that are proposed to be closed. Quay Avenue and 28th Street would be repaved. Approximately 1,200 cubic yards of demolished concrete and asphalt from the roadways would be exported off site to an approved facility for recycling. The railroad tracks on the west side of Quay Avenue and the existing above-ground SDG&E distribution lines (i.e., utility poles) would remain in place and be incorporated into the paved area. A minimum 10-foot clearance from the centerline of the railroad tracks would remain. Maintaining the railroad tracks would also require paving the rail area with asphalt per BNSF Railway Company Design Guidelines for Industrial Track Projects.

Closure of 32nd Street would require minor demolition and construction activities including the removal of the median, curbs, and gutter; relocation of the backflow valve; minor grading, repaving, and striping; and relocation of the guard shack to the east. Specific activities would include the removal of approximately 1,300 linear feet of curbs and gutters and approximately 2,200 square feet of median, and approximately 6,100 square feet of grading.

Implementation of this project component would not include the construction of any buildings; however, proposed land use changes from the Street designation to the Marine Related Industrial designation at these locations would require an amendment to the PMP as described under Section 3.4.5, *Incorporation of District-Owned Uplands into the Port Master Plan and Port Master Plan Amendment Component*. Use of these street closure sites would involve potential new real estate agreement(s), which are anticipated to be for terms of up to 5 years; however, to provide a more conservative analysis, this EIR assumes that Pasha would use the street closure sites for the duration of the existing Terminal Operating Agreement—until 2040. The allowable use for these sites is proposed to be import, export, handling, and storage of motor vehicles and cargo.

### 3.4.3 Short-Term Use Permit Sites Component

The proposed project also includes the potential renewal of short-term use permits on the lots identified in Table 2-1 and Figure 2-3, which all expired in 2015 and are now held on a holdover pursuant to the terms of the short-term use permits. These lots are currently in use by Pasha, and potential renewal of the use permits would continue the existing uses and operations, as indicated in Table 2-1. Any proposed renewals of the existing short-term use permits would take effect following expiration or termination of the existing short-term use permits and would likely include a term of no more than 5 years. Furthermore, the Marine Related Industrial Overlay, discussed in more detail in Section 3.4.5, proposes an overlay at two sites for a maximum of 7 years, at which point the sites would revert back to the Commercial Recreation land use designation only. The term of the renewals of the short-term use permits for these sites would be coterminous with this 7-year time period or could be terminated by the District upon delivery of a 30-day written notice. However, to provide a more conservative analysis, this EIR assumes that Pasha would use the existing short-term

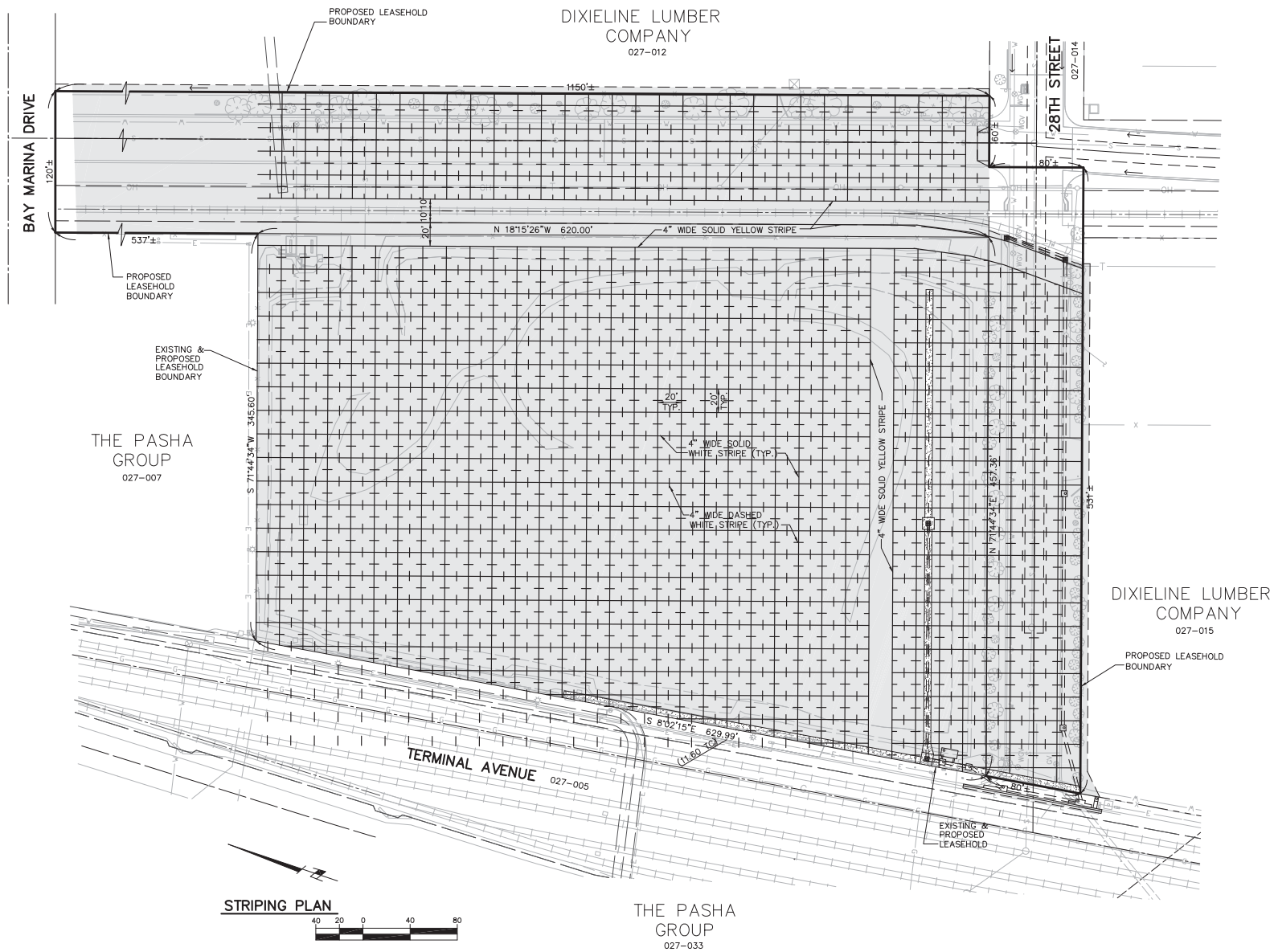


**Figure 3-1**

**Paving and Drainage Plan for the Tank Farm Site, Quay Ave and 28th Street Locations  
NCMT Tank Farm Paving and Street Closures Project & PMPA**



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SOURCE: Koerner Engineering (2009)

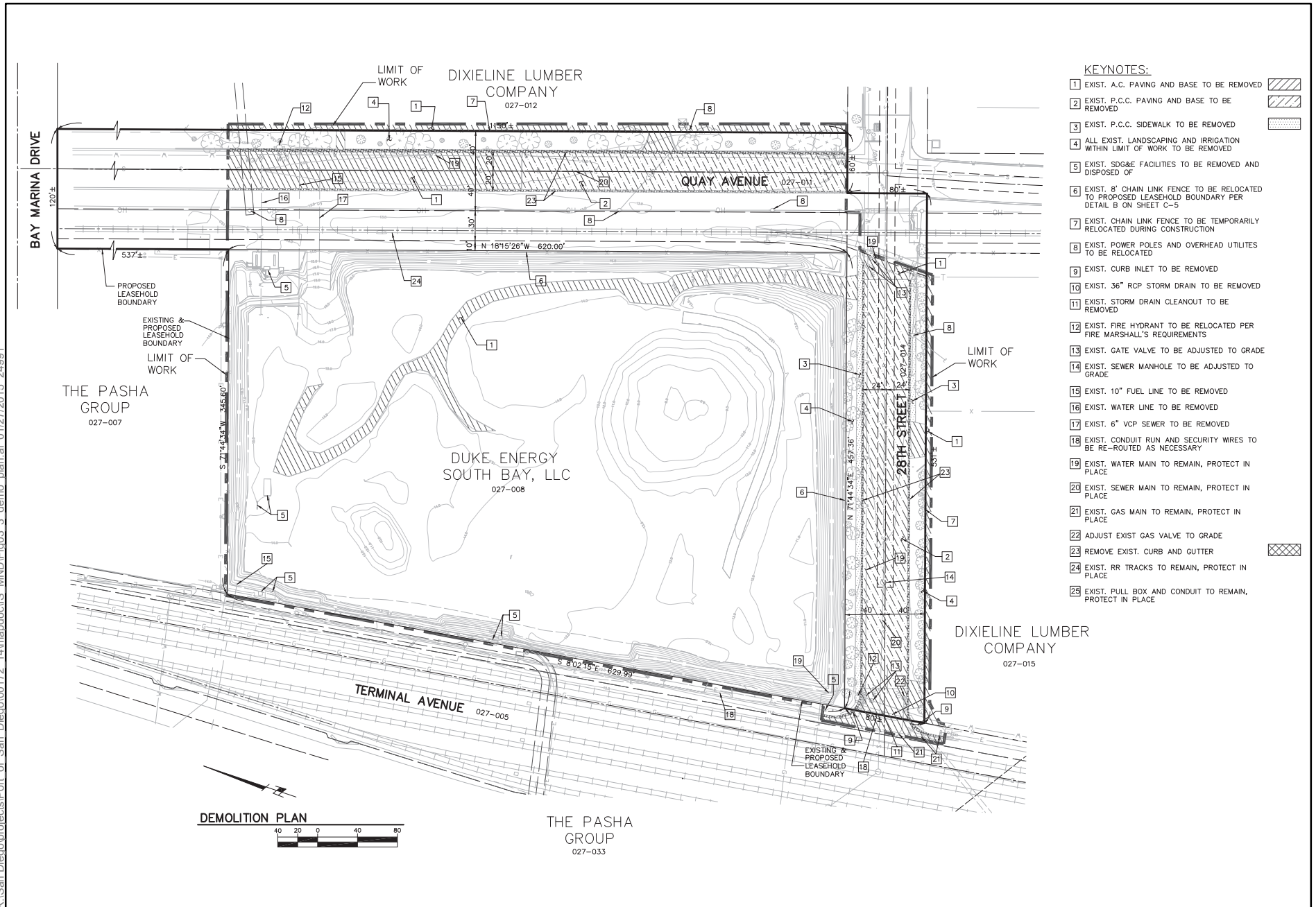


**Figure 3-2**  
**Striping Plan for the Tank Farm Site, Quay Ave and 28th Street Closure Locations**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





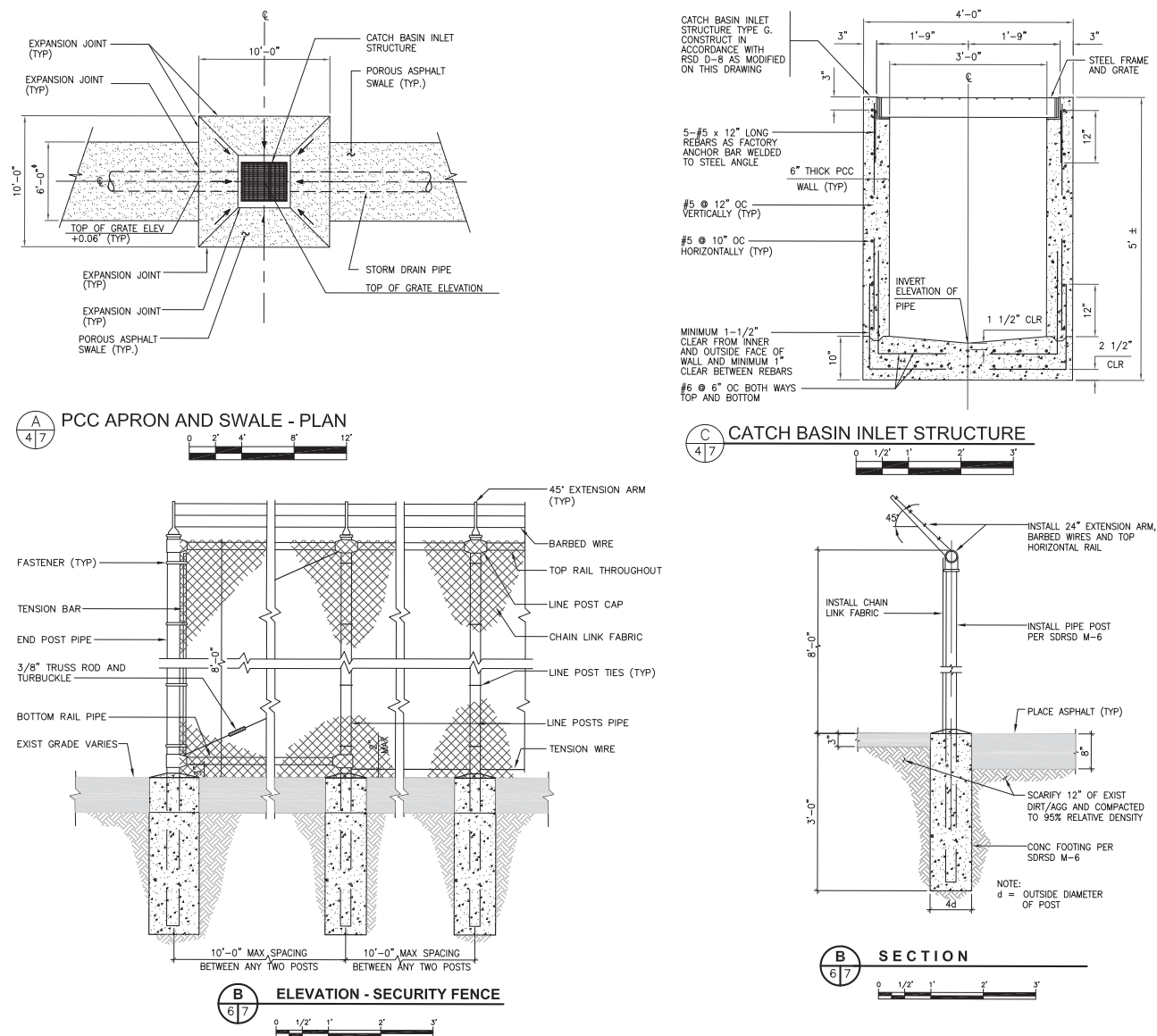
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SOURCE: Koerner Engineering (2009)

**Figure 3-3**  
**Demolition Plan for the Tank Farm Site, Quay Ave and 28th Street Closure Locations**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





SOURCE: Koerner Engineering (2009)

**Figure 3-4**

**Drainage and Fencing Detail for the Tank Farm Site and Street Closure Sites**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**



use permit sites for the duration of the existing Terminal Operating Agreement—until 2040. Any renewals of the existing short-term use permits would not change Pasha’s uses on the sites, but an increase in throughput is anticipated; therefore, the analysis in this EIR assumes a worst case scenario of the maximum practical throughput. No buildings or improvements are proposed on the short-term use permit sites.

### **3.4.4 Former Weyerhaeuser Site Component**

The proposed project includes a potential new real estate agreement (i.e., a Tideland Use and Occupancy Permit or a lease) for the approximately 6.14-acre former Weyerhaeuser site, as shown on Figure 2-3. This site is paved and contains two buildings, which may be demolished as part of the proposed project; one is an approximately 1,800-square-foot 1-story office building and the other is an approximately 20,000-square-foot shed structure. This potential new real estate agreement is anticipated to be for a term of up to 5 years; however, to provide a more conservative analysis, this EIR assumes that Pasha would use the former Weyerhaeuser site for the duration of the existing Terminal Operating Agreement—until 2040. The allowable use for this site is proposed to be import, export, handling, and storage of motor vehicles and cargo.

### **3.4.5 Incorporation of District-Owned Uplands into the Port Master Plan and Port Master Plan Amendment Component**

There are multiple actions related to the PMPA. The proposed PMPA would change the associated PMP maps, text, and tables to include the following changes in land use designations. The proposed PMPA is included in Appendix C of this Draft EIR.

#### **3.4.5.1 Incorporation of District-Owned Uplands into the PMP**

A PMPA is required to incorporate two District-owned Uplands Properties into the PMP (see Figure 3-5).<sup>5</sup> Both Uplands Properties are located north of the marina— the eastern portion of Lot K is west of Marina Way; Port Parcel 027-047 is east of Marina Way. These properties were incorporated into the City of National City’s Harbor District Specific Area Plan (Harbor District Plan) that is part of the City’s Local Coastal Program (LCP) and are designated as Tourist Commercial.

In 1997, the City’s Community Development Commission (CDC) and the District entered into a Memorandum of Understanding (Original MOU). The term of the Original MOU expired on June 30, 1999. The Original MOU specified that the District would undertake a Port Master Plan update for tidelands located within the City and the CDC would conduct a Master Plan of the area between I-5 and Tidelands, which included the District-acquired Uplands. The two plans were intended to be coordinated.<sup>6</sup> Accordingly, in 1998, the City amended the Harbor District Plan and incorporated the Upland Properties into the plan. In response to questions posed by the California Coastal

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<sup>5</sup> Section 5 of the Port Act requires the District to exercise its land management authority and power over property it acquires, and Section 19 of the Port Act requires the District incorporate such lands into the PMP. Additionally, Section 56 of the Port Act gives the District exclusive police power over property and development subject to its jurisdiction and grants the District general police powers, including land use authority.

<sup>6</sup> The Original MOU is available in the District clerk’s office and has a District document no. of 36077.

Commission during the amendment process, the City asserted that the City and the District agreed “that during the term of the MOU, [the Upland Properties] will remain in National City’s planning and regulatory jurisdiction” (see Appendix B-1). Moreover, the certified Harbor District Plan states that the portion of Lot K that is part of the Uplands Properties remained in the City’s LCP jurisdiction pursuant to the terms of the Original MOU.

On January 18, 2000, the District and CDC entered into an Amended and Restated Memorandum of Understanding (MOU), which would have expired on November 30, 2001.<sup>7</sup> Pursuant to the terms of the MOU, it superseded the Original MOU. The MOU specified that the District would undertake a PMPA of all property it owns or has real property interest in within the City limits collectively and all properties to be purchased and conveyed to the District that were not currently within the PMP. This included the Uplands Parcels. The CDC agreed to conduct a master plan for the areas it contemplated to develop excluding any District-owned land. The District and CDC agreed that the District could use Port Parcel 028-007, and the District would make the property available to a qualified developer within 6 months after the CDC accepted a proposal for a use consistent with a commercial/recreation-zoned use and the District approved the same. Because the portion of Lot K that is part of the Uplands Properties had not yet been incorporated into the PMP as the MOU contemplated, the MOU specified that the District could use the land for maritime operations subject to being issued a Coastal Development Permit and other entitlements from the City. The MOU was amended on July 31, 2001.<sup>8</sup> The amendment extended the term until November 31, 2003, but the provisions described above did not change. A second amendment to the MOU, which extended the term until August 31, 2005, was executed on March 3, 2004.<sup>9</sup> The MOU expired on August 31, 2005.

The incorporation of the two Uplands Properties into the PMP would apply PMP land use designations to District-owned properties similar to the land use designation in the City’s LCP. Both Uplands Properties would be designated as Commercial Recreation.

### **Marine Related Industrial Overlay**

The project proposes a Marine Related Industrial Overlay (Overlay) for the eastern portion of Lot K as well for Port Parcel 028-007. Both of these areas are currently used by Pasha for vehicle storage on site through short-term use permits, as discussed under Section 3.4.3, *Short-Term Use Permit Sites Component*.

The Overlay would be placed temporarily on the two sites to clarify the continued use of the properties by the project proponent or another operator as maritime related uses, and the sites would revert back to only the Commercial Recreation designation, the earlier of 7 years from the time the PMPA addressing the Overlay is finalized<sup>10</sup> or one or more development projects,

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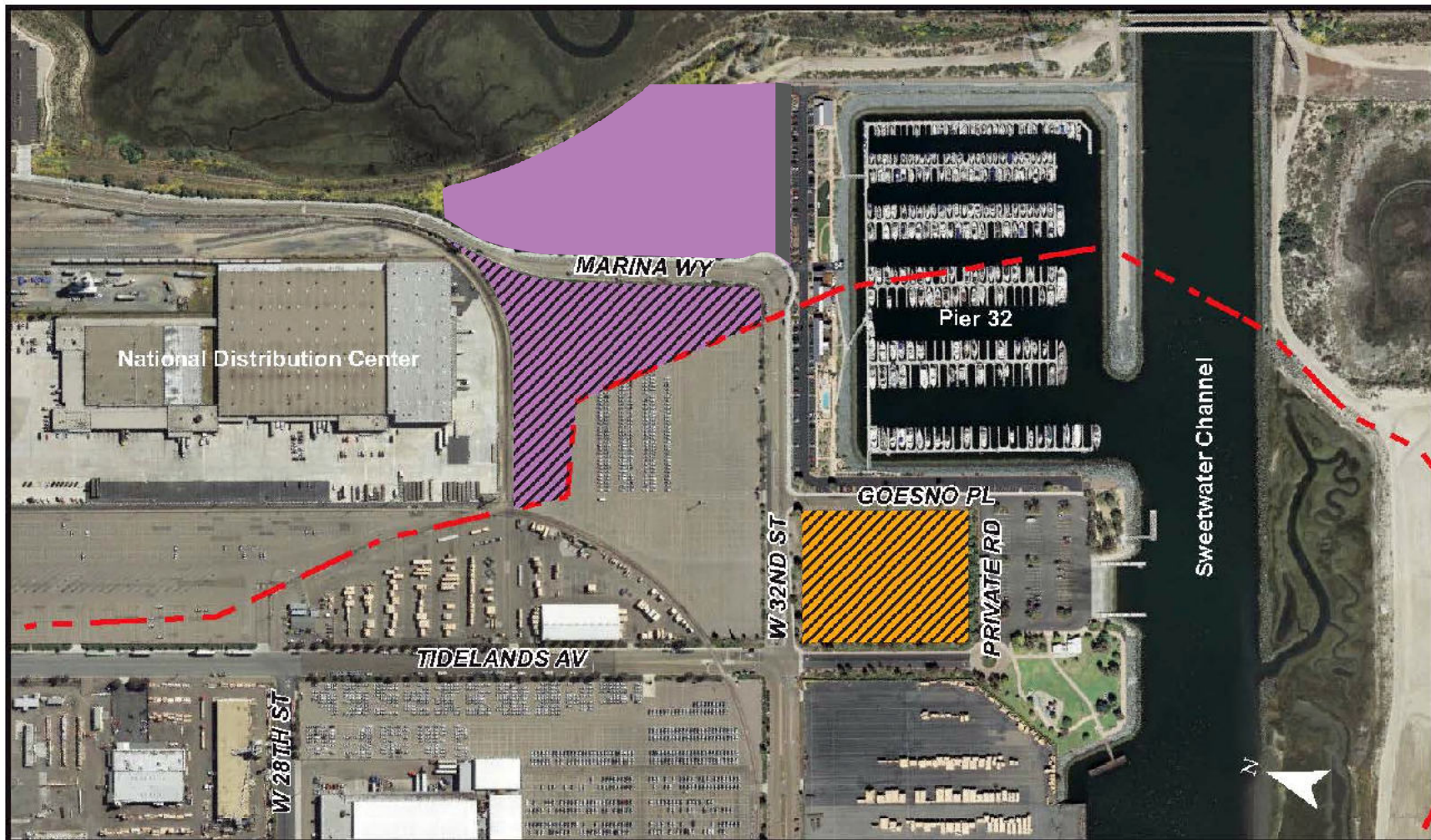
<sup>7</sup> The Amended and Restated MOU is hereby incorporated by reference and is available in the District clerk’s office (District document no. of 39834).

<sup>8</sup> The Amendment to the MOU is herein incorporated by reference and is available in the District clerk’s office (District document no. of 42362).

<sup>9</sup> The Amendment to the MOU is herein incorporated by reference and is available in the District clerk’s office (District document no. of 46725).

<sup>10</sup> For this purpose, “finalized” means the California Coastal Commission’s acceptance of the District’s approval of the California Coastal Commission’s certification of the PMPA pursuant to Section 13632 of the Coastal Commission’s regulations. 14 Cal. Code of Reg. § 13632.





## Legend



Add to Port Master Plan and designate Commercial Recreation



Currently designated Commercial Recreation in Port Master Plan



Add Marine Related Industrial overlay



Mean High Tide Line





consistent with the Commercial Recreation designation, are proposed and approved<sup>11</sup> by the BPC. The Overlay would better accommodate current maritime operations and is consistent with the existing uses on the two sites. At the time the revised NOP was issued for scoping input (August 2015), no commercial developments were proposed for the sites and the BPC had not advanced such a project forward.

As a separate project with independent utility, the District and City are collectively studying a land use plan for the Overlay parcels and adjacent areas, commonly known as the “Balanced Land Use Plan.” The Balanced Land Use Plan is not a part of the proposed project and is in its preliminary stages. The BPC directed staff on April 14, 2016, to proceed with CEQA review. If and when the District and the Coastal Commission approve/certify a PMPA for the Balanced Land Use Plan, in their sole and absolute discretion, after appropriate CEQA analysis is conducted, it may supersede the Overlay. The 7-year Overlay represents a worst-case scenario. The BPC could adopt a shorter term for the Overlay with options to extend not exceed 7 years. Also, note that CEQA would not foreclose a potential decision of the BPC to postpone the submittal to the Coastal Commission the portion of the PMPA that incorporates District-owned Uplands Properties into the PMP and/or established the Overlay.

### 3.4.5.2 Redesignation of Streets to Marine Related Industrial

A PMPA would also be required to convert Quay Avenue between Bay Marina Drive to the north and 28th Street to the south, 28th Street west of Quay Avenue, and 32nd Street west of Tidelands Avenue from their current land use designation of Street to a land use designation of Marine Related Industrial. Quay Avenue south of 28th Street, 28th Street east of Quay Avenue, and 32nd Street east of Tidelands Avenue are not part of the proposed project and would remain open as District roadways.

Implementation of the improvements to the street closures sites would require a coastal development permit(s) from the District. The coastal development permit(s) to close the streets could not be issued until after certification of the PMPA by the California Coastal Commission.

## 3.5 Project Operations

The tank farm, street closures, existing short-term use permit, and former Weyerhaeuser sites are located adjacent to or near the NCMT and are proposed to be used primarily for vehicle throughput operations. Non-vehicle throughput (i.e., breakbulk and *other* general cargo) is handled on the NCMT, adjacent to Berth 24-1. On occasion, non-vehicle throughput may be handled on the tank farm, street closures, short-term use permit or former Weyerhaeuser sites, but such use is anticipated to be minimal given that, historically, the existing short-term use permit sites have been used solely for vehicle throughput and all non-vehicle throughput is handled on the NCMT. The primary reason these sites are not used for non-vehicle cargo is due to their distance from Berth 24-1, which makes them better suited to vehicle cargo. This division of goods storage is anticipated to continue in the future given it is a practical logistical consideration.

As shown in Tables 2-2 and 2-3, the amount of non-vehicle throughput is relatively minimal in Pasha’s overall operations and, as discussed above, is currently primarily handled on the NCMT.

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<sup>11</sup> For this purpose, “approved” means issuance of a CDP.

Moreover, some of the existing short-term use permits restrict the allowable use to only vehicle storage. As such, the project assumptions consider the reasonably foreseeable worst case scenario for the project site based on the maximum theoretical vehicle throughput.

### 3.5.1 Vehicle Processing

If Pasha continued vehicle imports at the 2013 volumes, the addition of the tank farm, street closures, and the former Weyerhaeuser sites, which total approximately 17.3 acres, could result in a potential increase of 39,565 vehicles per year and 136,351 vehicles for all of the project sites.<sup>12,13,14</sup> However, this would assume zero growth in Pasha's operations, which is unlikely. Therefore, to estimate the maximum theoretical capacity associated with the proposed project, the information in Table 3-1 was utilized.

**Table 3-1. Criteria to Determine Theoretical Capacity**

Criteria	Factor	Source
Vehicles per acre	154 vehicles/acre <sup>a</sup>	Mercator 2013:47
Average dwell time in 2013	14.68 days	Pasha
Average estimated dwell time <sup>b</sup>	10.9 days	Mercator 2013:42
Total area in 2013	158 acres	District

<sup>a</sup> This is the maximum number of vehicles that could physically fit on an acre of land.

<sup>b</sup> The average dwell time from 2008 to 2013 was 20.67 days. The average dwell time for the first 4 months of 2014 was 19.08 days. However, to be conservative, the analysis uses the projected average dwell time stated in Mercator (2013), which was less dwell time, resulting in greater throughput.

The area of the project site that is proposed to include project operations covers approximately 64.65 acres (tank farm + street closures + former Weyerhaeuser + existing short-term use permit sites), of which approximately 59.65 acres are usable for vehicle throughput.<sup>15</sup> The maximum amount of vehicles that can be parked on 1 acre is 154 vehicles (Mercator 2013). Therefore, the maximum amount of vehicles that would fit on the 59.65 acres would be 9,186.<sup>16</sup>

Using the very conservative estimate of average dwell time from the Mercator report, the average projected dwell time would be 10.9 days for each vehicle. Therefore, based on the average projected dwell time, the maximum amount of vehicles on 59.65 acres would be 307,604 per year,<sup>17</sup> or 5,157 vehicles per acre per year.<sup>18</sup>

<sup>12</sup> 17.3 acres x 2,287 vehicles/acre/year (361,372 vehicles ÷ 158 acres = 2,287 vehicles per acre) = 39,565 vehicles per year.

<sup>13</sup> 42.32 acres x 2,287 vehicles/acre/year = 96,786 vehicles per year on short-term permit sites.

<sup>14</sup> 39,565 vehicles/year + 96,786 vehicles/year = 136,351 vehicles per year.

<sup>15</sup> This acreage does not include the uplands property located east of Marina Way as no project operations currently exist nor are any proposed to exist on that site.

<sup>16</sup> 59.65 acres x 154 maximum vehicles/acre = 9,186 maximum vehicles for 59.65 acres at one time.

<sup>17</sup> (9,186 vehicles x 365 days/year) ÷ 10.9 days dwell time = 307,604 vehicles per year.

<sup>18</sup> 307,604 vehicles/year ÷ 59.65 acres = 5,157 vehicles/acre/year.

As noted in Table 3-2, when compared to the existing operational conditions of 96,740 vehicles per year being processed on the existing short-term use permit sites, the proposed project would result in a potential throughput increase of 210,818 vehicle imports per year, for a total of 307,604.<sup>19</sup>

**Table 3-2. Comparison of Existing and Proposed Vehicle Throughput for Project Site**

Project Component	Usable Acreage	Existing Vehicle Throughput	Proposed Vehicle Throughput	Potential Net Increase with Project
Tank Farm and Quay Avenue/28th Street Closures Sites <sup>b</sup>	9.7	0	50,023	50,023
32nd Street Closure Site	1.51	0	7,787	7,787
Short-Term Use Permit Sites	42.3 <sup>a</sup>	96,740	218,141	121,401
Former Weyerhaeuser Site	6.14	0	31,664	31,664
<b>Total</b>	<b>59.65</b>	<b>96,740</b>	<b>307,604</b>	<b>210,818</b>

Note, calculations have been rounded up and may not total correctly.

<sup>a</sup> Approximately 5 acres of short-term use permit sites are not usable for vehicle storage (Mercator 2013:39) because they have other uses (i.e., maintenance, haul-away operations).

<sup>b</sup> Quay Avenue and 28th Street are included with the tank farm site here because they are located adjacent to one another.

## 3.5.2 Vessels

Vessel calls at the NCMT are an existing condition, and the quantity of vessel calls is not expected to change as a result of the project. The size of vessels calling at the terminal has increased over the years such that more vehicles can be transported with fewer ships. The average capacity of vessels that currently call on NCMT is 5,282 cars. On average the vessels that called in National City in year 2013 were only partially full, averaging 1,578 autos per vessel call, based on the 2013 throughput of 361,372 cars and 229 auto-carrier calls at the terminal ( $361,372 / 229 = 1,578$ ). Existing vessels range in size from 3,200 car capacity up to 6,700 car capacity, and larger class roll-on/roll-off carriers are entering the market that can carry over 8,000 autos. Therefore, because existing vessels are only loaded at a fraction of their capacity, existing vessel calls would have sufficient capacity to handle the additional throughput associated with the project. Thus, the frequency of vessel calls associated with the existing plus project future condition is anticipated to be similar to the existing condition, while loading and unloading would require a longer hotelling period—increasing from approximately 15.0 hours per vessel call to 21.5 hours with the project. A more detailed discussion of vessel calls and hotelling time is included in Section 4.1, *Air Quality and Health Risk*.

<sup>19</sup> 307,604 maximum vehicles on the tank farm, street closures, and short-term use permit sites – 96,786 vehicles on the short-term use permit sites = 210,818 annual increase in vehicles with the proposed project. Note the total amount is slightly off due to rounding; however, the difference is within the margin of error as this is a maximum theoretical capacity forecast and unlikely to be achieved on the number of acres analyzed in this EIR.

### 3.5.3 Rail

Trains servicing the NCMT and the surrounding marine related industrial land uses are operated by BNSF. Based on historical data, it is assumed that approximately 45% of the cars imported by vessel at NCMT would be transported via rail and the remainder would be transported by truck. Existing trains run 6 days per week (Monday through Saturday), and the project may result in a new train on Sunday.

Pasha is currently in the process of adding a mobile railcar mover<sup>20</sup> to provide switching work to break down and assemble trains at the NCMT. The railcar mover would handle some of the loading and switching duty at NCMT, which would reduce the hours locomotives are active at NCMT.

## 3.6 Project Construction

Construction activities associated with the proposed project are generally minor and would be limited to the tank farm site, street closures sites, and within an approximately 1-acre portion of the 6.14-acre former Weyerhaeuser site where the two structures are located. No construction would take place on the short-term use permit sites or the Uplands Properties.

Construction activities are anticipated to take place in 2016 and would last approximately 7 weeks. Phasing would consist of site demolition of concrete and asphalt at all three locations; demolition of the 20,000-square-foot warehouse and 1,800-square-foot office at the former Weyerhaeuser site; soil excavation, compaction, and grading; utility infrastructure (e.g., storm drains and bioswales) at the tank farm and street closure sites; site paving; and finishing (e.g., striping, fencing, and lighting). Equipment that would be used includes a water truck, skip loader, large wheel loader, dozer, excavator with breaker, mechanical auger, small truck mounted crane, small loader with forks, and dump and haul trucks. Implementation of the project may be completed all at once, or the project may be completed in two phases beginning with the tank farm and former Weyerhaeuser site components, followed by the street closure sites.

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<sup>20</sup> A railcar mover is a road-rail vehicle (capable of traveling on both roads and rail tracks) designed for moving small numbers of railroad cars around in a rail siding or small yard. Compared with locomotives, railcar movers are smaller and can provide cost (reduced fuel consumption) and emission savings.

## Introduction

Sections 4.1 through 4.7 of this chapter contain discussions of the potential project-related significant environmental effects resulting from project implementation, and include existing site conditions, criteria for determining significance of potential environmental impacts, analyses of the type and magnitude of environmental impacts, and feasible mitigation measures that would reduce or avoid significant environmental impacts.

## Potential Environmental Impacts

This chapter provides an analysis of the following potential environmental impacts of the proposed project.

- 4.1, Air Quality and Health Risk
- 4.2, Greenhouse Gas Emissions, Climate Change, and Energy Use
- 4.3, Hazards and Hazardous Materials
- 4.4, Hydrology and Water Quality
- 4.5, Land Use and Planning
- 4.6, Noise and Vibration
- 4.7, Transportation, Circulation, and Parking

It was determined during preparation of the Revised Initial Study/Environmental Checklist (Appendix B-1) that the proposed project would have either a less-than-significant impact or no impact associated with the following topics: aesthetics; agriculture and forestry resources; biological resources; cultural resources; geology and soils; mineral resources; population and housing; public services; recreation; and utilities (other than energy). Therefore, the impact analyses for these topics are not carried into this chapter and are instead summarized in Chapter 6, *Additional Consequences of Project Implementation*, of this EIR.

## Format of the Environmental Analysis

Each of the environmental topic sections of this chapter includes the following subsections.

### Overview

This subsection briefly describes the criteria considered in the particular resource section, summarizes the resources used to compile the information presented for the environmental analysis, and also summarizes the environmental effects of the proposed project and any feasible mitigation measures.

## Existing Conditions

According to Section 15125 of the State CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the “baseline condition” against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the NOP is published; however, a different baseline may be used in specific cases where it is deemed appropriate. Unless otherwise indicated, the environmental setting described in each of the following sections will be that which existed on the date the NOP was published.

## Applicable Laws and Regulations

This subsection provides a summary of regulations, plans, policies, and laws at the federal, state, and local levels that are relevant to the proposed project as they relate to the particular environmental resource area in discussion. Compliance with these applicable laws and regulations is mandatory unless noted otherwise within the analysis. Therefore, as it relates to the *Project Impact Analysis* below, compliance is assumed because it is required by law and specified in the tenant lease, and mitigation would generally not be required when an existing law or regulation would ensure that a significant impact would not occur.

## Project Impact Analysis

This subsection describes the methodology used for the analysis and the potential environmental impacts of the proposed project and then, based on the significance criteria, states a conclusion as to whether the environmental impacts would be considered significant and unavoidable, potentially significant but mitigable, or less than significant (see definitions below). Each topic analyzed is divided into specific issues, based on potential impacts, and is separated by construction and operation impacts wherever relevant. The discussion of potential impacts is based on the applicable threshold of significance (see below) for each issue. Where potential impacts are significant, mitigation measures are identified to avoid or reduce the potential impact to a level below significance.

### Methodology

Each methodology subsection describes the means used to analyze potential impacts on a particular resource, discussing the steps followed and listing any studies relied on for arriving at conclusions as to significance.

### Thresholds of Significance

Thresholds of significance are criteria used to assess whether potential environmental effects are significant. The significance criteria used in this analysis are primarily based on the recommendations provided in Appendix G of the State CEQA Guidelines. The thresholds of significance define the type, amount, and/or extent of impact that would be considered a significant adverse change in the environment. The thresholds of significance for some environmental topics, such as air quality and noise, are quantitative, while those for other topics, such as visual quality, are qualitative. The thresholds of significance are intended to assist the reader in understanding how an impact is determined to be significant.

## Project Impacts and Mitigation

The analysis of environmental impacts considers both the construction and operation of the proposed project. As required by Section 15126.2(a) of the State CEQA Guidelines, direct, indirect, short-term, long-term, onsite, and/or offsite impacts are addressed, as appropriate, for the environmental issue being analyzed. This EIR utilizes the following terms to describe the level of significance of impacts identified during the course of the environmental analysis.

**No Impact:** This term is used when the project's construction and/or operation would have no adverse effect on a resource.

**Less than Significant:** This term is used to refer to impacts resulting from implementation of the proposed project that are not likely to exceed the defined thresholds of significance, and potentially significant impacts that are reduced to a level that does not exceed the defined thresholds of significance after implementation of mitigation measures.

**Significant:** This term is often used to refer to impacts resulting from implementation of the proposed project that exceed the defined thresholds of significance and can be applied before identification of any mitigation measures. A "significant effect" is defined by Section 15382 of the State CEQA Guidelines as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment [but] may be considered in determining whether the physical change is significant." For impacts that exceed a threshold of significance, mitigation measures that avoid or reduce the potential impact are identified, which may cause the impact to be reclassified as less than significant if it is sufficiently reduced; or the impact may remain significant, in which case it is referred to as a significant and unavoidable impact (or unavoidable significant impact).

**Significant and Unavoidable:** This term is used to refer to significant impacts resulting from implementation of the proposed project that cannot be eliminated or reduced to below standards of significance through implementation of feasible mitigation measures.

### Mitigation Measures

Section 15126.4 of the State CEQA Guidelines requires an EIR to "describe feasible measures which could minimize significant adverse impacts." The State CEQA Guidelines define feasibility as "capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, legal, social, technological, or other considerations." This subsection lists the mitigation measures that could reduce the severity of impacts identified in the *Impact Analysis* subsection. Mitigation measures are the specific environmental requirements for construction or operation of the proposed project consistent with the Findings of this EIR.

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## Section 4.1

# Air Quality and Health Risk

### 4.1.1 Overview

This section describes the existing conditions and applicable laws and regulations for air quality. The section also discusses the proposed project's potential to increase air emissions in the region. Impacts on air quality are considered significant if the proposed project were to (1) conflict with or obstruct implementation of the applicable air quality plan, (2) violate any air quality standard or contribute substantially to an existing or projected air quality violation, (3) result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard, (4) expose sensitive receptors to substantial pollutant concentrations, or (5) create objectionable odors affecting a substantial number of people.

Table 4.1-1 summarizes the significant impacts and mitigation measures discussed in this section.

**Table 4.1-1. Summary of Significant Impacts and Mitigation Measures**

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
<b>Impact-AQ-1:</b> New Land Use Designations Not Accounted for in the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP).	<b>MM-AQ-1:</b> Update the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP) with New Growth Projections.	Less than Significant	The temporary inconsistency with the current RAQS and SIP associated with the proposed land use designation changes would be rectified and the project would no longer be inconsistent.
<b>Impact-AQ-2:</b> Emissions in Excess of NO <sub>x</sub> Thresholds During Operations.	<b>MM-AQ-2:</b> Implement Diesel-Reduction Measures During Construction and Operations. <b>MM-AQ-3:</b> Comply with San Diego Unified Port District Climate Action Plan Measures. <b>MM-AQ-4:</b> Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance. <b>MM-AQ-5:</b> Replace Gasoline/Diesel Passenger Van with Electric Passenger Van.	Less than Significant	Mitigation would reduce project-related operational NO <sub>x</sub> emissions, associated primarily with vessel transit, to a level below thresholds.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
<b>Impact-AQ-3:</b> Cumulative Emissions in Excess of NO <sub>x</sub> Threshold during Operations.	<b>MM-AQ-2 through MM-AQ-5</b>	Less than Significant	Mitigation would reduce project-related operational NO <sub>x</sub> emissions, associated primarily with vessel transit, to a level below thresholds.

## 4.1.2 Existing Conditions

### 4.1.2.1 Climate and Atmospheric Conditions

#### Regional

The proposed project sites are within the San Diego Air Basin (SDAB). The SDAB covers all of San Diego County and is bordered by the Pacific Ocean to the west, the South Coast Air Basin (SCAB) to the north, the Salton Sea Air Basin to the east, and the U.S.–Mexico border to the south.

The climate in Southern California, including the SDAB, is controlled largely by the strength and position of a subtropical high-pressure cell over the Pacific Ocean. Areas within 3–5 miles of the coast, including the project site, experience moderate temperatures and comfortable humidity (SDAPCD 2010a). Precipitation is mostly limited to a few storms during the winter season. Winds in the vicinity of the project site usually are driven by the dominant land/sea breeze circulation system. During the day, regional wind patterns are dominated by onshore sea breezes. At night, wind generally slows, remains still, or reverses direction, traveling toward the sea.

The atmospheric conditions of the SDAB contribute to the region's air quality conditions. Because of its climate, the SDAB experiences frequent temperature inversions. Typically, temperature decreases with height. However, under inversion conditions, temperature increases as altitude increases. Temperature inversions prevent the air close to the ground from mixing with the air at higher elevations. As a result, air pollutants are trapped near the ground. During the summer, the interaction between the ocean surface and the lower layer of the atmosphere creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons (HC) and nitrogen oxides (NO<sub>x</sub>) react under strong sunlight and temperature, creating smog<sup>1</sup>. Light and daytime winds, primarily from the northwest, further aggravate this condition by driving the air pollutants inland toward the warmer foothills. During the fall and winter, elevated carbon monoxide (CO) and NO<sub>x</sub> levels usually occur during fall or winter, on days with summer-like conditions (SDAPCD 2010b).

High air pollution levels in coastal communities of San Diego can often occur when polluted air from the SCAB, particularly from Los Angeles, travels southwest over the ocean at night and is brought on shore into San Diego by the sea breeze during the day. Smog transported from the SCAB is a key

<sup>1</sup> Smog is a combination of smoke and other particulates, ozone, hydrocarbons, nitrogen oxides and other chemically reactive compounds which, under certain conditions of weather and sunlight, may result in a murky brown haze that causes adverse health effects. The primary source of smog in California is motor vehicles.

factor on more than 50% of the days San Diego exceeds clean air standards. Ground-level ozone ( $O_3$ ), which is the primary ingredient in urban smog, and its precursor emissions (HC and  $NO_x$ ) are transported to San Diego during relatively mild Santa Ana weather conditions. During strong Santa Ana weather conditions, however, pollutants are pushed away from San Diego far out to sea. When smog is blown in from the SCAB at ground level, the highest  $O_3$  concentrations are measured at coastal and near-coastal monitoring stations. When the transported smog is elevated, coastal sites may be passed over, and the transported ozone is measured farther inland and on the mountain slopes (SDAPCD 2010b).

## Local

The nearest weather station within the Western Regional Climate Center's monitoring domain is the Chula Vista Station, which is approximately 2 miles to the southeast of the project site. Given its proximity, historic climatic conditions at Chula Vista over the period of record (September 1918–January 2015) are assumed to be representative of the prevailing climatic conditions. The annual average temperature at Chula Vista is 61 degrees Fahrenheit ( $^{\circ}F$ ), with an average winter temperature of 55 $^{\circ}F$  and an average summer temperature of 67 $^{\circ}F$  (WRCC 2015a). Annual precipitation averages 9.73 inches (WRCC 2015b); the majority of precipitation occurs between November and March, with January as the wettest month (NOAA 2004).

The project site is in the vicinity of two wind monitoring stations operated by the San Diego Air Pollution Control District (SDAPCD): the Chula Vista Field Station, approximately 3.5 miles southeast of the project site, and the San Diego/Lindbergh Field Station, approximately 6.5 miles northwest of the project site. Wind patterns at the Chula Vista station indicate a prominence of westerly winds that average 3.85 miles per hour (mph) (1.72 meters per second), with calm winds present approximately 13.3% of the time. Wind monitoring data recorded at the San Diego/Lindbergh Field Station indicate a more west–northwest prominence, averaging 6.33 mph (2.83 meters per second) with calm winds present approximately 0.84% of the time (Brick pers. comm.). A wind rose showing wind directions, speeds, and frequency in the project vicinity is shown in Appendix E.

### 4.1.2.2 Air Quality Conditions

#### Regional Background

The Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to designate areas within the country as either attainment or nonattainment for each criteria pollutant based on whether the national ambient air quality standards (NAAQS) have been achieved. Similarly, the California CAA requires the California Air Resources Board (ARB) to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the California Ambient Air Quality Standards (CAAQS) have been achieved. If a pollutant concentration is lower than the state or federal standard, the area is classified as being in attainment for that pollutant. If a pollutant violates the standard, the area is considered a nonattainment area. If data are insufficient to determine whether a pollutant is violating the standard, the area is designated unclassified. Under the California CAA, areas are designated as nonattainment for a pollutant if air quality data show that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment. The attainment status of San Diego County is summarized in Table 4.1-2.

**Table 4.1-2. Federal and State Attainment Status for San Diego County**

<b>Criteria Pollutant</b>	<b>Federal Designation</b>	<b>State Designation</b>
Ozone (O <sub>3</sub> ) (8-hour)	Nonattainment – Marginal	Nonattainment
Carbon Monoxide (CO)	Attainment/Maintenance	Attainment
Respirable Particulate Matter (PM <sub>10</sub> )	Attainment	Nonattainment
Fine Particulate Matter (PM <sub>2.5</sub> )	Unclassifiable/Attainment	Nonattainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassified <sup>a</sup>
Visibility	(No federal standard)	Unclassified <sup>a</sup>

Sources: ARB 2013a; SDAPCD 2016.

<sup>a</sup> At the time of designation, if the available data do not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

## Local Background

SDAPCD maintains and operates a network of ambient air monitoring stations throughout the county. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and NAAQS. The ambient monitoring stations closest to the proposed project are the San Diego–Beardsley Street station (ARB 80142), which is approximately 3.5 miles to the north-northwest of the project site in the Barrio Logan neighborhood, and the Chula Vista station (ARB 80114), which is approximately 3.5 miles to the southeast of the project site. Concentrations of pollutants from the San Diego–Beardsley Street and Chula Vista stations over the last 3 years (2012–2014) are presented in Table 4.1-3.

**Table 4.1-3. Ambient Background Concentrations from Nearby Monitoring Stations**

<b>Pollutant Standards</b>	<b>San Diego–Beardsley Street</b>			<b>Chula Vista</b>		
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>1-Hour Ozone (O<sub>3</sub>)</b>						
Maximum Concentration (ppm)	0.071	0.063	0.093	0.085	0.073	0.093
<i>Number of Days Standard Exceeded</i>						
CAAQS 1-hour (>0.09 ppm)	0	0	0	0	0	0
<b>8-Hour Ozone (O<sub>3</sub>)</b>						
State Maximum Concentration (ppm)	0.065	0.053	0.073	0.079	0.063	0.072
National Maximum Concentration (ppm)	0.065	0.053	0.072	0.078	0.062	0.072
National 4 <sup>th</sup> Highest Concentration (ppm)	0.052	0.052	0.068	0.065	0.059	0.063
<i>Number of days standard exceeded</i>						
CAAQS 8-hour (>0.070 ppm)	0	0	2	1	0	1
NAAQS 8-hour (> 0.075 ppm)	0	0	0	1	0	0
<b>Carbon Monoxide (CO)</b>						
Maximum Concentration 8-hour Period (ppm)	1.9	2.1	1.9	N/A	N/A	N/A
Maximum Concentration 1-hour Period (ppm)	2.6	3.0	2.7	N/A	N/A	N/A
<i>Number of days standard exceeded</i>						
NAAQS 8-hour (≥9 ppm)	0	0	0	N/A	N/A	N/A
CAAQS 8-hour (≥9.0 ppm)	0	0	0	N/A	N/A	N/A
NAAQS 1-hour (≥35 ppm)	0	0	0	N/A	N/A	N/A
CAAQS 1-hour (≥20 ppm)	0	0	0	N/A	N/A	N/A
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>						
Maximum 1-hour Concentration	0.0065	0.0072	0.0075	0.0057	0.0057	0.0055
Annual Average Concentration	0.0013	0.0014	0.0013	0.0011	0.0011	0.0011
<i>Number of Days Standard Exceeded</i>						
CAAQS 1-Hour (0.18 ppm)	0	0	0	0	0	0
NAAQS 1-Hour (0.100 ppm)	0	0	0	0	0	0
<b>Suspended Particulates (PM<sub>10</sub>)</b>						
State Maximum 24-hour Concentration	47.0	92.0	41.0	38.0	40.0	39.0
National Maximum 24-hour Concentration	45.0	90.0	40.0	37.0	38.0	38.0
State Annual Average Concentration (CAAQS = 20 µg/m <sup>3</sup> )	22.2	25.4	23.8	21.5	23.7	23.4

	San Diego–Beardsley Street			Chula Vista		
<b>Pollutant Standards</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<i>Number of Days Standard Exceeded</i>						
CAAQS 24-hour ( $>50 \mu\text{g}/\text{m}^3$ )	0	1	0	0	0	0
NAAQS 24-hour ( $>150 \mu\text{g}/\text{m}^3$ ) – <i>Estimated</i>	0.0	0.0	0.0	0.0	0.0	0.0
<b>Suspended Particulates (PM<sub>2.5</sub>)</b>						
National Maximum 24-hour Concentration ( $\mu\text{g}/\text{m}^3$ )	39.8	37.4	36.7	34.3	21.9	26.5
24-hour Standard 98 <sup>th</sup> Percentile ( $\mu\text{g}/\text{m}^3$ )	24.1	19.6	24.8	24.3	18.0	19.3
National Annual Average Concentration (NAAQS = $12.0 \mu\text{g}/\text{m}^3$ )	11.0	10.3	10.1	10.2	9.4	9.2
State Annual Average Concentration (CAAQS = $12 \mu\text{g}/\text{m}^3$ )	N/A	10.4	10.2	N/A	9.5	9.3
<i>Number of Days Standard Exceeded</i>						
NAAQS 24-Hour ( $>35 \mu\text{g}/\text{m}^3$ )	1	1	1	0	0	0
Source: ARB 2015a, EPA 2015a. Data compiled by ICF.						
N/A = data not available; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.						

Ambient levels of selected toxic air contaminants (TACs) are measured by ARB at several locations in Southern California. However, unlike the other nine TACs, diesel particulate matter (DPM) does not have ambient monitoring data because an industry accepted measurement method does not currently exist. Instead, the ARB estimates DPM based on PM<sub>10</sub> and typical DPM to PM<sub>10</sub> ratios. The closest TAC monitoring stations to the project site are Chula Vista and El Cajon, approximately 4 miles and 14 miles southeast and northeast of the project site, respectively. Both of these stations may potentially contain higher, as well as different, TAC concentrations than those near the project site because of their distance from the project site and the differing land uses in those areas. The annual average concentration for DPM in the 2009 California Almanac of Emissions and Air Quality for the SDAB was 1.4 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) as of the year 2000, with an estimated cancer risk of 420 persons in one million attributed to DPM. The annual average cancer risk from all other TACs within the SDAB is 187 persons in one million. For perspective, 1 out of 3 Americans will eventually develop cancer, and 1 out of 4 will die from cancer. Therefore, the national average background cancer incidence is equivalent to 333,000 persons in one million (ARB 2009). DPM emissions decreased from 2000 to 2010 primarily as a result of reduced exhaust emissions from diesel mobile sources, and DPM emissions are projected to continue to decrease through 2035 (ARB 2013b).

## Pollutants of Concern

### Criteria Pollutants

As discussed above, the federal and state governments have established NAAQS and CAAQS, respectively, for six criteria pollutants: O<sub>3</sub>, lead, CO, nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM) 10 microns or less in diameter (PM<sub>10</sub>) and less than 2.5 microns in diameter (PM<sub>2.5</sub>). Ozone and NO<sub>2</sub> are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, CO, SO<sub>2</sub>, and lead are considered local pollutants that tend to accumulate in the air locally.

The primary pollutants of concern in the project area are O<sub>3</sub> (including NO<sub>x</sub> and reactive organic gases [ROGs]), CO, and PM. Principal characteristics surrounding these pollutants are discussed below.

- **Ozone**, a primary constituent of urban smog, is a photochemical oxidant that is formed when ROG and NO<sub>x</sub> (both by-products of the internal combustion engine) react with sunlight. O<sub>3</sub> poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Additionally, O<sub>3</sub> has been tied to crop damage, typically in the form of stunted growth and premature death. O<sub>3</sub> can also act as a corrosive, resulting in property damage such as the degradation of rubber products. Meteorology and terrain play major roles in O<sub>3</sub> formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O<sub>3</sub> is considered a regional pollutant; high levels often occur downwind of the emission source because of the length of time between when the ROGs form and when they react with light to change to O<sub>3</sub>.
- **Organic Gases—Precursors to Ozone** include ROGs and volatile organic compounds (VOCs). HC are organic gases that are formed solely of hydrogen and carbon. ROGs include all HC except those exempted by ARB. Therefore, ROGs are a set of organic gases based on state rules and regulations. VOCs are similar to ROGs in that they include all organic gases except those exempted by federal law. Both VOCs and ROGs are emitted from incomplete combustion of HC

or other carbon-based fuels. Combustion engine exhaust, oil refineries, and oil-fueled power plants are the primary sources of HC. Another source of HC is evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint. Generally speaking, and in this analysis, ROG and VOCs are used interchangeably to refer to the HC that are a precursor to O<sub>3</sub> formation.

The primary health effects of HC result from the formation of O<sub>3</sub> and its related health effects. High levels of HC in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. There are no separate ambient air quality standards for ROG. Carcinogenic forms of ROG are considered to be TACs, which are described below. An example is benzene, which is a carcinogen.

- **Nitrogen Oxides** serve as integral participants in the process of photochemical smog production. The two major forms of NO<sub>x</sub> are nitric oxide (NO) and NO<sub>2</sub>. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO<sub>2</sub> is a reddish-brown irritating gas formed by the combination of NO and oxygen. NO<sub>x</sub> acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens. NO<sub>x</sub> is a precursor to O<sub>3</sub> formation.
- **Carbon Monoxide** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.
- **Particulate Matter** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized—inhalable coarse particles, or PM<sub>10</sub>, and inhalable fine particles, or PM<sub>2.5</sub>. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind on arid landscapes also contributes substantially to local particulate loading. Both PM<sub>10</sub> and PM<sub>2.5</sub> may adversely affect the human respiratory system, especially in those people who are naturally sensitive or susceptible to breathing problems.
- PM emitted from diesel-fueled engines contains a complex mixture gases and fine particles that include various TACs and other pollutants that contribute to urban smog (ARB 2007a). The particulate portion of diesel exhaust is known as DPM. The majority of DPM (i.e., 98%) is smaller than 10 microns in diameter (ARB 2000a)**Sulfur Dioxide** is a product of high-sulfur fuel combustion. Main sources of SO<sub>2</sub> are coal and oil used in power stations, in industries, and for domestic heating. Industrial chemical manufacturing is another source of SO<sub>2</sub>, which is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO<sub>2</sub> also can cause plant leaves to turn yellow and can erode iron and steel. In recent years, SO<sub>2</sub> concentrations have been reduced by the increasingly stringent controls placed on stationary-source emissions of SO<sub>2</sub> and limits on the sulfur content of fuels.

#### Health Effects of Criteria Air Pollutants

Criteria air pollutants are recognized to have a variety of health effects on humans. Research by ARB shows that exposure to high concentrations of air pollutants can trigger respiratory diseases, such as asthma, bronchitis, and other respiratory ailments; and cardiovascular diseases. A healthy person exposed to high concentrations of air pollutants may become nauseated or dizzy, may develop a headache or cough, or may experience eye irritation and/or a burning sensation in the chest. O<sub>3</sub> is a powerful irritant that attacks the respiratory system, leading to the damage of lung tissue. Inhaled



particulate matter, NO<sub>2</sub>, and SO<sub>2</sub> can directly irritate the respiratory tract, constrict airways, and interfere with the mucous lining of the airways. Exposure to CO, when absorbed into the bloodstream, can endanger the hemoglobin, the oxygen-carrying protein in blood, by reducing the amount of oxygen that reaches the heart, brain, and other body tissues. Extended exposure to PM<sub>10</sub> and PM<sub>2.5</sub> can increase the risk of chronic respiratory disease. When air pollutant levels are high, children, the elderly, and people with respiratory problems are advised to remain indoors. Outdoor exercise also is discouraged because strenuous activity may cause shortness of breath and chest pains. A discussion of the criteria pollutants and their effects on human health and the environment is provided in Table 4.1-4.

**Table 4.1-4. Health Effects Summary of the Major Criteria Air Pollutants**

<b>Pollutants</b>	<b>Sources</b>	<b>Primary Health and Welfare Effects</b>
Ozone (O <sub>3</sub> )	<ul style="list-style-type: none"> <li>Atmospheric reaction of organic gases with NO<sub>2</sub> in sunlight</li> </ul>	<ul style="list-style-type: none"> <li>Aggravation of respiratory and cardiovascular diseases</li> <li>Irritation of eyes</li> <li>Impairment of cardiopulmonary function</li> <li>Plant leaf injury</li> </ul>
Nitrogen Dioxide (NO <sub>2</sub> )	<ul style="list-style-type: none"> <li>Motor vehicle exhaust</li> <li>High temperature stationary combustion</li> <li>Atmospheric reactions</li> </ul>	<ul style="list-style-type: none"> <li>Aggravation of respiratory illness</li> <li>Reduced visibility</li> <li>Reduced plant growth</li> <li>Formation of acid rain</li> </ul>
Carbon Monoxide (CO)	<ul style="list-style-type: none"> <li>Incomplete combustion of fuels and other carbon containing substances, such as motor exhaust</li> <li>Natural events, such as decomposition of organic matter</li> </ul>	<ul style="list-style-type: none"> <li>Reduced tolerance for exercise</li> <li>Impairment of mental function</li> <li>Impairment of fetal development</li> <li>Death at high levels of exposure</li> <li>Aggravation of some heart diseases (angina)</li> </ul>
Particulate Matter (PM <sub>2.5</sub> and PM <sub>10</sub> )	<ul style="list-style-type: none"> <li>Stationary combustion of solid fuels</li> <li>Construction activities</li> <li>Industrial processes</li> <li>Atmospheric chemical reactions</li> </ul>	<ul style="list-style-type: none"> <li>Reduced lung function</li> <li>Aggravation of the effects of gaseous pollutants</li> <li>Aggravation of respiratory and cardio-respiratory diseases</li> <li>Increased cough and chest discomfort</li> <li>Soiling</li> <li>Reduced visibility</li> </ul>
Sulfur Dioxide (SO <sub>2</sub> )	<ul style="list-style-type: none"> <li>Combustion of sulfur-containing fossil fuels</li> <li>Smelting of sulfur-bearing metal ores</li> <li>Industrial processes</li> </ul>	<ul style="list-style-type: none"> <li>Aggravation of respiratory diseases (asthma, emphysema)</li> <li>Reduced lung function</li> <li>Irritation of eyes</li> <li>Reduced visibility</li> <li>Plant injury</li> <li>Deterioration of metals, textiles, leather, finishes, coatings, etc.</li> </ul>
Lead (Pb)	<ul style="list-style-type: none"> <li>Contaminated soil</li> </ul>	<ul style="list-style-type: none"> <li>Impairment of blood function and nerve conduction</li> <li>Behavioral and hearing problems in children</li> </ul>

Source: SCAQMD 2005

### **Toxic Air Contaminants**

TACs are pollutants that have no ambient standard but pose the potential to increase the risk of developing cancer or acute or chronic health risks. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. The most relevant TAC associated with the proposed project is DPM, which is emitted from diesel-powered vessels, equipment, and trucks. There are no NAAQS or CAAQS for TACs. Individual TACs vary greatly in the risks they present. At a given level of exposure, one TAC may pose a hazard that is many times greater than another. TACs are identified and their toxicity is studied by the California Office of Environmental Health Hazard Assessment (OEHHA). Adverse health effects of TACs can be carcinogenic (cancer-causing), short-term (acute) noncarcinogenic, and long-term (chronic) noncarcinogenic. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders.

### **Sensitive Receptors**

The impact of air pollutant emissions on sensitive members of the population is a special concern. Sensitive receptors are defined as locations where pollutant-sensitive members of the population may reside or where the presence of air pollutant emissions could adversely affect use of the land. ARB has identified the following people as the most likely to be affected by air pollution: children younger than 14, the elderly older than 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors (ARB 2005a). Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder-care facilities, elementary schools, and parks.

The project is an industrial land use and is completely surrounded by industrial uses at the terminal. The closest sensitive land uses within the vicinity of the project site include Pepper Park (which includes a public promenade) immediately south and southwest of the closest project sites (Parcel 028-007 and the 32nd Street Closure), and multi- and single-family residential, approximately 1,600 feet to the east of Parcels 025-010-B and 025-010-C and approximately 1,000 feet northeast of the eastern edge of the terminal itself. The closest sensitive land uses to truck travel along Bay Marina Drive are the multi- and single-family residential areas approximately 300 feet north of Bay Marina Drive near Harrison Avenue and Cleveland Avenue. The closest sensitive land uses to train travel along the BNSF right-of-way towards downtown are the various residences, parks, and schools in the National City and the Barrio Logan neighborhoods. A detailed description of the specific sensitive land uses near train and truck activity is contained within the impact analysis under Threshold 4. Please refer to Figure 2-4 for a depiction of nearby land uses.

### **Local Emissions at the Project Site**

Activity at the project site generates criteria pollutant and TAC emissions. Specifically, criteria pollutant and TAC emissions result from activity associated with existing vehicle throughput, including ocean-going vessel activity; Burlington Northern Santa Fe (BNSF) rail activity; auto-carrier truck travel; activity to unload, repair, and process cars, including car trips, evaporative resting

losses,<sup>2</sup> and van shuttles; worker trips; and periodic painting and coating operations. A description of each of these sources and associated emissions modeling is provided in Section 4.1.4.1 below. Emissions associated with existing activity at the daily time scale is presented in Table 4.1-5.

**Table 4.1-5. Estimate of Existing Conditions at the Project Site (pounds per day)**

<b>Operational Element</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Ocean-Going Vessels – Transit	33	644	48	16	11	10
Ocean-Going Vessels – Maneuvering	22	228	27	7	5	4
Ocean-Going Vessels – Hoteling	15	359	31	17	8	8
Auto-Carrier Truck Travel	4	282	13	<1	5	3
BNSF Rail – On-Port NCMT Switching	4	73	9	<1	2	1
BNSF Rail – Regional Line-Haul	7	181	22	1	5	4
Worker Trips	2	6	52	<1	4	1
Imported Car Off-loading and Evaporative Resting Losses	7	1	7	<1	1	<1
Van Shuttles	<1	1	<1	<1	<1	<1
Vehicle Repairs On Site	3	-	-	-	-	-
Periodic parking lot painting	<1	-	-	-	-	-
<i>Total Baseline Emissions</i>	<i>95</i>	<i>1,776</i>	<i>208</i>	<i>42</i>	<i>40</i>	<i>32</i>

Source: Appendix E.

Notes: Totals may not add exactly due to rounding.

### 4.1.3 Applicable Laws and Regulations

The air quality management agencies of direct importance in the county are EPA, ARB, and SDAPCD. EPA has established federal air quality standards for which ARB and SDAPCD have primary implementation responsibility. ARB and SDAPCD are also responsible for ensuring that state air quality standards are met.

#### 4.1.3.1 International Regulations

##### International Maritime Organization International Convention for the Prevention of Pollution from Ships Annex VI

The International Maritime Organization (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI, which came into force in May 2005, set new international NO<sub>x</sub> emission limits on marine engines over 130 kilowatts (kW) installed on new vessels retroactive to the year 2000. In October 2008, IMO adopted amendments to international requirements under MARPOL Annex VI, which introduced NO<sub>x</sub> emission standards for new engines and more stringent

<sup>2</sup> Evaporative hydrocarbon losses occur when rising ambient temperatures cause fuel evaporation from vehicles sitting throughout the day. Resting losses occur when a vehicle is sitting, but are caused by permeation through rubber or plastic components rather than normal daily temperature excursions. Because cars dwell for multiple days at the terminal, the analysis includes evaporative losses from partial day (soak time less than 24 hours) and multi-day (soak time greater than 24 hours) losses. Evaporative losses only occur in gasoline vehicles.

fuel quality requirements (DieselNet 2013; IMO 2008). The Annex VI North American Emission Control Area (ECA) requirements applicable to the proposed project include the following.

- Caps on the sulfur content of fuel as a measure to control sulfur oxide (SO<sub>x</sub>) emissions and, indirectly, PM emissions. For ECAs, the sulfur limits are capped at 1.0% starting in 2012 and 0.1% starting in 2015.<sup>3</sup> The analysis herein assume full compliance with MARPOL Annex VI SO<sub>x</sub> limits. The Port of San Diego is within an ECA.
- NO<sub>x</sub> engine emission rate limits for new engines. Tier I and Tier II limits effective 2000 and 2011 are global limits, whereas Tier III limits, effective in 2016, apply only in NO<sub>x</sub> ECAs.

### 4.1.3.2 Federal

#### Clean Air Act

The CAA was first enacted in 1963 and has been amended numerous times in subsequent years (1967, 1970, 1977, and 1990). The CAA establishes the NAAQS and specifies future dates for achieving compliance. The CAA identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of “sensitive” populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The CAA also mandates that each state submit and implement a State Implementation Plan (SIP) for local areas not meeting those standards. The plans must include pollution control measures that demonstrate how the standards will be met. Because the Port of San Diego is within the SDAB, it is in an area designated as nonattainment for certain pollutants that are regulated under the CAA.

The 1990 amendments to the CAA identify specific emission-reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones. The sections of the CAA that would most substantially affect the development of the proposed project include Title I (Nonattainment Provisions) and Title II (Mobile-Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for criteria pollutants. Table 4.1-6 shows the NAAQS currently in effect for each criteria pollutant. The NAAQS were amended in July 1997 to include an 8-hour standard for O<sub>3</sub> and adopt a standard for PM<sub>2.5</sub>. The 8-hour O<sub>3</sub> NAAQS was further amended in October 2015. EPA will designate O<sub>3</sub> attainment and nonattainment areas in late 2017.

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<sup>3</sup> The sulfur requirements in ECAs are 1.0% as of July 2010 and 0.1% starting in January 2015. North America was designated as an ECA in August 2012, and the sulfur requirements became applicable at the time of designation.

**Table 4.1-6. Federal and State Ambient Air Quality Standards**

<b>Pollutant</b>	<b>Averaging Time</b>	<b>CAAQS<sup>a</sup></b>	<b>NAAQS<sup>b</sup></b>
Ozone (O <sub>3</sub> )	1 hour	0.09 ppm <sup>3</sup>	--
	8 hour	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm
	8 hour	9.0 ppm	9 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	1 hour	0.18 ppm	100 ppb
	Annual Arithmetic Mean	0.030 ppm	53 ppb
Sulfur Dioxide (SO <sub>2</sub> )	1 hour	0.25 ppm	75 ppb
	24 hour	0.04 ppm	0.14 ppm
Respirable Particulate Matter (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	--
Fine Particulate Matter (PM <sub>2.5</sub> )	24 hour	--	35 µg/m <sup>3</sup>
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	12.0 µg/m <sup>3</sup>
Sulfates	24 hour	25 µg/m <sup>3</sup>	--
Lead (Pb)	30 day average	1.5 µg/m <sup>3</sup>	--
	Calendar quarter	--	1.5 µg/m <sup>3</sup>
	Rolling 3-Month Average	--	0.15 µg/m <sup>3</sup>
Hydrogen Sulfide	1 hour	0.03 ppm	--
Vinyl Chloride	24 hour	0.01 ppm	--

<sup>a</sup> The CAAQS for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24-hour), NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

<sup>b</sup> The NAAQS, other than O<sub>3</sub> and those based on annual averages, are not to be exceeded more than once a year. The O<sub>3</sub> standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than 1. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, is equal to or less than the standard.

Notes: ppm = parts per million by volume; ppb = parts per billion; µg/m<sup>3</sup> = micrograms per cubic meter.

Source: ARB 2015b.

### **EPA Emission Standards for Large Marine Diesel Engines—Category 3 Engines**

Category 3 engines have engine displacements per cylinder greater than 30 liters. Category 3 engines are propulsion engines on ocean-going vessels (OGVs). To reduce emissions from these engines, EPA established 2003 Tier 1 NO<sub>x</sub> standards for marine diesel engines above 30 liters per cylinder, and large Category 3 marine propulsion engines on U.S. flagged ocean-going vessels (40 CFR Parts 9 and 94) (68 FR 9745–9789). The standards went into effect for new engines built in 2004 and later. Tier 1 limits were achieved by engine-based controls, without the need for exhaust gas after-treatment.

In December 2009, EPA adopted Tier 2 and Tier 3 emissions standards for newly built Category 3 engines installed on U.S. flagged vessels, as well as marine fuel sulfur limits. The Tier 2 and 3 engines standards and fuel limits are equivalent to the amendments to MARPOL Annex VI. Tier 2 NO<sub>x</sub> standards for newly built engines applied beginning in 2011 and require the use of engine-based controls, such as engine timing, engine cooling, and advanced electronic controls. Tier 3 standards

will apply beginning in 2016 in ECAs and would be met with the use of high-efficiency emission control technology, such as selective catalytic reduction. The Tier 2 standards are anticipated to result in a 15 to 25% NO<sub>x</sub> reduction below the Tier 1 levels; Tier 3 standards are expected to achieve NO<sub>x</sub> reductions 80% below the Tier 1 levels (DieselNet 2013). In addition to the Tier 2 and Tier 3 NO<sub>x</sub> standards, the final regulation established standards for HC and CO.

### **EPA Emission Standards for Locomotives**

To reduce emissions from switch and line-haul locomotives, EPA established a series of increasingly strict emission standards for new or remanufactured locomotive engines (63 FR 18997-19084). Tier 0 standards, effective as of 2000, applied to engines manufactured or remanufactured from 1973 to 2001. Tier 1 standards applied to engines manufactured/remanufactured from 2002 to 2004. Tier 2 standards applied to engines manufactured/remanufactured after 2004.

In 2008, EPA strengthened the Tier 0 through 2 standards to apply to existing locomotives and introduced more stringent Tier 3 and 4 emission requirements (73 FR 88 25098-25352). Tier 3 standards, met by engine design methods, were phased in between 2011 and 2014. Tier 4 standards, which are expected to require exhaust gas after-treatment technologies, became effective starting in 2015 (DieselNet 2015b).

### **EPA Emission Standards for Non-Road Diesel Engines**

To reduce emissions from non-road diesel equipment, EPA established a series of increasingly strict emission standards for new non-road diesel engines. Tier 1 standards were phased in on newly manufactured equipment from 1996 through 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in on newly manufactured equipment from 2001 through 2006. Tier 3 standards were phased in on newly manufactured equipment from 2006 through 2008. Tier 4 standards, which require advanced emission control technology to attain them, are being phased in between 2008 and 2015.

### **EPA Non-Road Diesel Fuel Rule**

With this rule, EPA set sulfur limitations for non-road diesel fuel, including locomotives and marine vessels (though not for the marine residual fuel used by very large engines on OGVs). For the analysis herein, this rule affects line-haul locomotives; the California Diesel Fuel Regulation (described below) (ARB 2005b) generally pre-empts this rule for other sources such as yard locomotives, construction equipment, terminal equipment, and harbor craft. Under this rule, the diesel fuel used by line-haul locomotives was limited to 500 parts per million (ppm) starting June 1, 2007, and further limited to 15 ppm sulfur content (ultra-low-sulfur diesel) starting January 1, 2010, for non-road fuel, and June 2012 for marine and locomotive fuels (EPA 2004).

### **EPA On-Road Diesel Fuel Rule**

In December 2000, the EPA signed the Heavy-Duty Highway Rule, which reduces emissions from on-road, heavy-duty diesel trucks by establishing a series of increasingly strict emission standards for new engines. Manufacturers were required to produce new diesel vehicles that meet PM and NO<sub>x</sub> emission standards beginning with model year 2007 with the phase-in period being between 2007 and 2010. The phase-in was based on a percent-of-sales basis: 50% from 2007 to 2009 and 100% in 2010 (EPA 2000).

### 4.1.3.3 State

#### California Clean Air Act

The California CAA, signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and set standards for other pollutants recognized by the state. In general, the California standards are more health protective than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Table 4.1-6 shows the CAAQS currently in effect for each criteria pollutant.

ARB and local air districts bear responsibility for achieving California's air quality standards, which are to be achieved through district-level air quality management plans that would be incorporated into the SIP. In California, EPA has delegated authority to prepare SIPs to ARB, which, in turn, has delegated that authority to individual air districts. ARB traditionally has established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

The California CAA substantially adds to the authority and responsibilities of air districts. The California CAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The California CAA also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The California CAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish traffic control measures.

#### Toxic Air Contaminants Regulations

California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Toxic Air Contaminant Identification and Control Act (AB 1807) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. In August 1998, ARB identified particulate emissions from diesel-fueled engines as TACs. In September 2000, ARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles. As an ongoing process, ARB reviews air contaminants and identifies those that are classified as TACs. ARB also continues to establish new programs and regulations for the control of TACs, including DPM, as appropriate. Among the programs and strategies ARB has developed to reduce diesel emissions for various sources, many are applicable to sources that are present at the Port, including off-road sources (cargo-handling equipment, locomotives, construction equipment), on-road trucks (drayage trucks), and marine vessels (harbor craft, OGVs, and shore power)

## **ARB California Diesel Fuel Regulation**

With this rule, ARB set sulfur limitations for diesel fuel sold in California for use in on- and off-road motor vehicles (13 CCR 2281–2285; 17 CCR 93114). Harbor craft and intrastate locomotives were originally excluded from the rule, but were later included by a 2004 rule amendment (ARB 2005b). Under this rule, diesel fuel used in motor vehicles except harbor craft and intrastate locomotives has been limited to 500 ppm sulfur since 1993. The sulfur limit was reduced to 15 ppm on September 1, 2006. A federal diesel rule similarly limited sulfur content nationwide to 15 ppm by October 15, 2006.

## **ARB Agreements with Class I freight railroads**

### **1998 South Coast Locomotive Emissions Agreement**

In 1998, ARB, Class I freight railroads operating in the South Coast Air Basin (BNSF and Union Pacific Railroad [UP]), and EPA signed the 1998 Memorandum of Understanding (MOU), agreeing to a locomotive fleet average emissions program. The 1998 MOU required that, by 2010, the Class I freight railroad fleet of locomotives in the South Coast Air Basin achieve average emissions equivalent to the NO<sub>x</sub> emission standard established by EPA for Tier 2 locomotives (5.5 grams per brake horsepower-hour). BNSF and UP must continue to comply with the Tier 2 locomotive fleet average from 2010 to 2030. The MOU applies to both line-haul (freight) and switch locomotives operated by the railroads (ARB 1998). This MOU also provides emission reductions at the Port of San Diego because all trains arrive from and depart to the South Coast Air Basin. As of 2014, BNSF's NO<sub>x</sub> emission level is 5.2 grams per brake horsepower-hour, which is better than the MOU requirement.

### **2005 Railroad Statewide Agreement**

In 2005, ARB, Class I freight railroads operating in the South Coast Air Basin, and EPA signed the 2005 MOU agreeing to several program elements intended to reduce the emission impacts of railyard operations on local communities. The 2005 MOU includes a locomotive idling-reduction program, early introduction of lower-sulfur diesel fuel in interstate locomotives, and a visible emission reduction and repair program. The 2005 agreement also required a number of efforts to gather information and assess advanced technologies to further reduce locomotive and railyard emissions in the future, including the preparation of emission inventories and health risk assessments at the 17 major railyards in the state (including San Diego Railyard), community and air district involvement, evaluation and development of measures to further reduce impacts on local communities, and ongoing efforts to evaluate and assess advanced control technologies (ARB 2005c).

## **ARB Measures to Reduce Emissions from Goods Movement Activities**

### **Emission Reduction Plan for Ports and Goods Movement in California**

In April 2006, ARB approved the Emission Reduction Plan for Ports and Goods Movement in California (ARB 2006). This plan proposes measures that would reduce emissions from the main sources associated with port cargo-handling activities, including ships, harbor craft, terminal equipment, trucks, and locomotives. This effort was a step in implementing the Goods Movement Action Plan developed by the California Business, Transportation, and Housing Agency and the



California Environmental Protection Agency. The final Goods Movement Action Plan was released on January 11, 2007, and includes measures to address the various layers of the goods movement system throughout the state such as freeways, rail, and ports.

### **ARB Regulations for Fuel Sulfur and Other Operational Requirements for OGVs within California Waters and 24 Nautical Miles of the California Baseline**

In July 2008, ARB approved the Regulation for Fuel Sulfur and Other Operational Requirements for Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline (13 CCR 2299.2). These regulations have required ship main engines, auxiliary engines, and auxiliary boilers operating in California waters since July 2009 to either use marine diesel oil with a maximum sulfur content of 0.5% or marine gas oil with a maximum sulfur content of 1.5%. By August 1, 2012, these source activities were required to meet a marine diesel oil limit of 0.5% or marine gas oil limit of 1.0%. By January 1, 2012, these source activities were required to meet a marine diesel or gas oil sulfur limit of 0.1%, which is now in effect.

### **ARB Regulation to Reduce Emissions from Diesel Auxiliary Engines on OGVs While at Berth at a California Port**

In December 2007, ARB adopted a regulation to reduce emissions from diesel auxiliary engines on OGVs while at berth for container, passenger cruise, and refrigerated cargo vessels (17 CCR 93118.3). The regulation requires that auxiliary diesel engines on OGVs (while at berth for container, passenger cruise, and refrigerator cargo vessels) be shut down for specified percentages of a fleet's visits and also for the fleet's at-berth auxiliary engine power generation to be reduced by the same percentages. Vessels can either plug into the electrical grid (i.e., shore power, otherwise known as cold-ironing or alternative maritime power) or use an alternative emission control device. The law sets compliance percentages that phase in over time. By 2014, vessel operators were required to shut down their auxiliary engines at berth for 50% of the fleet's vessel visits and also reduce their onboard auxiliary engine power generation by 50%. The specified percentages will increase to 70% in 2017 and 80% in 2020. Vessel operators can also choose an emissions reduction equivalency alternative; the regulation requires a 10% reduction in OGV hoteling emissions starting in 2010, increasing in stringency to an 80% reduction by 2020 (ARB 2007b). Note that in developing the at-berth regulation, the ARB weighed three main factors in evaluating a vessel category: the frequency which a vessel visited a port; the time a vessel stays in port; and the power usage while docked. Based on this criteria, the At-Berth Regulation affects only container ships, passenger ships, and refrigerated-cargo ships at Los Angeles, Long Beach, Oakland, San Diego, San Francisco, and Hueneme (ARB 2013c). As noted, this regulation does not apply to auto carrier vessels, such as those that call at NCMT, or general cargo vessels, which only periodically call at NCMT.

### **ARB Mobile Cargo-Handling Equipment at Ports and Intermodal Rail Yards**

In December 2005, ARB approved the Regulation for Mobile Cargo-Handling Equipment at Ports and Intermodal Rail Yards (13 CCR 2479) designed to use best available control technology (BACT) to reduce diesel PM and NO<sub>x</sub> emissions from mobile cargo-handling equipment at ports and intermodal rail yards. Since January 1, 2007, the regulation has imposed emission performance standards on new and in-use terminal equipment that vary by equipment type. The regulation also includes recordkeeping and reporting requirements.

### **ARB Emission Standards and Test Procedures for Large Spark Ignition Engine Forklifts and Other Industrial Equipment**

Since 2007, ARB has promulgated more stringent emissions standards for HC and NO<sub>x</sub> combined emissions and test procedures. The engine emission standards and test procedures were implemented in two phases. The first phase was implemented for engines built between January 2007 and December 2009. The second, more stringent, phase was implemented for engines built starting in January 2010. The regulation was amended in 2010, establishing fleet average emissions requirements for existing engines.

### **ARB California Drayage Truck Regulation**

ARB adopted the drayage truck regulation in December 2007 to modernize the class 8 drayage truck fleet (trucks with a Gross Vehicle Weight Rating [GVWR] greater than 33,000 pounds) in use at California's ports. Emergency vehicles and yard trucks are exempted from this regulation. The regulatory objective is to be achieved in two phases.

1. By December 31, 2009, pre-1994 model year engines were to be retired or replaced with 1994 and newer model year engines. In addition, all drayage trucks with 1994 to 2003 model year engines were required to achieve an 85% PM emission reduction through the use of an ARB-approved Level 3 verified diesel emission control strategy.
2. By December 31, 2013, all trucks operating at California ports must have complied with the 2007 and newer on-road heavy-duty engine standards.

In December 2010, ARB amended the regulation to include Class 7 drayage trucks with a GVWR between 26,000 and 33,001 pounds. ARB further expanded the definition of drayage trucks to include dray-offs, those non-compliant trucks that may not directly come to the ports to pick up/drop off cargo but that engage in moving cargo destined to or originating from port facilities and to/from near-port facilities or railyards (ARB 2013d).

### **ARB On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation—Truck and Bus Regulation**

In December 2011, ARB amended the existing 2008 Statewide Truck and Bus Regulation to modernize in-use heavy-duty vehicles operating throughout the state. Under this regulation, existing heavy-duty trucks are required to be replaced with trucks meeting the latest NO<sub>x</sub> and PM BACT, or be retrofitted to meet these levels.

Trucks with a GVWR less than 26,000 pounds (most construction trucks) are required to replace engines with 2010 or newer engines, or equivalent, by January 2023. Trucks with a GVWR greater than 26,000 pounds (most drayage trucks) must meet PM BACT and upgrade to a 2010 or newer model year emissions equivalent engine pursuant to the compliance schedule set forth by the rule. By January 1, 2023, all model year 2007 class 8 drayage trucks are required to meet NO<sub>x</sub> and PM BACT (i.e., EPA 2010 and newer standards) (ARB 2011).

### **ARB On-Road Heavy-Duty Diesel Vehicle Idling Emission Reduction Regulation**

ARB adopted this airborne toxic control measure (ATCM) in 2005 to limit diesel-fueled commercial motor vehicle idling. This regulation states that diesel vehicles with GVWR greater than 10,000 pounds shall not idle the vehicle's diesel-powered primary or auxiliary power system for greater

than 5 minutes at any location (13 CCR 1956.8 and 2485). This regulation applies to all trucks used that visit the Port.

### **ARB Sustainable Freight Transport**

ARB is working on various strategies to improve freight efficiency and transition to zero-emission technologies, and increase competitiveness of California's freight system. The integrated action plan, called the California Sustainable Freight Action Plan, will also identify state policies, programs, and investments to achieve these targets. The plan will be informed by existing State agency strategies, including *California Freight Mobility Plan*, *Sustainable Freight Pathways to Zero and Near-Zero Emissions Discussion Document*, and *Integrated Energy Policy Report*, as well as broad stakeholder input. *The Sustainable Freight: Pathways to Zero and Near-Zero Emissions Discussion Document* sets out ARB's vision of a clean freight system, together with the immediate and near-term steps that ARB will take to support use of zero and near-zero emission technology to improve air quality and reduce health risk associated with goods movement.

## **4.1.3.4 Local**

### **Port of San Diego**

#### **Clean Air Program**

The Port Master Plan (PMP) is the governing land use document for physical development within the District; however, there are also other District programs that apply to air quality. The District developed the Green Port Program to support the goals of the Green Port Policy, which was adopted in 2008. The Green Port Program supports resource conservation, waste reduction, and pollution prevention. The Clean Air Program is one key area of the Green Port Program, with the primary goal of reducing air emissions from Port operations at its three marine terminals: the Cruise Ship Terminal, Tenth Avenue Marine Terminal, and NCMT. The Clean Air Program seeks to voluntarily reduce criteria pollutants and greenhouse gas emissions from current and future District operations through the identification and evaluation of feasible and effective control measures for each category of Port emissions. The District has developed various control measures geared toward reducing emissions from the greatest contributors of air pollution. The District has identified control measures to achieve a reduction of pollutants from the largest sources, including shore power (to enable ships to turn off their vessels and plug into electric power while docked), truck replacement/retrofits, replacement/retrofits of cargo handling equipment, and voluntary vessel speed reductions. The Clean Air Program will continue to be refined and be adapted to future changes in District operations (District 2008).

The District's Clean Truck Program (implemented in 2009) requires all drayage trucks with 2004 model year or older engines and with a GVWR greater than 33,000 pounds to be equipped with a level 3 verified diesel emission control strategy (likely diesel particulate filters) for PM emissions or be replaced with a new truck. The Clean Truck Program has similar requirements to, and ensures compliance with, ARB's drayage truck regulation.

Through efforts at the international, federal, state, and local levels, air emissions from goods movement sources at the Port have been greatly reduced. For example, between the 2006 and 2012 Emission Inventories, NO<sub>x</sub> emissions were reduced 50%, DPM emissions were reduced 75%, and SO<sub>2</sub> emissions were reduced 94% (ENVIRON 2014).

The ARB's at-berth shore power regulation only applies to container, cruise, and refrigerated cargo vessels (17 CCR 93118.3) and does not require other vessel types, including auto carriers, to comply. Thus, shore power is not required at NCMT and there are currently no plans to install connections or infrastructure at the terminal because shore power is generally not as feasible nor as critical for auto carriers given the low energy requirements at-berth (to only provide lighting and power ventilation systems) relative to other vessels such as refrigerated container vessels.

The Port's vessel speed reduction (VSR) program is a voluntary strategy to reduce air pollutants and greenhouse gas emissions from cargo and cruise ships by reducing speeds in the vicinity of San Diego Bay. The VSR program asks cargo vessel operators entering or leaving San Diego Bay to observe a 12-knot speed limit and for cruise ships to observe a 15-knot speed limit. The VSR zone extends 20 nautical miles seaward from Point Loma. Several vessels that call at NCMT have voluntarily complied with the Port's voluntary VSR program, achieving on average a 45% compliance in 2014 (Gibbons pers. comm.).

### **Climate Action Plan**

The District adopted a Climate Action Plan (CAP) in December 2013. The CAP includes an inventory of existing (2006) and projected GHG emissions in 2020, 2035, and 2050 and identifies the District's GHG reduction goals and measures to be implemented to support meeting the statewide reduction goals described in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*. To achieve the requisite reductions, the CAP includes various reduction measures related to transportation and land use, alternative energy generation, energy conservation, waste reduction and recycling, and water conservation and recycling, several of which are specific to the maritime sector and relevant to the proposed project. While the CAP and its reduction measures are targeted specifically at reducing GHG emissions, many air quality co-benefits would also be realized since the measures affect sources that emit criteria pollutant and TAC emissions along with GHG emissions. For example, while the CAP includes a VSR target to reduce GHG emissions, reducing vessel speed would also reduce criteria pollutant and TAC emissions. A detailed discussion of the District's CAP is included in Section 4.2.

### **San Diego Air Pollution Control District**

Local air pollution control districts have the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations in San Diego County.

### **Regional Air Quality Strategy and State Implementation Plan**

SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The San Diego Regional Air Quality Strategy (RAQS) was initially adopted in 1991 and is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, 2004, and 2009. The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O<sub>3</sub>. The RAQS does not currently address the state air quality standards for PM<sub>10</sub> or PM<sub>2.5</sub>. SDAPCD has also developed the air basin's input to the SIP, which is required under the federal CAA for areas that are out of attainment of air quality standards. The SIP includes

SDAPCD's plans and control measures for attaining the O<sub>3</sub> NAAQS. The SIP is also updated on a triennial basis. For the 8-hour O<sub>3</sub> standard, SDAPCD submitted its 8-hour O<sub>3</sub> Attainment Plan 2007 in May of 2007, calling for more reductions in VOC and NO<sub>x</sub> emissions. In addition, the *Measures to Reduce Particulate Matter in San Diego County* report (December 2005) proposes measures to reduce PM emissions and recommends measures for further detailed evaluation and, if appropriate, future rule development (or non-regulatory development, if applicable), adoption, and implementation in San Diego County, in order to attain PM CAAQS.

## SDAPCD Rules and Regulations

SDAPCD is responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. The proposed project may be subject to the following SDAPCD rules, and others, during construction.

- **Regulation 2, Rule 20.2—New Source Review Non-Major Stationary Sources:** establishes Air Quality Impact Analysis (AQIA) Trigger Levels, which set emission limits for non-major new or modified stationary sources.
- **Regulation 2, Rule 20.3—New Source Review Major Stationary Sources and Prevention of Significant Deterioration Stationary Sources:** establishes AQIA Trigger Levels, which set emission limits for major new or modified stationary sources or Prevention of Significant Deterioration stationary sources. Major sources are defined in Regulation 8 as sources that emit 100 tons per year of PM<sub>10</sub>, SO<sub>x</sub>, CO, and lead; and 50 tons per year of NO<sub>x</sub> and VOC in federal ozone nonattainment areas.
- **Rule 50—Visible Emissions:** establishes limits for the opacity of emissions within the SDAPCD. The proposed project is subject to Rule 50(d)(1) and (6) and should not exceed the visible emission limitation.
- **Rule 51—Nuisance:** prohibits emissions that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or cause injury or damage to business or property.
- **Rule 52—Particulate Matter:** establishes limits for the discharge of any particulate matter from nonstationary sources.
- **Rule 54—Dust and Fumes:** establishes limits for the amount of dust or fume discharged into the atmosphere in any 1 hour.
- **Rule 55—Fugitive Dust Control:** sets restrictions on visible fugitive dust from construction and demolition projects.
- **Rule 67—Architectural Coatings:** establishes limits to the VOC content for coatings applied within the SDAPCD.
- **Regulation 8, Rules 1200–1210:** establishes rules and procedures governing new, relocated, or modified emission units that may increase emissions of one or more TAC. While the project is not necessarily subject to the requirements of this regulation, the risk assessment guidelines and procedures published as part of this regulation are used in the health risk assessment herein.

## 4.1.4 Project Impact Analysis

### 4.1.4.1 Methodology

Air quality impacts associated with construction and operation of the project were assessed and quantified using industry standard and accepted software tools, techniques, and emission factors. A summary of the methodology is provided below. A full list of assumptions and emission calculations can be found in Appendix E. Note that the methodology used to estimate air quality emissions discussed below is the same that was used to estimate greenhouse gas emissions, as described in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*.

#### Construction

Construction of the proposed project would result in the generation of criteria pollutant emissions. Construction of the proposed project is expected to occur in 2016 and take approximately 7 weeks to complete. Construction would include site demolition, site grading, utility work, paving, and finishing (e.g., paints, curbs), and emissions would be generated from onsite equipment, material haul and delivery truck travel to and from the site, worker trips to and from the site, fugitive dust from site disturbance and demolition, and VOC off-gassing from parking area paving and striping/painting operations.

Emissions were estimated based on a construction phasing schedule and details regarding the types and numbers of construction equipment, haul, delivery, and employee vehicle trips, and material volumes obtained from the project applicant. Emissions from construction equipment were estimated based on the California Emissions Estimator Model (CalEEMod), version 2013.2.2, using construction information (schedule, equipment, vehicle trips) obtained from the project applicant and CalEEMod default horsepower rating and load factors for each specific piece of equipment. Site grading would include 22,500 cubic yards from the tank farm site, which would require 1,406 haul truck loads assuming a 20-ton (16-cubic-yard) truck capacity. Demolition would include 1,200 cubic yards of concrete from the street closure sites, and the materials would include 190 cubic yards of export and 12 haul truck loads during demolition. Demolition of the former Weyerhaeuser site would result in 267,457 square feet of debris and would require 1,222 haul truck loads. All hauling emissions assume a 20-ton (16-cubic-yard) truck capacity. It was assumed that each piece of equipment would be active for 8 hours per day and that every phase would overlap on the worst-case day. Emissions are summed at the daily time scale and compared to San Diego County's screening-level thresholds (SLTs) shown in Table 4.1-7.

#### Operation

Once operational, the proposed project could result in the long-term generation of criteria pollutant and TAC emissions in different quantities than existing conditions depending on Pasha's throughput. Criteria pollutant and TAC emissions would result from activity associated with increased throughput, including increased vessel activity; increased rail activity; increased auto-carrier truck travel; increased activity to unload, repair, and process cars; additional worker trips; and a minor change in area source emissions. Descriptions of each of these source and associated emissions modeling are provided below. Baseline and future year activity is based on the fleet that was active

at NCMT in 2014, including vessel and rail visits to the NCMT in 2014.<sup>4</sup> It was assumed that the project would be fully operational in 2016. Although the expected maximum throughput is not anticipated to be reached immediately, for a conservative analysis, emissions for all source categories assume that maximum terminal throughput would be reached immediately; therefore, emissions do not assume an incremental increase in activity over time.

Note that increased use of electricity and water use at the project site is discussed solely in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*.

## **Ocean-Going Vessels**

OGV emissions result primarily from three activities: transit, maneuvering, and hoteling. Transit occurs within both the outer unrestricted speed zone and within the vessel speed reduction zone to the Whistle Buoy. Maneuvering includes movement and maneuvering within the harbor until the vessel anchors. Hoteling occurs once the ship is at berth. During hoteling, the vessel is stationary at the dock/berth, typically during loading and unloading of cargo. The vessel is typically still active, operating boilers and providing the ship's power needs either by running on-board auxiliary engines or by cold ironing (utilizing at-berth shore power), but the vessel's propulsion engines are not operating.

OGVs that call on NCMT are predominantly auto carriers, which transport vehicles. Auto carrier vessels have drivable ramps and can have substantial ventilation systems to prevent vehicle fuel vapors from pooling in the lower decks. Auto carriers are the most numerous callers to the Port as a whole and predominantly visit NCMT, while historically auto carriers have periodically but infrequently visited the Tenth Avenue Marine Terminal as well.

Transit and maneuvering emissions under existing and project conditions were assumed to be similar, as speeds and time in transit and maneuvering modes is not expected to change under project conditions. While hoteling, auto carrier vessels run auxiliary engines for power needs (for lights and fans) and boilers (for maintaining fuel temperature). The project is not expected to increase vessel calls or change the composition of vessels that currently visit the terminal. Rather, the analysis assumes the vessels would be at higher capacity, but not require additional vessel calls. However, it stands to reason that as the amount of cargo to be unloaded increases, so too does the amount of time that vessels remain at-berth. Therefore, because auxiliary and boiler engines run while vessels are docked, emissions from these sources would increase under project conditions. Note that shore power infrastructure does not currently exist at NCMT, and auto carriers are not subject to the ARB's shore power regulation.

Vessel calls at the NCMT are an existing condition, and the quantity of vessel calls is not expected to change as a result of the project. The size of vessels calling at the terminal has increased over the years such that more vehicles can be transported with fewer ships. As new vessels are built, they will be built to comply with more stringent emission standards (higher main and auxiliary engine tier), and the average capacity of vessel should continue to increase while the emissions per unit of activity (e.g., grams per horsepower hour) should continue to decrease. The current vessel fleet that visits NCMT is a mix of Tier 0 (31% of fleet), Tier 1 (66% of fleet), and Tier 2 (3% of fleet) vessels. The Tier 0 vessels are smaller and are docked at-berth for a shorter duration (average of 10,986 kW

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<sup>4</sup> The Notice of Preparation (NOP) was issued in December 2014. A revised NOP was circulated in July 2015 to address additions to the proposed project only. Therefore, the 2014 calendar year represents the most recent full calendar year at the time the analysis was prepared.

main engine power, 2,703 auxiliary engine power, 13.87 hours per call, 5,183-car capacity) than typical Tier 1 vessels (average of 13,821 kW main engine power, 3,162 auxiliary engine power, 15.76 hours per call, 5,347-car capacity) and Tier 2 vessels (average of 13,010 kW main engine power, 4,215 auxiliary engine power, 13.19 hours per call, 5,602-car capacity). Emissions associated with changes in OGV activities were estimated based on ARB's OGV methodology for emission factors for Tier 0, Tier 1, and Tier 2 engines except Tier 1 and Tier 2 NO<sub>x</sub> (ARB 2011), EPA's Category 3 Rulemaking for main and auxiliary engine Tier 1 and Tier 2 NO<sub>x</sub> rates (EPA 2009), ARB's OGV methodology for auxiliary engine and boiler load factors (ARB 2011), the Port of Los Beach Inventory for estimating auto carrier boiler load (Port of Long Beach 2015), and vessel activity and VSR data obtained from the District. The increase in hoteling time for the vessels was estimated based on the projected increase in throughput under full buildout with project conditions (210,818 car-projected increase with the project over the 361,372 cars processed in 2013). Using this 58% multiplier, average hoteling time is expected to increase by approximately 6.5 hours per call. For purposes of analysis, it was assumed that a vessel would arrive and depart on a given day. The analysis includes round-trip vessel emissions within the air basin based on the last and next port of call in the vessel call data. Trip distances for each direction (north, south, and west) within the VSR zone and air basin were assigned based on information in the District's inventory, which set the basin consistent with the ARB limit for rulemaking and the National Oceanic and Atmospheric Administration Contiguous Zone and the VSR zone at 20 nautical miles from the California baseline. A detailed methodology describing vessel calculations is provided in Appendix E.

## Auto Carrier Trucks

Based on estimates from the project applicant and historical operational characteristics, it is assumed that 55% of the vehicles imported via vessel would be transported via truck while the remaining 45% would be transported via rail. It is also assumed that shipping operations would occur 365 days per year (Appendix G).

Auto carrier truck activity is split into three groups: idling at or near the terminal, driving between the terminal and nearest freeway entrance, and driving regionally on public roadways. Emissions associated with auto carrier trips were estimated using trip generation from the traffic analysis (Appendix G), idling and running exhaust emission factors from ARB's EMFAC model (ARB 2014a), and fugitive road dust methodology from EPA (2011) and ARB (2014b). Emissions from idling at the loading areas near the terminal are based on an average total idling time on the entire terminal area of 1.5 hours per truck per trip from (the Port's most recent air emissions inventory (District 2014). Note that 1.5 hours per truck per trip is the sum of all idling at and near the terminal in the District's inventory, and not the idling time at a given location, which is restricted to 5 minutes by the ARB (13 CCR 1956.8 and 2485). Emissions from truck travel between the terminal and nearest freeway entrance are based on a 1.2-mile travel distance as shown in the District's most recent air emissions inventory (District 2014), assuming a 20 mph travel speed on Bay Marina Drive. Emissions from regional travel are based on the assumption that all trucks travel the 60-mile one-way travel distance to the Riverside County line.<sup>5</sup> Emission factors for running exhaust, brake and tire wear, and idling were obtained from the EMFAC 2014 software for annual average heavy duty drayage trucks operating at the Port (i.e., "T7 other port") assuming an opening year of 2016. Daily truck

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<sup>5</sup> As the CEQA thresholds used in the impact analysis are regional and relate to the attainment status of air quality standards within San Diego County, haul truck trip emissions were confined to those occurring within the county.



activity was based on the 68 one-way truck trips per day under existing conditions, with the project adding 40 new one-way truck trips per day (Appendix E).

## Rail

Trains servicing the NCMT are operated by BNSF. As stated above, it assumed that 45% of the vehicles imported via vessel would be transported via rail and shipping operations would occur 365 days per year (Appendix G).

Rail activity is split between onsite switching (or switch-duty) and regional travel (or line-haul). BNSF line-haul locomotives are used to break and assemble trains at the NCMT. The emission calculation methodologies are adapted from the emission inventories at the Port of San Diego (District 2014) and Port of Long Beach (Port of Long Beach 2014), using switch duty and Class 1 line-haul notch time and power fraction emissions from EPA's locomotive rulemaking support document (EPA 1998). The simplified methodology for estimating both onsite switching and regional travel emissions is as follows.

- Onsite switch-duty emissions = locomotive hours x total locomotive horsepower x switch-duty load factor x switch-duty emission factors (in grams per horsepower-hour [g/hp-hr]), and
- Regional line-haul emissions = locomotive hours x total locomotive horsepower x line-haul load factor x line-haul emission factors (in g/hp-hr).

The increase in activity (locomotive hours) is based on the assumption that loaded trains include four active (running) locomotives, empty trains include two active (running) locomotives, BNSF locomotives are 4,400 horsepower on average, existing trains run 6 days per week (Monday through Saturday), and the project would result in a new train activity on Sunday. Rail emissions are based to the extent possible on BNSF-specific emission factors for the 1998 MOU (ARB 2015c) and EPA engine certification data (EPA 2015b), with the remainder of the emission factors based on EPA's technical highlights (EPA 2009). Maximum daily emissions for existing are based on BNSF's 2013 locomotive fleet assuming a new train is loaded and run every Sunday throughout the year. Emissions associated with new train activity are based on the BNSF locomotive fleet expected in year 2016 (see locomotive fleet turnover and emission factor calculations in Appendix E).

## Mobile Railcar Mover

Pasha is currently in the process of adding a mobile railcar mover<sup>6</sup> to provide switching work to break and assemble trains at the NCMT. The railcar mover would handle some of the loading and switching duty at NCMT, thereby reducing the amount of time locomotives would operate in switch-duty cycle at the terminal, which would reduce the hours locomotives are active at NCMT. Emissions associated with the new mobile railcar mover were estimated based on proposed product specifications (Rail King RK285 G4; 173 horsepower and EPA Tier 3 compliant<sup>7</sup>), assuming the railcar mover operates at full load for 4 hours per day, 365 days per year. Emission factors for the railcar mover were obtained from the EPA's Engine and Vehicle Compliance Information System (for

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<sup>6</sup> A railcar mover is a road-rail vehicle (capable of traveling on both roads and rail tracks) designed for moving small numbers of railroad cars around in a rail siding or small yard. Compared with locomotives, railcar movers are smaller and can provide cost (reduced fuel consumption) and emission savings.

<sup>7</sup> Product specifications available at: <http://www.railking.net/documents/railking.pdf>

ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub>) (EPA 2015b), CalEEMod (for CO<sub>2</sub> and SO<sub>x</sub>), and the Climate Registry (for CH<sub>4</sub> and N<sub>2</sub>O).

### **Car Processing**

Emissions associated with increased car movement on site (moving cars from vessels to locations on site), as well as increased evaporative resting losses (from increased throughput) were estimated based on the sum of internal and external vehicle movement trip generation from the traffic impact analysis (578 trips per day) assuming a 1.5-mile trip length, which is the distance from the vessel location at the terminal to the farthest parking location at the terminal (Port Parcel 025-010), and 10.9-day average dwell time (see Table 3-1 of this DEIR). Emission estimates assume that all cars are light-duty automobiles (LDA) and trucks (LDT1 and LDT2), and calculations assume a LDA/LDT1/LDT2 split similar to the worker commute assumptions within CalEEMod.

### **Shuttle Vans**

Emissions associated with increased shuttle van activity within the terminal and project sites (to pick up drivers that move cars from vessels to locations on site) were estimated based on information from the project proponent (up to 150 van movements per day) assuming a 1.5-mile trip length (similar to car processing above). Emission factors were based on the van fleet currently operating on site, which is an average of 2004 model year. Emissions are based on light heavy duty 1 (LHD1) rates from EMFAC.

### **Additional Workers**

Emissions associated with increased worker trips were estimated in CalEEMod based on worker trip generation of 1,083 average daily traffic (ADT) under existing conditions, with the project adding 636 average daily traffic (ADT) (212 employees), based on information from the traffic analysis, assuming 3 trips per employee to account for vehicle-dependent errands during the work shift (Appendix E).

### **Paved Parking Area Maintenance**

Emissions from periodic painting of paved parking areas (i.e., for striping) activities were estimated using CalEEMod default re-application rates and paint VOC content for a parking lot assuming 47.3 acres of surface parking under existing conditions, and the project would result in an additional 17.35 acres of surface parking area.<sup>8</sup>

### **Health Risk Assessment**

The project would result in additional TAC emissions in the area as a result of increasing truck travel along public roads and train activity along existing freight lines movement both on site and regionally. In order to estimate the potential risk to neighboring communities, a health risk assessment was conducted to analyze the potential health risks associated with increased truck and train activity in proximity of sensitive receptor locations both near train travel north toward downtown and along the truck traffic corridor.

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<sup>8</sup> 17.35 acres is the new acreage based on summing 5.71 acres for the tank farm site, 5.5 acres for the street closure sites, and 6.14 acres from the former Weyerhaeuser site. The existing 47.3 acres of short-term permit sites are part of the existing setting.

Exposure to DPM was assessed by predicting the cancer and non-cancer hazard impacts from pollutant concentrations at nearby sensitive land uses using the most recent version of EPA's AERMOD dispersion modeling system (version 15181) to estimate annual average DPM concentrations at various sensitive land uses.

The methodology used to estimate health risks from truck and train activity is based on the following.

- According to the TIA, trucks primarily enter and exit the terminal on Bay Marina Drive to Interstate 5 (Appendix G). Sensitive land uses exist near Bay Marina, particularly the residences approximately 300 feet north. DPM emissions from truck travel on Bay Marina were estimated based on daily truck ADT on Bay Marina Drive (140 ADT) traveling an average speed of 20 mph and 30-year weighted composite PM10 emission rates as obtained and aggregated over time from EMFAC 2014 modeling software. Note that PM10 exhaust emissions are used as a surrogate for DPM based on OEHHA guidance. Unlike BNSF rail, trucks are not limited as to when they can come and go; therefore, it was assumed that trucks travel on roadways both day and night every day of the year.
- Rail cars are loaded on the terminal along Terminal Avenue, and trains enter and exit the terminal to and from the north. As discussed in the rail methods above, train emissions result from both onsite/switching and offsite/regional line-haul activity. Train-related DPM emissions were estimated based on the assumed new Sunday train activity and 30-year weighted composite PM10 emission rates obtained from a combination of BNSF-specific emissions testing and EPA emission standards. In order to account for the variability in meteorological and surface characteristics between day and night that affect plume rise, rail activity was split between day and night, and train source parameters (release height and initial vertical dimension) were taken from BNSF's San Diego Railyard Dispersion Modeling report (ARB 2008). BNSF trains operate at the terminal throughout the day; therefore, onsite (near-port) emissions are assumed to occur over a 24-hour day and emissions are split evenly between day and night. Loaded BNSF trains typically leave around 9 p.m. and take approximately 35 minutes to travel through downtown at a maximum of 10 mph (Ash Street); therefore, all of the regional travel emissions from the NCMT to downtown were assumed to occur during the night and were assigned the nighttime train source parameters.

Project-level cancer risk and non-cancer hazard index were estimated based on average annual truck and train pollutant concentrations within AERMOD and accepted OEHHA (2015) values for residential, school, and recreational uses. The risk calculations incorporate OEHHA's recent guidance update, which includes age-specific factors to take into account the increased sensitivity to carcinogens during early-in-life exposure. Assumptions, including source parameters and receptor locations, along with model outputs and risk calculation worksheets are provided in Appendix E.

#### **4.1.4.2 Thresholds of Significance**

The following significance criteria are based on Appendix G of the State CEQA Guidelines and provide the basis for determining significance of impacts associated with air quality resulting from the proposed project. The determination of whether an air quality impact would be significant is based on the applicable thresholds and the professional judgment of the District as Lead Agency, supported by the recommendations of qualified personnel at ICF, and relies wholly on the

substantial evidence in the administrative record. Impacts would be considered significant if the project would do any of the following.

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
4. Expose sensitive receptors to substantial pollutant concentrations.
5. Create objectionable odors affecting a substantial number of people.

Appendix G of the State CEQA Guidelines further indicates the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the significance determinations.

## Supplemental Thresholds

The May 27, 2014, Fifth Appellate District court decision *Sierra Club et al. v. County of Fresno et al.* (Friant Ranch) concluded that an EIR should disclose and evaluate the public health consequences associated with increasing air pollutants.<sup>9</sup> Consequently, the following section summarizes the thresholds established by the County of San Diego, presents substantial evidence regarding the basis upon which they were developed, and also describes how they are used to determine whether project construction and operational emissions would result in a significant impact in light of Friant Ranch decision within the context of (1) interfering with or impeding attainment of CAAQS and NAAQS, or (2) causing or contributing to increased risks to human health.

### Regional Thresholds for SDAB Attainment of State and Federal Ambient Air Quality Standards

As previously indicated, the State CEQA Guidelines state that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the significance determination of whether a project would violate or impede attainment of air quality standards. Attainment status for each pollutant is assigned for the entire air basin. In San Diego, the SDAB is defined as “all of San Diego County” (see 17 CCR 60110). Therefore, the current attainment status for the entire San Diego region, which includes nonattainment status for ozone NAAQS and ozone CAAQS, PM10 CAAQS, and PM2.5 CAAQS, applies to the entire county.

Neither the City of National City nor the District have developed CEQA thresholds of significance for air quality and health risk.<sup>10</sup> Although SDAPCD has not developed specific thresholds of significance to evaluate construction and operational impacts within CEQA documents, SDAPCD’s Regulation II, Rules 20.2 and 20.3 (new source review for non-major and major stationary sources, respectively), outline AQIA Trigger Levels for criteria pollutants for new or modified sources. Based on SDAPCD’s

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<sup>10</sup> The District is currently undergoing creation of CEQA thresholds of significance for all resources, including air quality. Until these thresholds are adopted, the District will continue to rely on established regional thresholds, which are based on substantial evidence.

AQIA Trigger Levels, as well as EPA rulemaking and CEQA thresholds adopted by the South Coast Air Quality Management District (SCAQMD), San Diego County has established SLTs to assist lead agencies in determining the significance of project-level air quality impacts within the county (as shown in Table 4.1-7). Although SDAPCD does not have VOC or PM<sub>2.5</sub> AQIA Trigger Levels, the county has adopted a PM<sub>2.5</sub> SLT based on EPA's "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published on September 8, 2005, which is also consistent with SCAQMD's Air Quality Significance Thresholds (SCAQMD 2015), and a VOC SLT based on the threshold of significance for VOCs from the SCAQMD for the Coachella Valley. Emissions in excess of San Diego County's SLTs, shown in Table 4.1-7, would be expected to have a significant impact on air quality because an exceedance of the SLTs is anticipated to contribute to CAAQS and NAAQS violations in the county.

The County's SLTs are based on SDAPCD AQIA Trigger Levels, and these AQIA Trigger Levels are based on emissions levels identified under the "New Source Review" (NSR) program, which is a permitting program established by Congress as part of the CAA Amendments of 1990 to ensure that air quality is not significantly degraded by new or modified sources of emissions. The NSR program requires that stationary sources receive permits before construction begins and/or the use of equipment. By permitting large stationary sources, the NSR program ensures that new emissions would not slow regional progress toward attaining the NAAQS. SDAPCD implements the NSR program through Rules 20.2 and 20.3, and has concluded that the stationary pollutants described under the NSR program are equally significant as those pollutants generated with land use projects. SDAPCD's Trigger Levels were set as the total emission thresholds associated with the NSR program to help attain and maintain the NAAQS from new and modified non-major stationary sources.<sup>11</sup> SDAPCD's Trigger Levels take into account the region's attainment status, emission profile, inventory, and projections, and represent levels above which project-generated emissions could affect SDAPCD's and SANDAG's commitment to attain the state and federal standards in the region. Consistent with Section 15064.7(c) of the State CEQA Guidelines,<sup>12</sup> the evidence in support of the air quality thresholds shown in Table 4.1-7 is deemed appropriate for their use in this analysis and in this location within the greater SDAB.

**Table 4.1-7. San Diego County Screening-Level Thresholds**

Air Contaminant	Emission Rate		
	(pounds per hour)	(pounds per day) <sup>a</sup>	(tons per year)
Respirable Particulate Matter (PM <sub>10</sub> )	--	100	15
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>b</sup>	--	55	10
Nitrogen Oxides (NO <sub>x</sub> )	25	250	40
Sulfur Oxides (SO <sub>x</sub> )	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead (Pb) <sup>c</sup>	--	3.2	0.6
Volatile Organic Compounds (VOC) <sup>d</sup>	--	75	13.7 <sup>e</sup>

<sup>11</sup> San Diego Air Pollution Control District, Rule 20.2, Table 20.2-1, hereby incorporated by reference: <http://www.sdapcd.org/rules/Reg2pdf/R20-2.pdf>

<sup>12</sup> "When adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

Air Contaminant	Emission Rate		
	(pounds per hour)	(pounds per day) <sup>a</sup>	(tons per year)
Source: SDAPCD Regulation II, Rule 20.2, County of San Diego 2007.			
<sup>a</sup> According to San Diego County, the daily SLTs are most appropriate when assessing impacts from standard construction and operational emissions. Therefore, daily SLTs are used to evaluate project significance, while hourly and annual SLTs are provided for informational purposes only.			
<sup>b</sup> Based on EPA's "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published September 8, 2005, and also SCAQMD's Air Quality Significance Thresholds (SCAQMD 2015).			
<sup>c</sup> Lead and lead compounds.			
<sup>d</sup> County SLTs for VOCs were originally based on the threshold of significance for VOCs from SCAQMD for the Coachella Valley. The terms VOC and ROG are used interchangeably, although VOC is used in this table because the City and County use the term VOC.			
<sup>e</sup> 13.7 tons per year threshold is based on 75 pounds per day multiplied by 365 days per year and divided by 2,000 pounds per ton.			

## Health-Based Thresholds for Project-Generated Pollutants of Human Health Concern

The Friant Ranch ruling concluded that an EIR should disclose and evaluate the public health consequences associated with increasing air pollutants.<sup>13</sup> As discussed above, all criteria pollutants are associated with some form of health risk (e.g., asthma, asphyxiation). Adverse health effects associated with criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals [e.g., age, gender]). Moreover, O<sub>3</sub> precursors (ROG and NO<sub>x</sub>) affect air quality on a regional scale. Health effects related to O<sub>3</sub> are therefore the product of emissions generated by numerous sources throughout a region. As part of the setting and updating of the NAAQS, the EPA develops and considers quantitative characterizations of exposures and associated risks to human health or the environment associated, known as a Health Risk and Exposure Assessment (HREA), with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration (EPA 2016). The HREA estimates population exposure to and resulting mortality and morbidity health risks associated with the full range of observed pollutant concentrations, as well as incremental changes in exposures and risks associated with ambient air quality adjusted to just meeting the existing NAAQS and just meeting potential alternative NAAQS under consideration (EPA 2014). However, existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects would produce meaningless results. In other words, minor increases in regional air pollution from project-generated ROG and NO<sub>x</sub> would have nominal or negligible impacts on human health.<sup>14</sup>

As such, an analysis of impacts on human health associated with project-generated regional emissions is not included in the project-level analysis. Increased emissions of O<sub>3</sub> precursors (ROG and NO<sub>x</sub>) generated by the project could increase photochemical reactions and the formation of tropospheric O<sub>3</sub>, which, at certain concentrations, could lead to respiratory symptoms

<sup>13</sup> On October 1, 2014, the California Supreme Court granted the Real Party in interest and respondent Friant Ranch, L.P.'s petition for review but has yet to issue an opinion. However, this analysis discusses the public health consequences associated with increasing air pollutants.

<sup>14</sup> As an example, the Bay Area Air Quality Management District's Multi-Pollutant Evaluation Method requires a 3 to 5% increase in regional ozone precursors to produce a material change in modeled human health impacts. Based on 2008 ROG and NO<sub>x</sub> emissions in the Bay Area, a 3 to 5% increase equates to over 20,000 pounds per day of ROG and NO<sub>x</sub>.

(e.g., coughing), decreased lung function, and inflammation of airways. Although these health effects are associated with O<sub>3</sub>, the impacts are a result of cumulative and regional ROG and NO<sub>x</sub> emissions, and the incremental contribution of the project to specific health outcomes from criteria pollutant emissions would be limited and cannot be solely traced to the project. (See Threshold 3 and Chapter 5 for a discussion of regional cumulative impacts.)

Because localized pollutants generated by a project can directly affect adjacent sensitive receptors, the analysis of project-related impacts on human health focuses only on those localized pollutants with the greatest potential to result in a significant, material impact on human health. This is consistent with the current state-of-practice and published guidance by the California Air Pollution Control Officers Association (CAPCOA 2009), OEHHA (2015), SDAPCD (2006), and ARB (2000b). These localized pollutants are (1) locally concentrated CO and (2) DPM.<sup>15</sup> Locally adopted thresholds of significance for each pollutant are identified below. Note that a qualitative health-based analysis of criteria pollutants is briefly discussed under Threshold 4, but the health-based analysis focuses primarily on CO and DPM, which are most often associated with adverse health outcomes (i.e., acute, chronic, and cancer risks) as opposed to the respiratory irritability outcomes typically seen from exposure to elevated concentrations of the criteria pollutants discussed above.

#### **Local Micro-Scale Carbon Monoxide Concentration Standards**

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below state and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more (SCAQMD 1993). The following are applicable local emission concentration standards for CO.

- CAAQS and NAAQS 1-hour CO standards of 20 and 35 ppm, respectively.
- CAAQS and NAAQS 8-hour CO standard of 9.0 and 9 ppm, respectively.

As in most urban areas, high short-term concentrations of CO, known as “hot spots,” can be a problem in San Diego County. Hot spots typically occur in areas of high motor vehicle use, such as in parking lots, at congested intersections, and along highways. Because elevated CO concentrations typically occur at locations with high traffic volumes and congestion, elevated CO concentrations are often correlated with level of service (LOS) at intersections. LOS expresses the congestion level for an intersection and is designated by a letter from A to F, with LOS A representing the best operating conditions and LOS F the worst. Significant concentrations of CO sometimes occur (depending on temperature, wind speed, and other variables) at intersections where LOS is rated at D or worse.

In order to assess the potential for CO hot spots at nearby intersections, the analysis herein uses the county’s CO hot-spot screening criteria, which indicate that any project that would place receptors within 500 feet of a signalized intersection with peak-hour trips exceeding 3,000 trips and operating

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<sup>15</sup> DPM is the primary TAC of concern for mobile sources—of all controlled TACs, emissions of DPM are estimated to be responsible for about 70% of the total ambient TAC risk. Given the risks associated with DPM, tools and factors for evaluating human health impacts from project-generated DPM have been developed and are readily available. Conversely, tools and techniques for assessing project-specific health outcomes as a result of exposure to other TACs (e.g., benzene) remain limited. These limitations impede the ability to evaluate and precisely quantify potential public health risks posed by TAC exposure.

at or below LOS E must conduct a hot-spot analysis for CO. Likewise, projects that will cause road intersections with intersection peak-hour trips exceeding 3,000 trips to operate at or below LOS E must also conduct a CO hot-spot analysis.

#### **Localized Diesel Particulate Matter Concentrations**

DPM is a form of localized PM (see above) that is generated by diesel equipment and vehicle exhaust. DPM has been identified as a TAC by ARB and is particularly concerning because long-term exposure can lead to cancer, birth defects, and damage to the brain and nervous system. The County has adopted incremental cancer and hazard thresholds to evaluate receptor exposure to DPM emissions, which are adapted from SDAPCD Regulation XII, Rule 1200. Projects that would result in exposure to TACs resulting in a maximum incremental cancer risk (MICR) greater than 1 in 1 million without application of Toxics BACT,<sup>16</sup> MICR greater than 10 in 1 million with application of Toxics BACT, or a chronic and acute non-cancer health hazard index greater than 1 would be deemed as having a potentially significant impact related to health risks from DPM exposure. Because various toxics BACTs are in place at the Port—including ARB rules on vessels, shore power, and drayage trucks—the MICR of 10 in 1 million is utilized herein.

#### **Criteria for Cumulative Impacts**

Potential cumulative air quality impacts would result when cumulative projects' pollutant emissions would combine to degrade air quality conditions to below acceptable levels. This could occur on a local level, such as through increases in vehicle emissions at congested intersections, or at sensitive receptor locations due to concurrent construction activities; at a regional level, such as the potential impact of multiple past, present, and reasonably foreseeable projects on O<sub>3</sub> within the SDAB; or globally, such as the potential impact of greenhouse gas emissions on global climate change.

Neither the District nor SDAPCD has established quantitative thresholds to determine whether a project would have a cumulatively considerable contribution to air quality. Therefore, the County of San Diego thresholds (see below), set forth by SDAPCD and SCAQMD, for cumulative air quality impacts are utilized for the analysis of the impacts of proposed project construction and operations related to emissions on air quality.

Cumulatively considerable net increases during the construction phase would typically happen if two or more projects near each other are simultaneously constructed. The following thresholds are used to determine the cumulatively considerable net increase in emissions during the construction phase.

- A project that has a significant direct impact on air quality with regard to emissions of PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, and/or ROG<sub>s</sub> (i.e., an exceedance of SLT values indicated in Table 4.1-7) would also have a significant cumulatively considerable net increase.
- In the event that direct impacts from the proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other past, present, or

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<sup>16</sup> Best Available Control Technology (BACT) is the level of air contaminant emission control or reduction required by state law and District rules for new, modified, relocated, and replacement emission sources. Examples of Toxics BACT include diesel particulate filters, catalytic converters, and selective catalytic reduction technology.



reasonably foreseeable future projects within the proximity relevant to the pollutants of concern, are in excess of direct air quality impact thresholds.

The following thresholds are used to determine the cumulatively considerable net increase in emissions during the operation phase.

- A project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to operational emissions of PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, and/or ROG<sub>s</sub> (i.e., an exceedance of SLT values indicated in Table 4.1-7) would also have a significant cumulatively considerable net increase.
- Projects that cause road intersections to operate at or below LOS E for intersections with total (proposed project and surrounding project) peak-hour trips in excess of 3,000 trips and create a CO hot spot would create a cumulatively considerable net increase of CO.

### 4.1.4.3 Project Impacts and Mitigation Measures

***Threshold 1: Implementation of the proposed project would not conflict with or obstruct implementation of an applicable air quality plan.***

#### Impact Discussion

SDAPCD is required, pursuant to the NAAQS and CAAQS, to reduce emissions of criteria pollutants for which the county and air basin are in nonattainment (i.e., O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>). The most recent SDAPCD air quality attainment plans are the 2009 RAQS and the 2002 and 2012 O<sub>3</sub> maintenance plans. The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for O<sub>3</sub>, while the 2002 and 2012 maintenance plans include SDAPCD's plans and control measures for attaining the NAAQS for O<sub>3</sub>. The 2009 RAQS projects future emissions and determines the strategies necessary for the reduction of stationary source emissions through regulatory controls. ARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the region's cities and by the County of San Diego. As such, projects that propose development that is consistent with the growth anticipated by the relevant land use plans that were used in the formulation of the RAQS and SIP would be consistent with the RAQS and SIP. The PMP is the governing land use document for physical development under the jurisdiction of the District; however, an expired MOU, and the National City Harbor District Specific Area Plan identified land uses for the Uplands Properties. Therefore, projects that propose development consistent with growth anticipated by the current PMP and, for the Uplands Properties, the National City Harbor District Specific Area Plan,<sup>17</sup> are considered consistent with the RAQS and SIP.

Moreover, in the event that a project would propose development that is less dense than anticipated within an existing land use plan, the project would likewise be consistent with the RAQS and SIP because emissions would be less than estimated for the existing land use plan. If a project proposes development that is greater than that anticipated in the PMP and SANDAG's growth projections, the

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<sup>17</sup> Although the Uplands Properties are now owned by the District and would be incorporated into the PMP by the proposed project, the last applicable land use designation would have been considered by SANDAG's growth projections and the current RAQS and SIP—in this case, the Tourist Commercial land use designation of the Harbor District Specific Area Plan and maritime related activities as conditionally approved on Lot K.

project would be in conflict with the RAQS and SIP and could have a potentially significant impact on air quality because emissions would exceed those previously estimated. This situation would warrant further analysis to determine if a proposed project and surrounding projects would exceed the growth projections used in the RAQS for a specific subregional area.

As discussed in Chapter 3, *Project Description*, and in Section 4.5, *Land Use and Planning*, the project site includes Marine Related Industrial, Street, and Commercial Recreation land use designations (proposed to have a temporary marine related industrial overlay over two parcels). Activities suitable for Marine Related Industrial uses include marine terminals, passenger terminals, railroad switching and spur tracks, cargo handling equipment, berthing facilities, warehouses, silos, and marine-related support and transportation facilities. Activities suitable for Commercial Recreation uses include hotels, restaurants, convention centers, recreational vehicle parks, specialty shopping, pleasure craft marinas, water-dependent educational and recreational program facilities and activities, and sport fishing.<sup>18</sup>

The proposed project involves closing portions of Quay Avenue, 28th Street, and 32nd Street and requesting a PMPA to change land designated as Street to Marine Related Industrial uses. Emissions associated with the Marine Related Industrial land uses include car movement and evaporative losses associated with multi-day car storage, as well as indirect effects associated with more throughput at the terminal and may indirectly result in an increase in OGV emissions and truck trips. While the current Marine Related Industrial land uses have been accounted for in the current RAQS and SIP, the proposed conversion of the Streets to Marine Related Industrial would represent new designations that were not previously considered (**Impact-AQ-1**). Therefore, Mitigation Measure **MM-AQ-1** is required to ensure the administrative process to update SANDAG's growth projections is completed, thus, informing the air quality strategies contained within the RAQS and SIP with the additional Marine Related Industrial land use activity.

In addition, the PMPA would incorporate the two Uplands Properties (eastern half of Lot K, and Port Parcel 027-047) into the PMP as Commercial Recreation. Emissions associated with typical Commercial Recreation uses (visitor-serving commercial, including hotels, restaurants, marinas, etc.) include building operations (e.g., electricity, water) and motor vehicle travel (from visitation and deliveries). These Uplands Properties are designated as Tourist Commercial under the National City Harbor District Specific Area Plan with maritime-related activities on Lot K upon a conditional approval. As discussed in Chapter 4.5, *Land Use and Planning*, these two land use designations are nearly identical in their allowed uses. As such, the Tourist Commercial land use designation would have already been considered in SANDAG's regional growth projections, and the designation to Commercial Recreation under the PMP would have no change in the land uses that could have been proposed on the Uplands Properties. Thus, there would be no effect on the RAQS or SIP from designating the Uplands Properties as Commercial Recreation.

The PMPA would also include a temporary Marine Related Industrial Overlay for the eastern half of Lot K and Port Parcel 028-007. As proposed, the Overlay would be placed on these areas for 7 years or until a commercial recreational development is approved by the District, whichever occurs first. Both of the Overlay areas are currently used for vehicle storage through short-term use permits and

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<sup>18</sup> Note that the eastern half of Lot K and Port Parcel 028-007, the two sites proposed to be incorporated into the PMP, were most recently designated as Tourist Commercial/Recreation by the National City Harbor District Specific Area Plan, which is a land use that is consistent with the PMP's Commercial Recreation designation. Activities suitable for Tourist Commercial/Recreation uses include visitor services such as boating-related use, goods, eating establishments, dry storage areas, and accommodations.

the Overlay would continue to allow some marine industrial land uses such as vehicle storage on a temporary basis. Emissions at the eastern half of Lot K and Port Parcel 028-007 with the Marine Related Industrial Overlay implemented would include car movement and evaporative losses associated with multi-day car storage as well as indirect effects associated with more throughput at the terminal and may indirectly result in an increase in OGV emissions and truck trips. Although allowing for Marine Related Industrial uses to continue would allow for more efficient vehicle storage and loading to trucks and railcars, consistent with existing operations and consistent with the PMP, particularly Goal XIII, by facilitating more sequential, orderly, and efficient use of the existing marine terminal (see Table 4.5-5), these two parcels were likely not accounted for in the current RAQS and SIP as Marine Related Industrial land uses (**Impact-AQ-1**). Therefore, Mitigation Measure **MM-AQ-1** is required to ensure the administrative process to update SANDAG's growth projections is completed, thus, informing the air quality strategies contained within the RAQS and SIP and ensuring they adequately consider the Marine Related Operations at these two locations. With mitigation, impacts associated with being inconsistent with the RAQS and SIP would be reduced to a less-than-significant level.

### Level of Significance prior to Mitigation

Implementation of the proposed project would conflict with or obstruct implementation of an applicable air quality plan. Potentially significant impact(s) include the following.

**Impact-AQ-1: New Land Use Designations Not Accounted for in the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP).** The proposed project would re-designate Streets to Marine Related Industrial and would add a temporary Marine Related Industrial Overlay onto two parcels that are not currently designated as Marine Related Industrial. As these two land use changes were not known at the time the RAQS and SIP were last updated, this would result in a conflict with the applicable state and regional air quality plan.

### Mitigation Measures

**MM-AQ-1: Update the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP) with New Growth Projections.** Prior to the San Diego Air Pollution Control District's (SDAPCD's) next triennial review of the RAQS, the District shall coordinate with the SDAPCD to amend the growth assumptions using the Port Master Plan Amendment. This includes changing the designation of Streets to Marine Related Industrial and adding a Marine Related Industrial Overlay to two parcels within the proposed project site.

### Level of Significance after Mitigation

With implementation of **MM-AQ-1**, the temporary inconsistency with the current RAQS and SIP associated with the proposed land use designation changes would be rectified, and the project would no longer be inconsistent. Therefore, after mitigation, **Impact-AQ-1** would be less than significant.

***Threshold 2: Implementation of the proposed project would not violate an air quality standard or contribute substantially to an existing or projected air quality standard.***

## Impact Discussion

Construction and operation of the proposed project has the potential to create air quality impacts by violating an air quality standard or contributing substantially to an existing or projected air quality violation. A discussion of construction- and operations-related impacts is presented below.

### Construction

An estimate of emissions associated with construction of the proposed project is presented in Table 4.1-8. As shown in Table 4.1-8, emissions during worst-case construction would be below San Diego County's SLTs. Therefore, construction would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts would be less than significant.

**Table 4.1-8. Estimate of Construction Emissions (pounds per day)**

Construction Phase	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Site Demolition	6	80	65	<1	22	5
Site Grading	6	76	55	<1	9	6
Utilities	1	10	7	<1	1	1
Paving	11	22	13	<1	1	1
Finishing	3	30	14	<1	1	1
<b>Maximum Daily Construction Emissions</b>	<b>27</b>	<b>218</b>	<b>154</b>	<b>&lt;1</b>	<b>35</b>	<b>14</b>
San Diego County SLTs	75	250	550	150	100	55
Exceed Significant Threshold?	No	No	No	No	No	No

**Notes:**

Maximum daily emissions for all pollutants assumes that all phases could potentially overlap on their individual maximum day. Totals may not add exactly due to rounding.

Source: Appendix E.

### Operations

Table 4.1-9 shows the anticipated criteria pollutant emissions associated with project operations relative to existing conditions. Existing conditions are shown in Table 4.1-5. As shown in Table 4.1-9, emissions during operations are anticipated to exceed San Diego County's SLTs for NO<sub>x</sub>. Therefore, impacts would be significant and mitigation is required.

As noted earlier, the eventual expected throughput (210,818 net new cars) is not anticipated to be reached immediately. For a conservative analysis, Table 4.1-9 shows unmitigated emissions assuming the expected throughput (210,818 net new cars) is reached immediately during opening year 2016. In reality, the increase in throughput is much more likely to be incremental and due to economic factors. As shown in Table 4.1-9, NO<sub>x</sub> emissions (443 net new pounds per day) exceeds the SLT (250 pounds per day) by 193 pounds per day on this worst-case opening year emission rate (**Impact-AQ-2**). Based on this, assuming all project-related emission sources increase linearly with throughput, the SLT for NO<sub>x</sub> is reached when net new throughput hits approximately 119,014 net

new cars.<sup>19</sup> Mitigation Measures **MM-AQ-2** and **MM-AQ-3** are required by 2020 regardless of throughput to comply with the District Climate Action Plan (CAP), but Mitigation Measure **MM-AQ-4** is required once the throughput trigger (approximately 119,014 net new cars) is met and would require the tenant to increase its compliance with the currently voluntary VSR program.

**Table 4.1-9. Estimate of Operational Emissions under Unmitigated Project Conditions (pounds per day)**

<b>Operational Element</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM10</b>	<b>PM2.5</b>
Ocean-Going Vessels – Transit	44	883	64	21	14	13
Ocean-Going Vessels – Maneuvering	25	261	31	8	6	5
Ocean-Going Vessels – Hoteling	22	513	45	25	12	11
Auto-Carrier Truck Travel	6	348	20	<1	8	4
BNSF Rail – NCMT Switching	7	144	17	<1	3	3
BNSF Rail – Regional Line-Haul	14	359	44	2	9	9
Worker Trips	2	8	73	<1	7	2
Imported Car Off-loading and Resting Losses	10	1	9	<1	1	<1
Van Shuttles	<1	2	1	<1	<1	<1
Car Repairs On Site	4	<1	<1	<1	<1	<1
Periodic painting	<1	<1	<1	<1	<1	<1
Railcar Mover	<1	4	1	<1	<1	<1
BNSF Rail – NCMT Switching (displaced by Railcar Mover)	-2	-32	-4	<-1	-1	-1
<b>Existing<sup>a</sup> + Project</b>	<b>133</b>	<b>2,490</b>	<b>301</b>	<b>57</b>	<b>59</b>	<b>46</b>
<b>Project Only</b>	<b>23</b>	<b>443</b>	<b>73</b>	<b>9</b>	<b>14</b>	<b>10</b>
San Diego County SLTs	75	250	550	150	100	55
Exceed Significant Threshold?	No	<b>Yes</b>	No	No	No	No

Source: Appendix E. Totals may not add up exactly due to rounding.  
<sup>a</sup> Baseline emissions are shown in Table 4.1-5.

<sup>19</sup> The 250 pounds per day threshold is approximately 56.5% of 443 pounds per day, and 119,014 cars per year is approximately 56.5% of 210,772 new cars per year.

**Table 4.1-10. Estimate of Operational Emissions under Mitigated Project Conditions (pounds per day)**

<b>Operational Element</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM10</b>	<b>PM2.5</b>
Ocean-Going Vessels – Transit	44	883	64	21	14	13
Ocean-Going Vessels – Maneuvering	25	261	31	8	6	5
Ocean-Going Vessels – Hoteling	22	513	45	25	12	11
Auto-Carrier Truck Travel	6	348	20	<1	8	4
BNSF Rail – NCMT Switching	7	144	17	<1	3	3
BNSF Rail – Regional Line-Haul	14	359	44	2	9	9
Worker Trips	2	8	73	<1	7	2
Imported Car Off-loading and Resting Losses	10	1	9	<1	1	<1
Van Shuttles	<1	2	1	<1	<1	<1
Car Repairs On Site	4	<1	<1	<1	<1	<1
Periodic painting	<1	<1	<1	<1	<1	<1
Railcar Mover	<1	4	1	<1	<1	<1
BNSF Rail – NCMT Switching (displaced by Railcar Mover)	-2	-32	-4	<1	-1	-1
<i>MM-AQ-2 Idling<sup>a</sup></i>	<-1	<-1	<-1	<-1	<-1	<-1
<i>MM-AQ-3 CAP Measures<sup>b</sup></i>	-3	-68	-4	-1	-1	-1
<i>MM-AQ-4 VSR Beyond CAP<sup>c</sup></i>	-6	-139	-8	-2	-2	-2
<i>MM-AQ-5 Electric Van</i>	<-1	<-1	<-1	<-1	<-1	<-1
<b>Existing<sup>d</sup> + Project</b>	<b>124</b>	<b>2,283</b>	<b>289</b>	<b>54</b>	<b>56</b>	<b>44</b>
<b>Project Only</b>	<b>14</b>	<b>235</b>	<b>60</b>	<b>5</b>	<b>11</b>	<b>8</b>
San Diego County SLTs	75	250	550	150	100	55
Exceed Significant Threshold?	No	No	No	No	No	No

Source: Appendix E. Totals may not add up exactly due to rounding.

<sup>a</sup> Reductions from idling are not quantified because reductions would be speculative, as it is not fully known whether long trucks currently idle at any given location.

<sup>b</sup> Includes VSR compliance with the CAP target of 80% (12 knot speed within 20 nautical miles of Point Loma).

<sup>c</sup> Includes VSR compliance of 90% (12 knot speed within 40 nautical miles of Point Loma).

<sup>d</sup> Baseline emissions are shown in Table 4.1-5.

## Level of Significance prior to Mitigation

Implementation of the proposed project would violate an air quality standard or contribute substantially to an existing or projected air quality standard. Potentially significant impact(s) include:

**Impact-AQ-2: Emissions in Excess of NO<sub>x</sub> Thresholds During Operations.** Project emissions during operations, before mitigation, would exceed the San Diego County SLTs for NO<sub>x</sub> at maximum capacity. While the incremental contribution to health effects from NO<sub>x</sub> cannot be traced solely to the proposed project, the contribution of project-related emissions is considered

significant because the project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health.

## Mitigation Measures

### **MM-AQ-2: Implement Diesel-Reduction Measures During Construction and Operations.**

The project proponent shall implement the following measures during project construction and operations.

- i. The project proponent shall limit all construction equipment, drayage, and delivery truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and shall submit quarterly reports of violators to the San Diego Unified Port District. This measure shall be enforced by Pasha supervisors, and repeat violators shall be subject to penalties pursuant to California airborne toxics control measure 13 California Code of Regulations Section 2485. The project proponent shall submit evidence of the use of diesel reduction measures to the San Diego Unified Port District through annual reporting with the first report due one year from the date of project completion and each report due exactly one year after, noting all violations with relevant identifying information of the vehicles and drivers in violation of these measures.
- ii. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, the project proponent shall verify that all equipment has been checked by a certified mechanic and determined to be running in proper condition prior to admittance into any Pasha leasehold. The project proponent shall submit a report by the certified mechanic of the condition of the construction equipment to the San Diego Unified Port District prior to construction.

### **MM-AQ-3: Comply with San Diego Unified Port District Climate Action Plan Measures.**

Effective opening day, the project proponent shall implement the following measures to be consistent with the Climate Action Plan.

- Vessels shall comply with the San Diego Unified Port District's voluntary vessel speed reduction program, which targets 80% compliance.
- The project proponent shall decrease onsite movements where practicable.
- No drive-through shall be implemented.
- Comply with Assembly Bill 939 by recycling at least 50% of solid waste. This measure shall be applied during construction and operation of the proposed project.
- Light fixtures shall be replaced with lower energy bulbs such as fluorescent, Light-Emitting Diodes (LEDs), or Compact Fluorescent Lights (CFLs).

Implementation of Climate Action Plan measures will be included in all new real estate agreements and Coastal Development Permit(s) associated with this project. Evidence of implementation and compliance with this mitigation measure shall be provided to the San Diego Unified Port District on an annual basis through 2040 (the end year of Pasha's Terminal Operating Agreement).

**MM-AQ-4: Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance.** Every quarter following approval of the first real estate agreement or issuance of the first Coastal Development Permit associated with the project, whichever occurs first, the project proponent shall provide a report of the annual vehicle throughput to-date, and the projected total throughput for the following 6 months to the District's Planning & Green Port Department. Prior to the annual vehicle throughput reaching 480,337 vehicles, which is an increase of 119,065 vehicles over the 2013 vehicle throughput total (361,372 vehicles), the project proponent shall implement vessel speed reduction measures to reduce the project's net-new nitrogen oxide emissions. The program shall require that 90% of the vessels calling at National City Marine Terminal reduce their speeds to 12 knots starting at 40 nautical miles from Point Loma.

Implementation of this vessel speed reduction program will be included in all new real estate agreements and Coastal Development Permit(s) associated with this project. Evidence of implementation and compliance with this mitigation measure shall be provided to the District's Planning & Green Port Department on an annual basis through 2040 (the end year of Pasha's Terminal Operating Agreement).

**MM-AQ-5: Replace Gasoline/Diesel Passenger Van with Electric Passenger Van.** Prior to January 1, 2020, the project proponent shall purchase and operate an electric passenger shuttle to be used for yard movement associated with vehicle storage operations.

### Level of Significance after Mitigation

As shown in Table 4.1-10, **Impact-AQ-2** would be less than significant after implementation of Mitigation Measures **MM-AQ-2** through **MM-AQ-5** because mitigation would reduce operations-related NO<sub>x</sub> emissions to a level below San Diego County SLTs. As such, the proposed project would not violate an air quality standard or contribute substantially to an existing or projected air quality standard during operation. The proposed project's construction and operational impact on air quality standards would be considered less than significant.

***Threshold 3: Implementation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.***

### Impact Discussion

The SDAB is currently in nonattainment for O<sub>3</sub> under NAAQS and for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> under CAAQS, as a result of past and present projects, and will be further impeded by reasonably foreseeable future projects (see Chapter 5, *Cumulative Impacts*). As discussed above and shown in Tables 4.1-8, 4.1-9, and 4.1-10, criteria pollutant emissions are expected to be below County SLT levels for all nonattainment criteria pollutants and precursors during construction and below County SLT levels during operation after mitigation. The projects identified by the District within a 1-mile radius of the project site include the following: National City Aquatic Center (cumulative project #1), portion of Segment 5 of the Bayshore Bikeway (cumulative project #2), WI-TOD (cumulative project #8), NCMT Berth 24-10 Structural & Mooring Repair (cumulative project #9), Closure of Tidelands Avenue between Bay Marina Drive and 32nd Street (cumulative project #10),



and City of National City's Balanced Plan with Mitigation and Enhancements for National City (cumulative project #11). Of these, only the construction phases of cumulative projects #2, #8, and #9 would potentially overlap with construction of the proposed project.

Emissions from all nearby projects, including those listed above, would be subject to the same SDAPCD rules and regulations that would reduce emissions from the proposed project, including fugitive dust control per Rule 55. As such, cumulative impacts with respect to criteria pollutant emissions during construction would be less than significant. In terms of operations, the project would not create a CO hotspot. However, the proposed project would exceed the thresholds for NO<sub>x</sub> before mitigation, which is a nonattainment pollutant (**Impact-AQ-2**). As such, the proposed project is expected to result in a cumulatively considerable net increase in a nonattainment pollutant. With Mitigation Measures **MM-AQ-2** through **MM-AQ-5** incorporated, NO<sub>x</sub> emissions would be reduced to below the County's SLTs. Therefore, after mitigation, the project's operational air quality impacts would be less than significant.

### Level of Significance prior to Mitigation

Implementation of the proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Potentially significant impact(s) include:

**Impact-AQ-2: Cumulative Emissions in Excess of NO<sub>x</sub> Threshold during Operations.** Project emissions during operations, before mitigation, would exceed the San Diego County SLTs for NO<sub>x</sub> at maximum capacity, and when combined with other nearby past, present, and probable future projects, the project's contribution would be cumulatively considerable. While the incremental contribution to health effects from NO<sub>x</sub> cannot be traced solely to the proposed project, the contribution of project-related emissions is considered significant because the project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health.

### Mitigation Measures

Implement **MM-AQ-2** through **MM-AQ-5**, as described under Threshold 2.

### Level of Significance after Mitigation

As shown in Table 4.1-10, **Impact AQ-2** would be less than significant after implementation of Mitigation Measures **MM-AQ-2** through **MM-AQ-5**, because mitigation would reduce operations-related NO<sub>x</sub> emissions to a level below County SLTs. Therefore, when combined with contributions of nonattainment pollutant emissions of past, present, and probable future projects, the proposed project's contribution of nonattainment pollutants would be less than cumulatively considerable during operations and is considered less than significant.

***Threshold 4: Implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations.*****Impact Discussion****Toxic Air Contaminants**

DPM, which is classified as a carcinogenic toxic air contaminant by ARB, is the primary pollutant of concern with regard to health risks to sensitive receptors. Diesel-powered construction equipment as well as heavy duty truck movement and hauling both on and off site would emit DPM that could potentially expose nearby sensitive receptors to pollutant concentrations. The closest sensitive land uses within the vicinity of the project site include Pepper Park (which includes a public promenade), immediately south and southwest of the closest project site (Parcel 028-007), and multi- and single-family residential, approximately 1,600 feet to the east of Parcels 025-010-B and 025-010-C and approximately 1,000 feet northeast of the eastern edge of the terminal itself. The closest sensitive land uses to truck travel along Bay Marina Drive are the multi- and single-family residential areas approximately 300 feet north of Bay Marina Drive near Harrison Avenue and Cleveland Avenue. The closest sensitive land uses to train travel along the BNSF right-of-way towards downtown are the various residences, parks, and schools in the National City and Barrio Logan neighborhoods.

Construction activities would be short term, occurring over an approximately 7-week period, which is much shorter than the assumed 9-, 30-, or 70-year exposure period typically used to estimate lifetime cancer risks. DPM emitted by these sources can remain airborne for several days. However, given the prevailing winds and meteorological conditions at the project site during daytime construction hours, pollutant emission concentrations would be expected to be well dispersed. Construction activities would be sporadic, transitory, and short term in nature; once construction activities end, so too would the source of emissions. In addition, Table 4.1-8 indicates that diesel exhaust (PM<sub>10</sub>) associated with construction activities would be minimal, and diesel-vehicle activity on public roadways would be minimal, comprising a few delivery and material haul trips. Furthermore, diesel-equipment activity on site would be short term and transitory, result in minimal emissions, and occur at distances not expected to expose sensitive receptor locations to substantial pollutant concentrations.

Once the project is operational, TAC emissions would result primarily from truck travel along public roads as well as from train movement both on site and regionally. In order to estimate the potential risk on neighboring communities, a health risk assessment was conducted to analyze the potential health risks associated with diesel-powered train and truck travel in proximity to sensitive receptors locations both near train travel north toward downtown and along the truck traffic corridor. With regard to train travel, sensitive land uses near train travel include the various residences, parks, and schools in the National City and Barrio Logan neighborhoods. Note that because trains primarily travel at night, parks and schools are assumed to not be in use during train activity. Truck and train emissions are based on composite DPM emission rates based on a 70-year average emission rate, which takes into account truck and train fleet turnover over time.

As shown in Table 4.1-11, the increase in train and truck activity would result in an increase in cancer risk at the maximum exposed residence along train and truck corridors. However, the combined risk shown in Table 4.1-11 is below the chronic cancer and hazard risk thresholds and is considered less than significant.

**Table 4.1-11. Estimate of Health Risk at Nearby Receptors**

Receptor Type	Cancer Risk Per Million	Chronic Hazard Index
Residential	8.6	0.002
Recreational/Park	0.4	0.005
School	0.5	0.001
<i>Threshold</i>	<i>10</i>	<i>1.0</i>
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>
Note that risk for the various receptor types is not additive and the risk is not the sum of all the risks shown here; rather, the risk at each receptor type is already the sum of emissions.		
Source: Appendix E.		

**Carbon Monoxide Hotspots**

Additional traffic created by the proposed project would have the potential to create CO hotspots at nearby roadways and intersections. No intersections would operate at LOS D or worse under existing or existing plus project conditions (Appendix G). The intersection that would show the most congestion would be the I-5 southbound off-ramps at Bay Marina Drive during the PM peak hours, which would operate at LOS C under each the existing plus project, near-term with project, and future year with project conditions. Also, I-5 northbound off-ramps at Bay Marina Drive would operate at LOS C under future year with project conditions during the PM peak hour. However, to provide a conservative analysis, concentrations were modeled to estimate pollutant concentrations under at the I-5 southbound off-ramps at Bay Marina Drive existing, near term, and future year conditions and I-5 southbound on-ramps at Bay Marina Drive during future year conditions. Table 4.1-12 presents the results of the CO hotspot modeling and indicates that implementation of the proposed project would not result in violations of the state or federal 1- or 8-hour CO standards during the existing plus project, near term, and future year conditions. Consequently, the impact of traffic conditions from the proposed project on ambient CO levels is considered less than significant.

**Table 4.1-12. Modeled CO Levels Measured at Receptors in the Vicinity of the Affected Intersection**

Intersection	Existing Plus Project <sup>a</sup>		Near Term Plus Project <sup>a</sup>		Future Year Plus Project <sup>a</sup>	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
I-5 Southbound Off-Ramp and Bay Marina Drive	4.2	3.2	4.2	3.2	3.6	2.8
I-5 Northbound On-Ramp and Bay Marina Drive	--	--	--	--	3.6	2.8
<i>Ambient Air Quality Standards (NAAQS/CAAQS)</i>	<i>35/20</i>	<i>9/9.0</i>	<i>35/20</i>	<i>9/9.0</i>	<i>35/20</i>	<i>9/9.0</i>
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

<sup>a</sup> Background concentrations of 3.0 and 2.4 ppm were added to the modeling 1- and 8-hour results, respectively.

Source: ICF 2014, EMFAC and CALINE4 modeling.

**Criteria Air Pollutants**

High levels of criteria pollutants are associated with some form of health risk (e.g., asthma, asphyxiation). Adverse health effects associated with criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, gender]). Moreover, ozone precursors (VOC and NO<sub>x</sub>) affect air quality on a regional scale.

Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. As part of the setting and updating of the NAAQS, the EPA develops and considers quantitative characterizations of exposures and associated risks to human health or the environment associated, known as an HREA, with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration (EPA 2016). The HREA estimates population exposure to and resulting mortality and morbidity health risks associated with the full range of observed pollutant concentrations, as well as incremental changes in exposures and risks associated with ambient air quality adjusted to just meeting the existing NAAQS and just meeting potential alternative NAAQS under consideration (EPA 2014). However, existing models have limited sensitivity to small changes in criteria pollutant concentrations and, as such, translating project-generated criteria pollutants to specific health effects would produce meaningless results. In other words, increases in regional air pollution from project-generated VOC and NO<sub>x</sub> would have no effect on specific human health outcomes that could be attributed to specific project emissions. Other criteria pollutant emissions, including CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, generally affect air quality on a localized scale. Health effects related to localized pollutants are the product of localized sources and emissions generated by numerous sources throughout a region. Certain air quality models, particularly dispersion models, have the ability to translate project-generated localized pollutants to specific health effects.

As shown in Table 4.1-9 and Table 4.1-10, operation of the proposed project would significantly increase emissions of one ozone precursor (NO<sub>x</sub>) (**Impact-AQ-1**). After implementation of Mitigation Measures **MM-AQ-2 through MM-AQ-5**, NO<sub>x</sub> emissions would be reduced to below the applicable County SLT threshold. Project-generated ozone precursors could increase photochemical reactions and the formation of tropospheric ozone, which, at certain concentrations, could lead to respiratory symptoms (e.g., coughing), decreased lung function, and inflammation of airways. Although these health effects are associated with ozone, the impacts are a result of cumulative and regional VOC and NO<sub>x</sub> emissions. However, the incremental contribution of the project to specific health outcomes related to criteria pollutant emissions would be limited and any effects thereof would be below any health-based significance threshold (e.g., NAAQS and CAAQS). Furthermore, while the incremental contribution could not be traced solely to the proposed project, the contribution of project-related emissions is considered less than significant because the project would result in emissions below thresholds that have been set by SDAPCD and adopted by the County to attain the NAAQS and CAAQS, which are designed to provide public health protection. Therefore, because the project would result in emissions below health-based thresholds (SDAPCD Trigger Levels and County SLTs) after mitigation, the project would not result in adverse health effects associated with criteria pollutant emissions. As shown in Table 4.1-11 and Table 4.1-12, operation of the proposed project would not result in adverse health effects on the nearby populations associated with localized PM exhaust and CO NAAQS and CAAQS. Moreover, as shown in Table 4.1-9 and Table 4.1-10, operation of the proposed project would result in emissions of localized pollutants (CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) far below thresholds. Consequently, the health-related impacts of the proposed project's localized criteria air pollutant emissions is considered less than significant.

### Level of Significance prior to Mitigation

Implementation of the proposed project would expose sensitive receptors to substantial pollutant concentrations. Potentially significant impact(s) include:

**Impact-AQ-2: Emissions in Excess of NO<sub>x</sub> Thresholds During Operations.** Project emissions during operations, before mitigation, would exceed the San Diego County SLTs for NO<sub>x</sub> at maximum capacity. While the incremental contribution to health effects from NO<sub>x</sub> cannot be traced solely to the proposed project, the contribution of project-related emissions is considered significant because the project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health.

### Mitigation Measures

Implement **MM-AQ-2** through **MM-AQ-5**.

### Level of Significance after Mitigation

As shown in Table 4.1-10, **Impact-AQ-2** would be less than significant after implementation of Mitigation Measures **MM-AQ-2** through **MM-AQ-5** because mitigation would reduce NO<sub>x</sub> emissions to below the applicable San Diego County SLT. As such, the contribution of project-related emissions would not exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health. The proposed project's operational impact related to exposing sensitive receptors to substantial pollutant concentrations would be less than significant.

***Threshold 5: Implementation of the proposed project would not create objectionable odors affecting a substantial number of people.***

### Impact Discussion

Although offensive odors rarely cause any physical harm, they can be unpleasant and lead to considerable distress among the public. This distress may often generate citizen complaints to local governments and air districts. Any project with the potential to frequently expose the public to objectionable odors would be deemed as having a significant impact.

According to ARB's *Air Quality and Land Use Handbook*, land uses associated with odor complaints typically include sewage treatment plants, landfills, recycling facilities, and manufacturing (ARB 2005a). Odor impacts on residential areas and other sensitive receptors, such as hospitals, daycare centers, and schools, warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, work sites, and commercial areas.

Potential odor emitters during construction activities include diesel exhaust, asphalt paving, and architectural coatings (for parking area and curb striping) to paint paved surfaces. Construction-related activities near existing receptors would be temporary in nature, and construction activities would not result in nuisance odors that would violate SDAPCD Rule 51. Potential odor emitters during operations would include diesel exhaust from truck and train activity as well as architectural coatings to periodically paint paved surfaces. However, odor impacts would be limited to the circulation routes, parking areas, and areas immediately adjacent to terminal operations. Although such brief exhaust odors may be considered adverse, they would not affect a substantial number of people and any odor-related impacts would be less than significant.

### **Level of Significance prior to Mitigation**

Implementation of the proposed project would not create objectionable odors affecting a substantial number of people. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Level of Significance after Mitigation**

Impacts would be less than significant.

## Section 4.2

# Greenhouse Gas Emissions, Climate Change, and Energy Use

### 4.2.1 Overview

This section describes the existing conditions and applicable laws and regulations for greenhouse gas (GHG) emissions, climate change, and energy use, and analyzes the proposed project's potential to result in emissions that are (1) consistent with the District's Climate Action Plan (CAP) reduction targets and in compliance with regulatory programs outlined in the Scoping Plan and adopted by the California Air Resources Board (ARB) or other California agencies to reduce GHG emissions in 2020; and (2) consistent with the post-2020 reduction targets set forth through California Executive Order (EO) S-03-05 and EO B-30-15 and in compliance with plans, policies, and regulations promulgated to reduce GHG emissions post-2020; and whether the project would (3) expose property and persons to the physical effects of climate change, including but not limited to flooding, public health risk, wildfire risk, or other impacts resulting from climate change. The section also quantifies construction and operational energy consumption and evaluates whether the project would (4) result in the wasteful, inefficient, and unnecessary consumption of energy.

Table 4.2-1 summarizes the significant impacts and mitigation measures discussed in this section.

**Table 4.2-1. Summary of Significant Impacts and Mitigation Measures**

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
<b>Impact-GHG-1:</b> Project GHG Emissions through 2020.	<b>MM-GHG-1:</b> Implement Diesel-Reduction Measures During Construction and Operations. <b>MM-GHG-2:</b> Comply with San Diego Unified Port District Climate Action Plan Measures. <b>MM-GHG-3:</b> Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance. <b>MM-GHG-4:</b> Replace Gasoline/Diesel Passenger Van with Electric Passenger Van. <b>MM-GHG-5:</b> Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry.	Less than Significant	Project GHG emissions achieve the CAP's reduction target for maritime projects (33%) and the project would comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
<b>Impact-GHG-2:</b> Project GHG Emissions Beyond 2020.	<b>MM-GHG-6:</b> Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry.	Significant and Unavoidable	There are no known reduction targets that apply to the project based on its location and development type. In addition, there is no state-wide guidance document to indicate how to achieve the deep reductions set by EO S-03-05 and EO B-30-15.

## 4.2.2 Existing Conditions

This section provides a discussion of the existing understanding of global climate change and its effects. This section also provides an explanation of GHG emissions, as well as energy resources as they relate to the project area.

### 4.2.2.1 Climate Change and Greenhouse Gases

#### Overview of Global Climate Change

The phenomenon known as the *greenhouse effect* keeps the atmosphere near the Earth's surface warm enough for the successful habitation of humans and other life forms. GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and hydrofluorocarbons (HFCs), in addition to water vapor. These six gases are also identified as GHGs in Section 15364.5 of the State CEQA Guidelines.

Sunlight in the form of infrared, visible, and ultraviolet light passes through the atmosphere. Some of the sunlight striking the Earth is absorbed and converted to heat, which warms the surface. The surface emits infrared radiation to the atmosphere, where some of it is absorbed by GHGs and re-emitted toward the surface. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and amplifying the warming of the Earth (Center for Climate and Energy Solutions 2011).

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution. Rising atmospheric concentrations of GHGs in excess of natural levels enhance the greenhouse effect, which contributes to global warming of the Earth's lower atmosphere. This warming induces large-scale changes in ocean circulation patterns, precipitation patterns, global ice cover, biological distributions, and other changes to the Earth system that are collectively referred to as *climate change*.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs). Criteria air pollutants and TACs occur locally or regionally, and local concentrations respond to locally



implemented control measures. However, the long atmospheric lifetimes of GHGs allow them to be transported great distances from sources and become well mixed, unlike criteria air pollutants, which typically exhibit strong concentration gradients away from point sources. GHGs and global climate change represent cumulative impacts; that is, GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change.

## Greenhouse Gases

The GHGs listed by the Intergovernmental Panel on Climate Change (IPCC) (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) (2013) are discussed in this section in order of abundance in the atmosphere, and the principal characteristics surrounding these pollutants are discussed below. Note that PFCs are not discussed because those gases are primarily generated by industrial processes, which are not anticipated as part of the project. California law and the State CEQA Guidelines contain a similar definition of GHGs (Health and Safety Code Section 38505(g); 14 CCR Section 15364.5). Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic (human-made) sources. Note that HFCs, PFCs, and SF<sub>6</sub> are associated primarily with industrial processes<sup>1</sup> and include short-lived pollutants,<sup>2</sup> but these processes do not exist at the project site. The primary GHGs of concern associated with the project are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, and SF<sub>6</sub>.

- **Carbon Dioxide (CO<sub>2</sub>)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, respiration, and also as a result of other chemical reactions (e.g., manufacture of cement). CO<sub>2</sub> is also removed from the atmosphere (or “sequestered”) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH<sub>4</sub>)** is emitted during the production, transport, and use of coal, natural gas, and oil. CH<sub>4</sub> also results from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- **Nitrous Oxide (N<sub>2</sub>O)** is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- **Hydrofluorocarbons (HFCs)** are anthropogenic chemicals used in commercial, industrial, and consumer products and have high global warming potential (GWP; see below). HFCs are generally used as substitutes for ozone-depleting substances in automobile air conditioners and refrigerants.<sup>3</sup>
- **Sulfur hexafluoride (SF<sub>6</sub>)**, a human-made chemical, is used as an electrical insulating fluid for power distribution equipment, in the magnesium industry, in semiconductor manufacturing, and also as a tracer chemical for the study of oceanic and atmospheric processes.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. The most commonly accepted method to compare GHG emissions is the GWP methodology defined in the IPCC reference documents. IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide

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<sup>1</sup> The Scoping Plan’s definition of industrial processes includes a broad range of sources, including cement plants, refineries, power plants, glass manufacturers, and oil and gas production facilities.

<sup>2</sup> Short-lived pollutants remain in the atmosphere for shorter periods of time and have much larger global warming potentials compared to CO<sub>2</sub>.

<sup>3</sup> HFCs and SF<sub>6</sub> would not be produced by the proposed project, but are described here for informational purposes because they can be emitted by other terminal operations.

equivalent (CO<sub>2</sub>e), which compares the gas in question to that of the same mass of CO<sub>2</sub> (which has a GWP of 1 by definition). The GWP values used in this report are based on the IPCC Fourth Assessment Report (AR4) and United Nations Framework Convention on Climate Change reporting guidelines and are defined in Table 4.2-2 (IPCC 2007). The AR4 GWP values are used in ARB's California inventory and Assembly Bill (AB) 32 Scoping Plan estimate update, as well as in the Port of San Diego's GHG emissions inventory (ARB 2014; District 2013).

Table 4.2-2 lists the GWP of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, and SF<sub>6</sub>, their lifetimes, and abundances in the atmosphere.

**Table 4.2-2. Lifetimes, GWPs, and Abundances of Significant GHGs**

Gas	GWP (100 years)	Lifetime (years) <sup>a</sup>	Atmospheric Abundance
CO <sub>2</sub>	1	50–200	397 ppm
CH <sub>4</sub>	25	9–15	1,823 ppb
N <sub>2</sub> O	298	121	327 ppb
HFC-23	14,800	222	18 ppt
HFC-134a	1,430	13.4	78 ppt
HFC-152a	124	1.5	3.9 ppt
SF <sub>6</sub>	22,800	3,200	7.9 ppt

Sources: Myhre et al. 2013; Blasing 2015; IPCC 2007.

<sup>a</sup> Defined as the half-life of the gas.

ppm = parts per million; ppb = parts per billion; ppt = parts per trillion.

## Greenhouse Gas Inventories

A GHG inventory is a quantification of all GHG emissions and sinks<sup>4</sup> within a selected physical and/or economic boundary. GHG inventories can be performed on a large scale (e.g., for global and national entities) or on a small scale (e.g., for a particular building or person). Although many processes are difficult to evaluate, several agencies have developed tools to quantify emissions from certain sources.

Table 4.2-3 outlines the most recent global, national, statewide, and local GHG inventories to help contextualize the magnitude of potential project-related emissions.

<sup>4</sup>A GHG sink is a process, activity, or mechanism that removes a GHG from the atmosphere.

**Table 4.2-3. Global, National, State, and Local GHG Emissions Inventories**

<b>Emissions Inventory</b>	<b>CO<sub>2</sub>e (metric tons)</b>
2010 IPCC Global GHG Emissions Inventory	52,000,000,000
2013 EPA National GHG Emissions Inventory	6,673,000,000
2013 ARB State GHG Emissions Inventory	459,300,000
2012 County of San Diego GHG Emissions Inventory	34,670,000
2010 City of San Diego GHG Emissions Inventory	13,091,591
2006 Port of San Diego GHG Emissions Inventory <sup>a</sup>	826,429
Sources: IPCC 2014; EPA 2015a; ARB 2015a; Energy Policy Initiatives Center 2015; City of San Diego 2015; District 2013.	
<sup>a</sup> The Port of San Diego's GHG emissions inventory is based on the 2013 Climate Action Plan, rather than the District's 2012 Maritime Air Emissions Inventory, because the Climate Action Plan provides a more comprehensive inventory of the Port's activities and GHG emissions profile.	

## Impacts of Global Climate Change

Climate change is a complex phenomenon that has the potential to alter local climatic patterns and meteorology. Although modeling indicates that climate change will result in sea-level rise (SLR) (both globally and regionally) as well as changes in climate and rainfall, among other effects, there remains uncertainty with regard to characterizing precise *local* climate characteristics and predicting precisely how various ecological and social systems will react to any changes in the existing climate at the local level. Regardless of this uncertainty, it is widely understood that substantial climate change is expected to occur in the future, although the precise extent will take further research to define. Consequently, the entire San Diego region, including the project area, will be affected by changing climatic conditions.

Research efforts coordinated through ARB, the California Energy Commission (CEC), the California Environmental Protection Agency, the University of California system, and others are examining the specific changes to California's climate that will occur as the Earth's surface warms. Potential impacts include rising sea levels along the California coastline; extreme heat conditions; an increase in heat-related human deaths, infectious diseases, and respiratory problems caused by deteriorating air quality; reduced snow pack and streamflow in the Sierra Nevada, affecting winter recreation and water supplies; potential increase in the severity of winter storms, affecting peak stream flows and flooding; changes in growing season conditions that could affect California agriculture, causing variations in crop quality and yield; and changes in the distribution of plant and wildlife species due to changes in temperature, competition from colonizing species, changes in hydrologic cycles, changes in sea levels, and other climate-related effects.

With respect to the San Diego region, the San Diego Foundation's *A Regional Wake-Up Call* (2013), which summarizes the CEC's *Climate Change-Related Impacts in the San Diego Region by 2050* paper (CEC 2009), provides a summary of potential climate change impacts in the region (Ocean Protection Council 2013), which include the following.

- **Increased temperatures:** The San Diego region will see hotter and drier days and more frequent, prolonged heat waves. Average annual temperatures are expected to increase 1.5–4.5°F (CEC 2009; The San Diego Foundation 2013).

- **Reduction in air quality:** Hotter and drier days create more air pollution by raising ozone levels, and this can exacerbate asthma and other respiratory and cardiovascular diseases (CEC 2009).
- **Introduction of new public health issues:** Warmer temperatures year-round could lead to growing mosquito populations, increasing the regional occurrence of West Nile virus and potentially introducing tropical diseases such as malaria and dengue fever (CEC 2009).
- **Reductions in fresh water:** Water and energy demand will increase, while extended and more frequent droughts will cause traditional sources of fresh water supplies to diminish. Reduced local and regional precipitation could shrink water supplies by 20% or more, while water demand is expected to increase 37%. There could be an 18% water shortage by 2050 (CEC 2009; The San Diego Foundation 2013).
- **Increased rate of wildfires:** Drier weather may increase the frequency and size of wildfires, with an estimated 20% increase in days with ideal fire conditions (CEC 2009; The San Diego Foundation 2013).
- **Rising sea levels:** Projected SLR, coastal erosion, and increasing storm surges may cause fragile sea cliffs to collapse, shrink beaches, and destroy coastal property and ecosystems. Sea levels are expected to rise 12–16 inches by 2020 (CEC 2009; The San Diego Foundation 2013), 24 inches by 2050, and 65.7 inches by 2100, relative to 2000 conditions (Ocean Protection Council 2013; Coastal and Ocean Working Group of the California Climate Action Team 2013).

## Sea Level Rise

Projected SLR as an effect of climate change is expected to increase the number of areas that experience coastal flooding along San Diego Bay in the future. Coastal and low-lying areas, such as the project sites, are particularly vulnerable to future SLR. More specifically, SLR is a concern for the future, particularly in combination with future storm events and coastal flooding. A scenario with 100-year flood flows that coincide with high tides, taking into account SLR over a 50- or 100-year horizon, would dramatically increase the risk of flooding in the project vicinity.

Specifically regarding SLR, the San Diego Bay Vulnerability Assessment conducted by ICLEI– Local Governments for Sustainability found that the greatest concern from SLR will be an increase in the kind of flooding that the region already experiences due to waves, storm surge, El Niño events, and very high tides. Furthermore, starting around mid-century, the San Diego Bay may become more susceptible to regularly occurring inundation of certain locations and assets. The most vulnerable sectors in the community include stormwater management, wastewater collection, shoreline parks and public access, transportation facilities, commercial buildings, and ecosystems (ICLEI 2012). According to the map in the San Diego Bay Vulnerability Assessment report, the project site is outside of the SLR hazard zone for 2050.

The Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT) developed the *State of California Sea-Level Rise Guidance Document* for State agencies to incorporate SLR into planning and decision-making for projects in California. The document was developed in response to Governor Schwarzenegger’s Executive Order S-13-08, issued on November 14, 2008, which directed State agencies to plan for SLR and coastal impacts. That executive order also requested the National Research Council (NRC) to issue a report on SLR to advise California on planning efforts. The final report from NRC, *Sea-Level Rise for the Coasts of California, Oregon, and Washington*, was

released in June 2012. The *State of California Sea-Level Rise Guidance Document* was last updated in March 2013 with the scientific findings of the 2012 NRC report.

In the CO-CAT SLR guidance document (Coastal and Ocean Working Group of the California Climate Action Team 2013), three SLR projections based on time periods (2030, 2050, and 2100) were selected for south of Cape Mendocino using year 2000 as the baseline. Table 4.2-14 provides a summary of the SLR projections relevant to the project area during the life of the project, which is out to 2040.

### 4.2.2.2 State and Regional Energy Resources and Use

California has a diverse portfolio of energy resources that produced 2,335.5 trillion British thermal units<sup>5</sup> (BTUs) in 2012.<sup>6</sup> Excluding offshore areas, the state ranked third in the nation in crude oil production in 2012, producing the equivalent of 1,143.8 trillion BTUs. The state also ranked fourth in the nation in conventional hydroelectric generation (23,755 megawatt hours [MWh]) and first in the nation for net electricity generation from renewable resources. Other energy sources in the state include natural gas (277.7 trillion BTUs), nuclear (193.9 trillion BTUs), and biofuels (24.3 trillion BTUs) (U.S. Energy Information Administration 2014).<sup>7</sup>

According to the U.S. Energy Information Administration (2014), California consumed approximately 7,612 trillion BTUs of energy in 2012. Per capita energy consumption (i.e., total energy consumption divided by the population) in California is among the lowest in the country, with 201 million BTU in 2012, which ranked 49<sup>th</sup> among all states. Natural gas accounted for the majority of energy consumption (32%), followed by motor gasoline (22%), distillate and jet fuel (14%), interstate electricity (11%), and nuclear and hydroelectric power (6%), with the remaining 15% coming from a variety of other sources (U.S. Energy Information Administration 2014). The transportation sector consumed the highest quantity of energy (38.5%), followed by the industrial and commercial sectors.

Per capita energy consumption, in general, is declining due to improvements in energy efficiency and design. However, despite this reduction in per capita energy use, the state's total overall energy consumption (i.e., non-per capita energy consumption) is expected to increase over the next several decades due to growth in population, jobs, and vehicle travel. For example, electricity usage is anticipated to grow about 9 to 15% over the next decade (2015–2025) (CEC 2014).

San Diego County is served by San Diego Gas and Electric (SDG&E), which provides energy service to over 3.4 million customers (i.e., 1.4 million accounts) in the county and portions of southern Orange County. The utility has a diverse power production portfolio, composed of a variety of renewable and non-renewable sources. Energy production typically varies by season and by year. Regional electricity loads also tend to be higher in the summer because the higher summer temperatures drive increased demand for air-conditioning. In contrast, natural gas loads are higher in the winter because the colder temperatures drive increased demand for natural gas heating.

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<sup>5</sup>One BTU is the amount of energy required to heat 1 pound of water by 1°F at sea level. BTU is a standard unit of energy that is used in the United States and is on the English system of units (foot-pound-second system).

<sup>6</sup>Note, 2012 data is the most recent available at the U.S. Energy Information Administration website, at [http://www.eia.gov/state/seds/sep\\_prod/pdf/P5.pdf](http://www.eia.gov/state/seds/sep_prod/pdf/P5.pdf). Accessed July 25, 2015.

<sup>7</sup>No coal production occurs in California.

In 2014 (most recent year for which California Renewables Portfolio Standard [RPS] data is available) more than 36% of the electricity SDG&E supplied was from renewable sources, compared to less than 1% in 2002 (CPUC 2016). Over the last 3 years, SDG&E customers have reduced their electricity use by more than 911 million kilowatt hours (kWh) and their gas usage by more than 1.8 million therms (Semptra Energy Company 2014).

## Local Emissions at the Project Site

Activity at the project site generates GHG emissions. Specifically, GHG emissions result from activity associated with existing vehicle throughput, including ocean-going vessel activity; Burlington Northern Santa Fe (BNSF) rail activity; auto-carrier truck travel; activity to unload, repair, and process cars, including car trips and van shuttles; and worker trips. A description of each of these sources and associated emissions modeling is provided in Section 4.2.4.1 below. Ocean-going vessel transit activity takes into account existing compliance with the District vessel speed reduction for vessels that call on NCMT. GHG emissions associated with existing activity at the annual time scale is presented in Table 4.2-4. Note that unlike the existing conditions described in Section 4.1, *Air Quality and Health Risk*, GHG emissions do not result from unloaded car evaporative resting losses and periodic parking area painting operations, which only result in criteria pollutant emissions. Baseline emissions are based on calendar year 2013 activity at the project site.

**Table 4.2-4. Estimate of Existing GHG Emissions at the Project Site (metric tons per year)**

<b>Operational Element</b>	<b>CO<sub>2</sub>e</b>
Ocean-Going Vessels – Transit	3,670
Ocean-Going Vessels – Maneuvering	1,464
Ocean-Going Vessels – Hoteling	3,055
Auto-Carrier Truck Travel	5,399
BNSF Rail – NCMT Switching	732
BNSF Rail – Regional Line-Haul	2,360
Worker Trips	1,676
Imported Car Off-loading	213
Van Shuttles	77
Electricity	496
Water	7
<b>Total Baseline</b>	<b>19,149</b>
Source: Appendix E. Totals may not add up exactly due to rounding.	

## 4.2.3 Applicable Laws and Regulations

This section summarizes federal, state, and local regulations related to GHG emissions, climate change, and energy resources that are applicable to the proposed project.

### **4.2.3.1 International Regulations**

#### **International Maritime Organization International Convention for the Prevention of Pollution from Ships Annex VI**

The International Maritime Organization International Convention for the Prevention of Pollution from Ships amended Annex VI in 2011 to include fuel economy and GHG requirements. The new Chapter 4 includes requirements for energy efficiency for ships and makes mandatory the Energy Efficiency Design Index for new ships, and the Ship Energy Efficiency Management Plan for all ships. The regulations apply to all ships of 400 gross tonnage and became effective January 1, 2013, with certain exceptions.

### **4.2.3.2 Federal**

Climate change is widely recognized as an imminent threat to the global climate, economy, and population. The U.S. Environmental Protection Agency (EPA) has acknowledged potential threats imposed by climate change in a Cause or Contribute Finding, which found that the GHG emissions contribute to pollution that threatens public health and welfare and was a necessary finding prior to adopting new vehicle emissions standards that reduce GHG emissions. Federal climate change regulation under the federal Clean Air Act (CAA) is also currently under development for both existing and new sources. Despite the actions discussed below, there is still no comprehensive, overarching federal law specifically related to the reduction of GHG emissions.

#### **Update to Corporate Average Fuel Economy Standards (2009/2012)**

The Corporate Average Fuel Economy (CAFE) standards incorporate stricter fuel economy standards promulgated by the State of California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25% by 2016.

EPA, the National Highway Traffic Safety Administration (NHTSA), and ARB issued joint Final Rules for CAFE standards and GHG emissions regulations for 2017 to 2025 model year passenger vehicles, which require an industry-wide average of 54.5 miles per gallon (mpg) in 2025.

#### **EPA Clean Power Plan (2015)**

On June 2, 2014, EPA, under President Obama's Climate Action Plan, proposed the Clean Power Plan, which includes national GHG limits for the electric power industry. The rule was adopted on August 3, 2015 and contains State-specific emission-reduction goals and will help cut carbon pollution from the power sector by 32% from 2005 levels by 2030. On February 9, 2016, the Supreme Court issued a stay regarding implementation of the Clean Power Plan pending judicial review.

#### **EPA and NHTSA Fuel Economy for Medium and Heavy Duty Engines and Vehicles (2011/2015)**

On August 9, 2011, EPA and NHTSA announced a new national program to reduce GHG emissions and improve fuel economy for new medium- and heavy-duty engines and vehicles sold in the U.S. EPA and NHTSA finalized a joint rule (Phase 1) that established a national program consisting of new standards for engines in model years 2014 through 2018, which would reduce CO<sub>2</sub> emissions

by about 270 million metric tons and save about 530 million barrels of oil over the life of vehicles built for the 2014 to 2018 model years.

EPA and NHTSA are currently working on Phase 2 standards, which would reduce CO<sub>2</sub> emissions associated with model year 2018 and beyond, reducing fuel consumption and GHG emissions from tractor trailers as much as 24% once fully implemented. The Notice of Proposed Rulemaking was issued in June 2015, and the final rule is expected to be issued in spring of 2016.

## **Energy Policy Act of 2005**

The Energy Policy Act of 2005 was intended to establish a comprehensive, long-term energy policy and is implemented by the U.S. Department of Energy. The Energy Policy Act addresses energy production in the U.S., including oil, gas, coal, and alternative forms of energy, and energy efficiency and tax incentives. Energy efficiency and tax incentive programs include credits for the construction of new energy-efficient homes, production or purchase of energy-efficient appliances, and loan guarantees for entities that develop or use innovative technologies that avoid the production of GHGs.

### **4.2.3.3 State**

California has adopted statewide legislation addressing various aspects of climate change, GHG mitigation, and energy efficiency. Much of this establishes a broad framework for the State's long-term GHG and energy reduction goals and climate change adaptation program. The former and current governors of California have also issued several EOs related to the State's evolving climate change policy. Summaries of key policies, EOs, regulations, and legislation at the State level that are relevant to the project are provided below.

#### **Executive Order S-03-05 (2005)**

EO S-03-05 is designed to reduce California's GHG emissions to (1) 2000 levels by 2010, (2) 1990 levels by 2020, and (3) 80% below 1990 levels by 2050.

#### **Executive Order B-16-2012 (2012)**

EO B-16-2012 establishes benchmarks for reducing transportation-related GHG emissions. It requires agencies to implement the Plug-in Electric Vehicle Collaborative and California Fuel Cell Partnership by 2015 and sets forth targets specific to the transportation section, including the goal of reducing transportation-related GHG emissions to 80% less than 1990 levels.

#### **Executive Order B-30-15 (2015)**

EO B-30-15 established a medium-term goal for 2030 of reducing GHG emissions by 40% below 1990 levels and requires ARB to update its current AB 32 Scoping Plan to identify the measures to meet the 2030 target. The executive order supports EO S-03-05, described above, but is currently only binding on State agencies. However, there are current (2015/2016) proposals (i.e., Senate Bill [SB] 32) at the State legislature to adopt a legislative target for 2030.



### **Senate Bill 350 (2015)**

SB 350 (De Leon, also known as the “Clean Energy and Pollution Reduction Act of 2015”) was approved by the California legislature in September 2015 and signed by Governor Brown in October 2015. Its key provisions are to require the following by 2030: (1) an RPS of 50% and (2) a doubling of efficiency for existing buildings.

### **Assembly Bill 1493, Pavley Rules (2002, Amendments 2009, 2012)**

Known as Pavley I, AB 1493 provided the nation’s first GHG standards for automobiles. AB 1493 required ARB to adopt vehicle standards that will lower GHG emissions from new light-duty autos to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as *Pavley II* and now referred to as the *Advanced Clean Cars* [ACC] measure) was adopted for vehicle model years 2017–2025 in 2012. Together, the two standards are expected to increase average fuel economy to roughly 54.5 mpg in 2025.

### **Assembly Bill 2076, Reducing Dependence on Petroleum**

The CEC and ARB are directed by AB 2076 (passed in 2000) to develop and adopt recommendations for reducing dependence on petroleum. A performance-based goal is to reduce petroleum demand to 15% less than 2003 demand by 2020.

### **Senate Bills 1078/107/X 1-2, Renewables Portfolio Standard and Renewable Energy Resources Act (2002, 2006, 2011)**

SBs 1078 and 107, California’s RPS, obligated investor-owned utilities, energy service providers, and Community Choice Aggregations to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached by 2010. The California Public Utilities Commission and CEC are jointly responsible for implementing the program. SB X 1-2, called the California Renewable Energy Resources Act, obligates all California electricity providers to obtain at least 33% of their energy from renewable resources by 2020. As of 2013, SDG&E’s renewable procurement was 23.6%. As noted above, SB 350 increased the RPS to 50% for 2030.

### **Assembly Bill 32, California Global Warming Solutions Act (2006)**

AB 32 codified the State’s GHG emissions target by requiring California’s global warming emissions to be reduced to 1990 levels by 2020. Since being adopted, ARB, CEC, the California Public Utilities Commission, and the California Building Standards Commission have been developing regulations that will help the State meet the goals of AB 32 and EO S-03-05. The scoping plan for AB 32 identifies specific measures to reduce GHG emissions to 1990 levels by 2020 and requires ARB and other State agencies to develop and enforce regulations and other initiatives to reduce GHG emissions. The AB 32 Scoping Plan, first adopted in 2008, comprises the State’s roadmap for meeting AB 32’s reduction target. Specifically, the scoping plan articulates a key role for local governments by recommending that they establish GHG emissions-reduction goals for both their municipal operations and the community that are consistent with those of the State (i.e., approximately 15% below current levels) (ARB 2008).

ARB re-evaluated its emissions forecast in light of the economic downturn and updated the projected 2020 emissions to 545 million metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>). Two reduction measures (Pavley I and RPS [12–20%]) that were not previously included in the 2008

scoping plan baseline were incorporated into the updated baseline, further reducing the 2020 statewide emissions projection to 507 million MTCO<sub>2</sub>e. The updated forecast of 507 million MTCO<sub>2</sub>e is referred to as the AB 32 2020 baseline. An estimated reduction of 80 million MTCO<sub>2</sub>e is necessary to lower statewide emissions to the AB 32 target of 427 million MTCO<sub>2</sub>e by 2020 (ARB 2014).

ARB approved the *First Update to the Scoping Plan* on May 22, 2014 (ARB 2014). The first update includes both a 2020 element and a post-2020 element. The 2020 element focuses on the state, regional, and local initiatives that are being implemented now to help the State meet the 2020 goal. ARB is currently working on a second update to the Scoping Plan to reflect the 2030 target established in EO B-30-15, noting that “California has already made great progress in driving the development of clean technologies thanks to programs developed under AB 32 and other important Legislation; the 2030 target will ensure that success continues beyond 2020” (ARB 2015b). ARB is expecting to present the final 2030 Target Scoping Plan to the board in late 2016.

### **Executive Order S-01-07, Low Carbon Fuel Standard (2007)**

EO S-01-07, the Low Carbon Fuel Standard (LCFS), mandates (1) that a statewide goal be established to reduce the carbon intensity of California’s transportation fuels by at least 10% by 2020, with a reduction in the carbon content of fuel by a quarter of a percent starting in 2011, and (2) that a low carbon fuel standard for transportation fuels be established in California. The EO initiates a research and regulatory process at ARB. The LCFS regulation does not apply to certain transportation applications, including locomotives and Ocean-Going Vessels (OGVs). Note that the majority of the emissions benefits due to the LCFS come from the production cycle (upstream emissions) of the fuel rather than the combustion cycle (tailpipe). As a result, LCFS-related reductions are not included in this analysis of combustion-related emissions of CO<sub>2</sub>.

### **Senate Bill 375—Sustainable Communities Strategy (2008)**

SB 375 provides for a new planning process that coordinates land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires regional transportation plans (RTPs), developed by metropolitan planning organizations, to incorporate a “sustainable communities strategy” (SCS). The goal of the SCS is to reduce regional vehicle miles traveled through land use planning and consequent transportation patterns. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development.

The final reduction targets from ARB require the San Diego Association of Governments (SANDAG) to identify strategies to reduce per capita GHG emissions from passenger vehicles by approximately 7% by 2020 and 13% by 2035 over base year 2005. SANDAG’s 2050 RTP and SCS, which detail steps the region will take to reduce GHG emissions to State-mandated levels, were originally adopted by SANDAG on October 28, 2011 (SANDAG 2011). However, due to a legal challenge to the CEQA document for the RTP/SCS, the RTP/SCS was revised and adopted by SANDAG on October 9, 2015 (SANDAG 2015).

### **Cap-and-Trade (2012)**

On October 20, 2011, ARB adopted the final cap-and-trade program for California. The California cap-and-trade program is a market-based system with an overall emissions limit for affected sectors. Examples of affected entities include CO<sub>2</sub> suppliers, in-state electricity generators, hydrogen

production, petroleum refining, and other large-scale manufacturers and fuel suppliers. The cap-and-trade program is currently regulating more than 85% of California's emissions. Compliance requirements began according to the following schedule: (1) electricity generation and large industrial sources (2012) and (2) fuel combustion and transportation (2015). Cap-and-trade allowance auction proceeds are used to fund a variety of investments. The first 3-year investment plan prioritizes (1) sustainable communities and clean transportation (including low-carbon freight equipment with specific emphasis on efforts that would be beneficial for disadvantaged communities located near ports, railyards, freeways, and distribution centers), (2) energy efficiency and clean energy, and (3) natural resources and waste diversion (ARB 2013a).

## CEQA Guidelines

### Sections 15064.4, 15126.4, and 15183.5

The State CEQA Guidelines require lead agencies to describe, calculate, or estimate the amount of GHG emissions that would result from a project. Moreover, the State CEQA Guidelines emphasize the necessity to determine potential climate change effects of a project and propose mitigation as necessary. They do not prescribe or recommend a specific analysis methodology or provide quantitative criteria for determining the significance of GHG emissions. However, the State CEQA Guidelines do confirm the discretion of lead agencies to determine appropriate significance thresholds, but require the preparation of an EIR if "there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with adopted regulations or requirements" (Section 15064.4).

State CEQA Guidelines Section 15126.4 includes considerations for lead agencies related to feasible mitigation measures to reduce GHG emissions, which may include, among others, measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision; implementation of project features, project design, or other measures that are incorporated into the project to substantially reduce energy consumption or GHG emissions; offsite measures, including offsets that are not otherwise required, to mitigate a project's emissions; and measures that sequester carbon or carbon-equivalent emissions.

State CEQA Guideline Section 15183.5(a) provides that a lead agency may analyze and mitigate significant effects of GHG emissions at a programmatic level, such as in a plan targeted to reduce GHG emissions. Additionally, the section allows for tiering off and incorporating by reference the environmental analysis done for such plans.<sup>8</sup> Subdivision (b) of Section 15183.5 also states that a plan to reduce GHG emissions may be used to find that a project's incremental contribution to the cumulative effect of GHG emissions is not cumulatively considerable if the project complies with the adopted plan and mitigation program. Subdivision (b) of Section 15183.5 provides that such a plan should (1) quantify GHG emissions over a specific time period resulting from activities within a defined geographic area; (2) establish a level below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; (3) identify and analyze GHG emissions resulting from specific actions or categories of actions within the defined geographic area; (4) specify measures or a group of measures, including performance standards, that if implemented on a project-by-project basis would collectively achieve the specified emissions level; (5) establish a mechanism to monitor the plan's progress; and (6) be adopted in a public process following environmental review. Such plans may be used in the cumulative impact analysis of later projects,

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<sup>8</sup>Note that this analysis does not tier off or rely on any previous CEQA analysis conducted for a GHG plan.

but such later project analysis must identify those requirements specified in the plan that apply to the project and, if those requirements are not otherwise binding and enforceable, incorporate them as mitigation measures.

## **Appendix F**

CEQA requires EIRs to include a discussion of potential energy impacts and energy conservation measures. Appendix F, Energy Conservation, of the State CEQA Guidelines outlines energy impact possibilities and potential conservation measures designed to assist in the evaluation of potential energy impacts of proposed projects. Appendix F places “particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy,” and further indicates this may result in an unavoidable adverse effect on energy conservation. Moreover, the State CEQA Guidelines state that significant energy impacts should be “considered in an EIR to the extent relevant and applicable to the project.” Mitigation for potential significant energy impacts could include implementing a variety of strategies, such as measures to reduce wasteful energy consumption and alteration of project siting to reduce energy consumption.

### **Tractor-Trailer Greenhouse Gas Regulation (2013)**

ARB approved the Tractor-Trailer Greenhouse Gas Regulation to reduce GHG emissions by requiring the use of aerodynamic tractors and trailers that are also equipped with low rolling resistance tires. The regulation applies to certain Class 8 tractors manufactured for use in California and is harmonized with the parallel EPA and NHTSA heavy-duty truck standards. This regulation could reduce fuel consumption and GHG emissions from new heavy-duty trucks between 4 and 5% per year between 2014 and 2018 (EPA 2015b). Upon EPA and NHTSA’s adoption of Phase 2, ARB plans to approve the California Phase 2 program in late 2016 or 2017.

### **ARB Regulation to Reduce Emissions from Diesel Auxiliary Engines on OGVs While at Berth at a California Port**

As discussed in Section 4.1, *Air Quality and Health Risk*, ARB has adopted at-berth regulations that require that auxiliary diesel engines on OGVs (while at berth for container, passenger cruise, and refrigerator cargo vessels) be shut down for specified percentages of a fleet’s visits and also for the fleet’s at-berth auxiliary engine power generation to be reduced by the same percentages. Vessels can either plug into the electrical grid (i.e., shore power, otherwise known as cold-ironing or alternative maritime power) or use an alternative emission control device. The law sets compliance percentages that phase in over time. By 2014, vessel operators were required to shut down their auxiliary engines at berth for 50% of the fleet’s vessel visits and also reduce their onboard auxiliary engine power generation by 50%. The specified percentages will increase to 70% in 2017 and 80% in 2020. Vessel operators can also choose an emissions reduction equivalency alternative; the regulation requires a 10% reduction in OGV hoteling emissions starting in 2010, increasing to an 80% reduction requirement by 2020 (ARB 2007). Note that in developing the at-berth regulation, ARB weighed three main factors in evaluating a vessel category: the frequency with which a vessel visited a port; the time a vessel stays in port; and the power usage while docked. Based on this criteria, the At-Berth Regulation affects only container ships, passenger ships, and refrigerated-cargo ships at Los Angeles, Long Beach, Oakland, San Diego, San Francisco, and Hueneme (ARB 2013b). As noted, this regulation does not apply to auto carrier vessels such as those that call at NCMT or general cargo vessels, which only periodically call at NCMT.

## ARB Sustainable Freight Transport

As discussed in Section 4.1, *Air Quality*, ARB is working on various strategies to improve freight efficiency, transition to zero-emission technologies, and increase the competitiveness of California's freight system. The integrated action plan, called the California Sustainable Freight Action Plan, will also identify State policies, programs, and investments to achieve these targets. The plan will be informed by existing State agency strategies, including the *California Freight Mobility Plan*, *Sustainable Freight: Pathways to Zero and Near-Zero Emissions Discussion Document*, and *Integrated Energy Policy Report*, as well as broad stakeholder input. Specifically, the *Sustainable Freight: Pathways to Zero and Near-Zero Emissions Discussion Document* sets out ARB's vision of a clean freight system, together with the immediate and near-term steps that ARB will take to support use of zero and near-zero emission technology to improve air quality and help the State meet its GHG reduction targets.

### 4.2.3.4 Regional

The AB 32 Scoping Plan does not provide an explicit role for local air districts in implementing AB 32, but it does state that ARB will work actively with air districts in coordinating emissions reporting, encouraging and coordinating GHG reductions, and providing technical assistance in quantifying reductions. The ability of air districts to control emissions (both criteria pollutants and GHGs) is provided primarily through permitting as well as through their role as CEQA lead or commenting agency, the establishment of CEQA thresholds, and the development of analytical requirements for CEQA documents. To date, the San Diego Air Pollution Control District has not developed specific thresholds of significance with regard to addressing the GHG emissions in CEQA documents.

### 4.2.3.5 Local

#### Port of San Diego Clean Air Program

The District developed the Green Port Program to support the goals of the Green Port Policy, which was adopted in 2008. The Green Port Program supports resource conservation, waste reduction, and pollution prevention. The Clean Air Program is one key area of the Green Port Program, with the primary goal of reducing GHG emissions and other air emissions from Port operations at its three marine terminals: the Cruise Ship Terminal, Tenth Avenue Marine Terminal, and NCMT. The Clean Air Program seeks to voluntarily reduce emissions through the identification and evaluation of feasible and effective control measures. Through this program, the District has identified control measures to achieve a reduction of pollutants from the largest sources, including shore power (to enable ships to turn off their auxiliary engines and plug into electric power while docked), truck replacement/retrofits, replacement/retrofits of cargo handling equipment (CHE), and vessel speed reductions (VSR). The Clean Air Program will continue to be refined and adapted to future changes in District operations.

The District and SDG&E have also established a partnership to increase energy efficiency and reduce overall energy consumption. SDG&E currently allocates a portion of funds collected from utility customers to energy efficiency programs with local governments. The District uses some of those funds to develop energy efficiency education programs, track energy consumption, perform energy

audits, and implement energy retrofits. The District's energy efficiency programs benefit employees, tenants, and the general public.

## Climate Action Plan

As noted above in Section 4.2.3.3, ARB encourages local governments to adopt a reduction goal for municipal operations emissions and move toward establishing similar goals for community emissions that parallel the State's commitment to reducing GHG emissions (ARB 2008). The District adopted a CAP in December 2013. The CAP includes an inventory of existing (2006) and projected emissions in 2020, 2035, and 2050 and identifies the District's GHG reduction goals and measures to be implemented to support meeting the statewide reduction goals set forth in AB 32 (1990 levels by 2020). Port-wide 1990 emissions were not quantified given activity data gaps; instead, a base year of 2006 was used to calculate reductions needed at the Port to reach 1990 levels by 2020. Consistent with AB 32 targets, a 10% reduction target (471.3 million MTCO<sub>2</sub>e in 2006 and estimated 426.6 million MTCO<sub>2</sub>e in 1990 statewide) was used as the Port-wide reduction target for 2020.<sup>9</sup>

The CAP's 2020 projections and reduction targets (1990 levels) for each activity are based on the growth projections specific to each tenant and activity type. For example, the CAP assumes a 3% annual growth in maritime-related uses between 2006 and 2020. Thus, the CAP and its reduction targets are specific to the District's geography, type and intensity of uses, and future year projected conditions. Table 4.2-5 provides the CAP's 2006 baseline, projected future year (2020) GHG emissions, and future year GHG emission targets (1990 levels) by activity within the District's jurisdiction. As shown, maritime-related emissions, the activity type the proposed project falls within, are expected to increase from 224,845 MTCO<sub>2</sub>e in 2006 to 300,897 MTCO<sub>2</sub>e in 2020 without implementation of any CAP or State measures. In order to reach the CAP's target of achieving 202,880 MTCO<sub>2</sub>e by 2020 (1990 levels), District maritime-related GHG emissions would need to be reduced by 33% below 2020 business-as-usual (BAU) levels.<sup>10</sup> To achieve the requisite reductions, the CAP includes various reduction measures related to transportation and land use, alternative energy generation, energy conservation, waste reduction and recycling, and water conservation and recycling, several of which are specific to the maritime sector.<sup>11</sup>

A critical aspect of having a CAP that fits the criteria within State CEQA Guidelines Section 15183.5 is to have reduction targets that align with statewide goals. The CAP's reduction targets parallel the State's commitment to reducing GHG emissions in AB 32, and go even further by identifying targets for a specific location based on projected emissions specific to the Port of San Diego's geographic location as well as specific activity types and their associated sources. Therefore, because the CAP targets align with statewide goals, the CAP is consistent with AB 32.

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<sup>9</sup> The CAP also includes projected emissions and some reduction policies to achieve the reduction target of 25% less than 2006 baseline levels by 2035, but does not yet quantify those reductions.

<sup>10</sup> Unlike ARB's BAU targets, which are statewide percentage targets, these targets are specific to the District in order to meet the CAP's 2020 goal and AB 32's reduction requirement.

<sup>11</sup> Measures specific to the maritime sector are listed and analyzed in Table 4.2-8 below, in Section 4.2.4, *Project Impact Analysis*.

**Table 4.2-5. GHG Emissions (Metric Tons per Year) by Activity Shown in the CAP**

Category	Activity	GHG Emissions By Category and District Activity Type			Percentage Reduction to Achieve 1990 Levels – Specific to the District	
		2006 Baseline	2020 BAU	1990 <sup>a</sup> Levels	2006 Baseline	2020 BAU
Port Operations	Port Operations	37,164	38,930	33,533	10%	14%
Maritime	Ocean Going Vessels	55,162	72,786	49,773	10%	32%
	Recreational Boating	80,441	118,252	72,583	10%	39%
	Other Terminal Activity <sup>b</sup>	89,242	109,859	80,524	10%	27%
	<b>Total Maritime</b>	<b>224,845</b>	<b>300,897</b>	<b>202,880</b>	<b>10%</b>	<b>33%</b>
Other	Industrial	137,426	138,258	124,001	10%	10%
	Shipbuilding	123,725	123,545	111,638	10%	10%
	Lodging	137,429	249,852	124,004	10%	50%
	Other	165,840	188,217	149,639	10%	20%
	<b>Total Other</b>	<b>564,420</b>	<b>699,872</b>	<b>509,282</b>	<b>10%</b>	<b>27%</b>
<b>Total Port-wide</b>		<b>826,429</b>	<b>1,039,699</b>	<b>745,695</b>	<b>10%</b>	<b>28%</b>

Source: Table ES-2 of the CAP (District 2013)

<sup>a</sup> The CAP only presents the 2020 target (1990 levels) for broad source types (electricity & natural gas, transportation, water, and waste) and does not clearly present the emissions target for each activity (OGVs, shipbuilding, etc.) in the main body of the CAP. However, these emission estimates are presented in the CAP appendices (Table ES-2). To calculate the reductions needed from maritime-specific sources, the same methodology was used in the CAP using information in the CAP appendices; 2006 levels were reduced by approximately 10% to get to 1990 emission estimates. This allows for percentage reductions below 2020 levels to be calculated and used as the performance-based standard herein.

<sup>b</sup> “Other Terminal Activity” includes cargo handling equipment, commercial harbor craft, locomotives, heavy-duty trucks (for transport of goods to/from OGVs), cruise terminal transportation, and terminal tenant operations.

## 4.2.4 Project Impact Analysis

### 4.2.4.1 Methodology

GHG impacts associated with construction and operation of the project were assessed and quantified using standard and accepted software tools, techniques, and emission factors. A summary of the methodology is provided below. A full list of assumptions and emission calculations can be found in Appendix E. Note that the methodology used to estimate GHG emissions discussed below is the same that was used to estimate air quality emissions, as described in Section 4.1, *Air Quality and Health Risk*, with the exception of electricity- and water-related emissions.

## Greenhouse Gases

### Construction

Construction of the proposed project would result in the short-term generation of GHG emissions. Construction of the proposed project is expected to occur in 2016 and take approximately 7 weeks to complete. Construction would include site demolition, site grading, utility work, paving, and finishing (e.g., paints, curbs), and emissions would be generated from onsite equipment, material haul and delivery truck travel to and from the site, and worker trips to and from the site.

Emissions were estimated based on a construction phasing schedule and details regarding the types and numbers of construction equipment, haul, delivery, and employee vehicle trips, and material volumes obtained from the project applicant. Site grading would include 22,500 cubic yards of excavated cut from the tank farm site. While the excavated soils would likely be used as fill on the adjacent Quay Avenue and 28th Street to match the surrounding grade, this analysis conservatively assumes the soil would be hauled to a disposal location off site, which would result in higher emissions than using onsite equipment to reuse the dirt for balancing. This analysis assumes that the dirt would require 1,406 haul truck loads assuming a 20-ton (16-cubic-yard) truck capacity. Demolition would include up to 1,200 cubic yards of concrete from the street closure sites, and the materials would include 190 cubic yards of export and 12 haul truck loads during demolition assuming a 20-ton (16-cubic-yard) truck capacity. Demolition of the former Weyerhaeuser site would result in 267,457 square feet of debris and would require 1,222 haul truck loads. All hauling emissions assume a 20-ton (16-cubic-yard) truck capacity. It was assumed that each piece of equipment would be active for 8 hours per day. Construction emissions are summed and amortized over the expected life of the project (assumed to be 20 years), consistent with industry standards and the life of the project.

### Operation

Once operational, the proposed project could result in the long-term generation of GHG emissions in different quantities than existing conditions depending on Pasha's throughput. Exhaust-related GHG emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions would result from activity associated with increased throughput, including increased vessel activity; increased rail activity; increased auto-carrier truck travel; increased activity to unload, repair, and process cars; and additional worker trips. A description of each of these sources and associated emissions modeling are provided below. In addition to the same sources analyzed in Section 4.1, CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions would also result from increased electricity and water consumption at the project site associated with the increased throughput. Baseline and future year activity is based on the activity at NCMT including rail and truck activity associated with operation of the NCMT in 2013 and annual vessel activity and fleet mix associated with operation of the NCMT in 2014.<sup>12</sup> It was assumed that the project would be fully operational in 2016. Although the expected maximum throughput is not anticipated to be reached immediately, for a conservative analysis, emissions for all source categories assume that maximum terminal throughput would be reached immediately; therefore, emissions do not assume an incremental increase in activity over time.

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<sup>12</sup> The Notice of Preparation (NOP) was issued in December 2014. A revised NOP was circulated in August 2015 to address additions to the proposed project. Therefore, the 2014 calendar year represents the most recent full calendar year at the time the analysis was prepared.



## Ocean-Going Vessels

OGV emissions result primarily from three activities: transit, maneuvering, and hoteling. Transit occurs within both the outer unrestricted speed zone and within the vessel speed reduction zone to the Whistle Buoy.<sup>13</sup> Maneuvering includes movement and maneuvering within the harbor until the vessel anchors. Hoteling occurs once the ship is at berth. During hoteling, the vessel is stationary at the dock/berth, typically during loading and unloading of cargo. The vessel is typically still active, operating boilers and providing the ship's power needs either by running on-board auxiliary engines or by cold ironing (utilizing at-berth shore power), but the vessel's propulsion engines are not operating.

OGVs that call on NCMT are predominantly auto carriers, which transport vehicles. Auto carrier vessels have drivable ramps and can have substantial ventilation systems to prevent vehicle fuel vapors from pooling in the lower decks. Auto carriers are the most numerous callers to the Port as a whole and predominantly visit NCMT, while historically auto carriers have periodically but infrequently visited the Tenth Avenue Marine Terminal as well.

Transit and maneuvering emissions under existing and project conditions were assumed to be similar, as speeds and time in transit and maneuvering modes are not proposed to be changed under project conditions. While hoteling at berth, auto carrier vessels run auxiliary engines for power needs (for lights and fans) and boilers (for maintaining fuel temperature). The project is not expected to increase vessel calls or change the composition of vessels that currently visit the terminal. Rather, the analysis assumes the vessels will be at full capacity, but not require additional vessel calls. However, it stands to reason that as the amount of cargo to be unloaded from each call increases, so too does the amount of time that vessels remain at berth. Therefore, because auxiliary and boiler engines run while vessels are docked, emissions from these sources would increase under project conditions. Note that shore power infrastructure does not currently exist at NCMT and auto carriers are not subject to ARB's shore power regulation.

The sizes of vessels calling at the terminal has increased over the years such that more vehicles can be transported with fewer ships. As new vessels are built, they will be built to comply with more stringent emission standards (higher Tier) and the average capacity of vessels should continue to increase. The current vessel fleet that visits NCMT is a mix of Tier 0 (31% of fleet), Tier 1 (66% of fleet), and Tier 2 (3% of fleet) vessels. The Tier 0 vessels are smaller and are docked at berth for a shorter duration (average of 10,986 kW main engine power, 2,703 auxiliary engine power, 13.87 hours per call, 5,183-car capacity) than typical Tier 1 vessels (average of 13,821 kW main engine power, 3,162 auxiliary engine power, 15.76 hours per call, 5,347-car capacity) and Tier 2 vessels (average of 13,010 kW main engine power, 4,215 auxiliary engine power, 13.19 hours per call, 5,602-car capacity). Emissions associated with changes in OGV activities were estimated based on (1) ARB's OGV methodology for transit, maneuvering, and hoteling load factors and main, auxiliary, and boiler engine CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emission rates (ARB 2011), (2) the Port of Long Beach's Inventory for estimating boiler load (Port of Long Beach 2015), and (3) vessel activity and VSR data obtained from the District. Note that unlike criteria pollutants, GHG emission rates do not vary by engine tier, but instead only vary based on activity (including horsepower, transit speeds, and hotel time), which do vary by engine tier and vessel size (e.g., newer vessels are larger and have more main and auxiliary engine horsepower). Therefore, GHG emission rates per level of activity (g/kW-

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<sup>13</sup> The Whistle Buoy is used to mark a maritime administrative area to allow boats and ships to navigate safely and near where the San Diego Bay Pilots will board and leave a vessel. Located at latitude 32° 37.3'N, and longitude 117° 14.7'W.

hr) for existing Tier 0, Tier 1, and Tier 2 vessels do not vary, but emissions do change due to the changes in activity.

The increase in hoteling time for the vessels was estimated based on the projected increase in throughput under full buildout with project conditions (210,818-vehicle projected increase with the project over the 361,372 cars processed in 2013). Using this 58% multiplier, average hoteling time is expected to increase by approximately 6.5 hours per call. The analysis includes round-trip vessel emissions within the air basin based on the last and next port of call in the vessel call data. Trip distances for each direction (north, south, and west) within the VSR zone and air basin were assigned based on information in the District's inventory, which set the basin consistent with the ARB limit for rulemaking and the National Oceanic and Atmospheric Administration Contiguous Zone and the VSR zone at 20 nautical miles from the California baseline.<sup>14</sup> A detailed methodology describing vessel calculations is provided in Appendix E.

### **Auto Carrier Trucks**

Based on estimates from the project applicant and historical operational characteristics, it is assumed that 55% of the cars imported via vessel would be transported via truck while the remaining 45% would be transported via rail. It is also assumed that shipping operations would occur 365 days per year (Appendix G).

Auto carrier truck activity is split into three groups: idling at or near the terminal, driving between the terminal and nearest freeway entrance, and driving regionally on public roadways. Emissions associated with auto carrier trips were estimated using trip generation from the traffic analysis (Appendix G) and idling and running exhaust emission factors for the drayage truck (T7 Other Port) vehicle category from EMFAC. Emissions from idling at the loading area near the terminal are based on an average idling time of 1.5 hours per truck as shown in the Port's most recent air emissions inventory (District 2014). Emissions from travel between the terminal and nearest freeway entrance are based on a 1.2-mile travel distance as shown in the Port's most recent air emissions inventory (District 2014), assuming a 20 mph travel speed on Bay Marina Drive. Emissions from regional travel are based on the assumption that all trucks travel the 60-mile one-way travel distance to the Riverside County line.<sup>15</sup> Daily truck activity under existing conditions was estimated to be 68 one-way truck trips per day and 24,820 one-way truck trips per year, assuming 545 imported cars are currently processed per day via truck and 8 cars fit on each auto carrier truck. It was assumed that the project would add up to 40 new one-way truck trips per day and 14,600 one-way truck trips year, assuming 365 days of truck activity per year, based on information from the traffic analysis (Appendix G).

### **Rail**

Trains servicing the NCMT are operated by BNSF. As stated above, it assumed that 45% of the imported cars would be shipped via rail and shipping operations would occur 365 days per year (Appendix G).

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<sup>14</sup> "Baseline" means the mean lower low water line along the California coast, as shown on the National Oceanic and Atmospheric Administration Nautical Charts.

<sup>15</sup> As the CEQA thresholds used in the impact analysis are regional and relate to the attainment status of air quality standards within San Diego County, haul truck trip emissions were confined to those occurring within the county.

Rail activity is split between onsite switching at the terminal (to build and break down trains) and regional travel. BNSF line-haul locomotives are currently used to break down and assemble trains at the NCMT. The emission calculation methodologies are adapted from the emission inventories at the Port of San Diego (District 2014) and Port of Long Beach (Port of Long Beach 2013), using switch duty and Class 1 line-haul notch time and power fraction from EPA's locomotive rulemaking support document to estimate switching and line-haul load factor (EPA 1998, 2009) and GHG emissions factors from the Port of Long Beach emission inventory (Port of Long Beach 2015). The simplified methodology for estimating both onsite switching and regional travel emissions is as follows.

- Switch-duty emissions at NCMT = locomotive switch-duty hours x total locomotive horsepower x switch-duty load factor x switch-duty emission factors (in grams per horsepower-hour [g/hp-hr]), and
- Regional line-haul emissions = locomotive hours operating regionally x total locomotive horsepower x line-haul load factor x line-haul emission factors (in g/hp-hr).

The increase in activity (locomotive hours) is based on the assumption that loaded trains include four active (running) locomotives, empty trains include two active (running) locomotives, BNSF locomotives are 4,400 horsepower on average, existing trains run 6 days per week (Monday through Saturday), assuming a new train is loaded and run every Sunday throughout the year as a result of project implementation. Annually, this results in a net new increase of 50 round-trip trains per year based on current annual use (50 work weeks per year and 350 working days per year). See Appendix H for the rail activity assumptions calculation sheets.

### Mobile Railcar Mover

In anticipation of the increase in throughput that may be achieved with the proposed project, Pasha would add a mobile railcar mover<sup>16</sup> to provide switching work to break down and assemble trains at the NCMT. A railcar mover is equipment that is capable of traveling on both roads and rail tracks and is designed for moving small numbers of railroad cars around in a rail siding or small yard. In this case, the railcar mover would handle some of the loading and switching duty at NCMT used to move railcars around the terminal, thereby reducing the amount of time line-haul locomotives would operate in switch-duty cycle at the terminal, which would reduce the hours BNSF line-haul locomotives are active at NCMT. Emissions associated with the new mobile railcar mover were estimated based on proposed product specifications (Rail King RK285 G4; 173 horsepower and EPA Tier 3 compliant<sup>17</sup>), assuming the railcar mover operates at full load for 4 hours per day, 365 days per year. GHG emission factors for the railcar mover were obtained from the California Emissions Estimator Model (CalEEMod) (for CO<sub>2</sub>) and the Climate Registry (for CH<sub>4</sub> and N<sub>2</sub>O). The railcar mover is anticipated to displace 2 hours of locomotive switching activity per day. Emissions associated with displaced locomotive activity were estimated using the same switching methodology discussed above.

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<sup>16</sup> A railcar mover is a road-rail vehicle (capable of traveling on both roads and rail tracks) designed for moving small numbers of railroad cars around in a rail siding or small yard. Compared with locomotives, railcar movers are smaller and can provide cost (reduced fuel consumption) and emission savings.

<sup>17</sup> Product specifications for the proposed railcar mover available at:  
<http://www.railking.net/documents/railking.pdf>

### **Car Processing**

Emissions associated with increased car movement on site (moving cars from vessels to locations on site), as well as increased evaporative resting losses (from increased throughput) were estimated based on the sum of internal and external vehicle movement trip generation from the traffic impact analysis (578 trips per day) assuming a 1.5-mile trip length, which is the distance from the vessel location at the terminal to the farthest parking location at the terminal (Port Parcel 025-110), and 365 working days per year. Emission estimates assume that all cars are light-duty automobiles (LDA) and trucks (LDT1 and LDT2), similar to the worker commute assumptions within CalEEMod, consistent with the types of vehicles the terminal processes (cars and light duty trucks).

### **Shuttle Vans**

Emissions associated with increased shuttle van activity within the terminal and project sites (to pick up drivers that move cars from vessels to locations on site) were estimated based on information from the project proponent (150 van movements per day) assuming a 1.5-mile trip length (similar to car processing above) and 365 working days per year. Emission factors were based on the van fleet currently operating on site, which is an average of 2004 model year. Emissions are based on light heavy duty 1 (LHD1) rates from EMFAC.

### **Additional Workers**

Emissions associated with increased worker trips were estimated in CalEEMod based on worker trip generation of 1,083 average daily traffic (ADT) and 395,295 annual trips (361 employees) under existing conditions, with the project adding 636 ADT and 232,140 trips annually (212 employees), based on information from the traffic analysis assuming 365 working days per year and assuming 3 trips per employee to account for vehicle-dependent errands during the work shift (Appendix E).

### **Electricity**

The additional space and throughput at the terminal would result in an increase in electricity consumption, primarily for outdoor lighting. Electricity-related emissions were estimated based on CalEEMod default electricity consumption for a 42.31-acre surface parking lot under existing conditions and 17.35-acre surface area for imported vehicles added by the project. Emissions are based on SDG&E's most recent published emission rate for operating year 2013 and adjustments for the projected RPS in opening year 2016 and year 2020, as well as projected adjustments for 50% renewables by year 2030 (consistent with the RPS from SB 350).

### **Water Use**

The additional throughput would require additional water use to process (i.e., wash) cars as well as additional water for employee use. Energy use associated with water supply was estimated based on 7.5 gallons per day per worker, 4.34 gallons per day per vehicle cleaned, which results in 3,279 gallons per day and 1.2 million gallons per year under existing conditions, with the project adding 1,924 gallons per day and 0.7 million gallons per year. Emissions are based on the same utility emission rates described above in estimating electricity-related emissions.

To obtain annual project-related emissions, projected existing and incremental emissions from all emission sources were summed annually and added to the amortized construction total discussed above.

## GHG Emissions Scenarios

Given EO S-03-05 and EO B-30-15 and the scientific evidence that additional GHG reductions are needed through 2050 to stabilize CO<sub>2</sub> concentrations, project-related impacts for both 2020 (AB 32) and the post-2020 period are considered in the analysis.<sup>18</sup> Specifically, the analysis includes an inventory of baseline GHG emissions without the project and the estimated GHG emissions that the project would contribute for 2016 (opening year), 2020, 2030, and 2040 (the life of the project). The analysis assumes incorporation of features proposed by the project proponent that will be incorporated into the Coastal Development Permit (CDP) as conditions of approval.

## Energy Consumption

The energy analysis for the project evaluates the following sources of energy consumption associated with existing conditions and the proposed project.

- Short-term construction—gasoline and diesel consumed by vehicles and off-road construction equipment.
- Operational power—electricity consumed by the facility, primarily for lighting.
- Operational on-road vehicles—gasoline and diesel consumed by personal automobiles and heavy-duty trucks.
- Operational marine vessels—diesel consumed by marine vessels.
- Operational locomotives—diesel consumed by BNSF locomotives both on-port and regionally.

Energy use associated with fuel consumption during construction and operations (OGVs, trucks, locomotives, worker trips) was calculated by converting GHG emissions predicted by the GHG analysis using the rate of CO<sub>2</sub> emissions emitted per gallon of combusted gasoline (8.78 kilograms/gallon) and diesel (10.21 kilograms/gallon) (Climate Registry 2015). The estimated fuel consumption was converted to BTUs, assuming an energy intensity of 113,927 BTUs per gallon of gasoline and 129,488 per gallon of diesel (Argonne 2015).

Operational electricity consumption under full project buildout (2016) was drawn from the modeling performed to support the GHG analysis (see above). For ease of comparison, electricity consumption was converted to BTUs assuming an energy intensity of 3,416 BTU per kWh (Argonne 2015).

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<sup>18</sup>The Association of Environmental Professionals' Climate Change Committee recommended in the *Beyond 2020: The Challenge of Greenhouse Gas Reduction Planning by Local Governments in California (Beyond 2020)* white paper, incorporated herein by reference, that CEQA analyses for most land use development projects can continue to rely on current thresholds for the immediate future but that general plans and long-term projects should consider "post-2020 emissions consistent with 'substantial progress' along a post-2020 reduction trajectory toward meeting the 2050 target." *Beyond 2020* further recommends that the "significance determination...should be based on consistency with 'substantial progress' along a post-2020 trajectory." This point is further clarified in the more recent *Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California* white paper, that "the best measure of whether an individual project is providing its fair share of GHG reductions or efficiency levels is whether that project is supporting 'substantial progress' toward the statewide reduction targets over time, not whether the project is meeting a milestone target many years in the future, such as for 2050."

#### 4.2.4.2 Thresholds of Significance

Note that climate change is a global problem and GHGs are global pollutants, unlike criteria air pollutants (such as ozone precursors), which are primarily pollutants of regional and local concern. Given their long atmospheric lifetimes, GHGs emitted by countless sources worldwide accumulate in the atmosphere. No single emitter of GHGs is large enough to trigger global climate change on its own. Rather, climate change is the result of the individual contributions of countless past, present, and future sources. Therefore, GHG impacts are inherently cumulative, and the analysis below is a cumulative impact analysis.

#### Greenhouse Gases

The State CEQA Guidelines do not indicate what amount of GHG emissions would constitute a significant impact on the environment. Instead, they authorize the lead agency to consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence (State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)).

A number of agencies throughout the state, including multiple air districts, have drafted and/or adopted varying threshold approaches and guidelines for analyzing GHG emissions and climate change in CEQA documents. However, none of these are binding; they are only recommendations for consideration by CEQA lead agencies. Some commonly used threshold approaches include (1) consistency with a qualified GHG reduction strategy, (2) performance-based reductions,<sup>19</sup> (3) numeric “bright-line” thresholds, and (4) efficiency-based thresholds.

#### Summary of “Newhall Ranch” Supreme Court Decision

The recent California Supreme Court decision in the *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (November 30, 2015, Case No. S217763) (hereafter *Newhall Ranch*), confirmed that the use of BAU analysis (i.e., 29% below business as usual), a performance-based approach, would be satisfactory. However, for a project-level analysis that uses ARB’s statewide BAU targets, substantial evidence must be presented to support the use of those targets for a particular project at a specific location. The Court notes that this may require examination of the data behind the statewide model and adjustment to the levels of reduction from BAU used for project evaluation. To date, neither ARB nor any lead agencies have provided any guidance on how to adjust AB 32’s statewide BAU target for use at the project level.

The *Newhall Ranch* decision suggested several approaches for determining significance of GHG emissions are appropriate as alternatives to the percentage below BAU approach, but did not foreclose other methodologies that may be used by lead agencies. In any case, the decision affirmed that “thresholds only define the level at which an environmental effect ‘normally’ is considered significant; they do not relieve the lead agency of its duty to determine the significance of an impact independently.” Some of the Court’s suggested approaches are introduced next and are discussed more thoroughly in the context of the proposed project below.

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<sup>19</sup> Performance-based reductions include the “percentage below business-as-usual” threshold approach and are generally based solely on statewide targets, which has been used widely in the past. This approach was the subject of the *Newhall Ranch* case and presently is subject to uncertainty until the issues raised by the California Supreme Court ruling are resolved.

- **Consistency with a Qualified GHG Emissions Reduction Plan.** Use of a GHG emission reduction plan consistent with State CEQA Guidelines Sections 15183.5 or 15064.4 for a particular geographic area.
- **Quantitative Thresholds.** Use of a quantitative threshold (such as the Bay Area Air Quality Management District's bright-line threshold).<sup>20</sup>
- **Compliance with Regulatory Programs.** This approach would include an assessment of the project's compliance with regulatory programs designed to reduce GHG emissions from particular activities (e.g., building efficiency, transportation, water usage). To the extent that a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by ARB or other State agencies, the lead agency could appropriately rely on their use as showing that the project is reducing emissions consistent with AB 32 and, thus, that emissions are less than significant.
- **CEQA Streamlining.** Certain land use projects (such as residential, mixed use, and transit priority projects) could use SB 375's expressed allowance for streamlining of transportation impacts based on metropolitan regional SCS to streamline analysis of emissions from cars and light trucks. Under any methodology, the *Newhall Ranch* case recognizes that if GHG emission impacts are still significant after adoption of all feasible mitigation measures and consideration of project alternatives, the lead agency may adopt a statement of overriding considerations with the appropriate findings.

## Applicability of Available Thresholds

In light of the recent *Newhall Ranch* decision, the following section discusses each applicable approach and analyzes its specific applicability to the project.

### Performance-Based Reductions

Performance-based thresholds are based on a percentage reduction from a projected future condition. For example, reducing future BAU emissions by the AB 32 target of 29% (below 2020 BAU levels) through a combination of State measures, project design features (e.g., renewable energy), or mitigation is a performance-based threshold. The performance-based approach is based on the project's reduction in emissions from an unmitigated condition. Other lead agencies have adopted performance-based targets that are all tied to the AB 32 target of achieving 1990 levels by 2020, but the prescribed percentage reduction can vary depending on the version of the Scoping Plan and targets therein that were used. For example, San Joaquin Valley Air Pollution Control District recommends a 29% reduction, which is based on the 2008 Scoping Plan, while Sacramento Metro Air Quality Management District previously recommended a 21.7% reduction from a projected no action taken (NAT) scenario,<sup>21</sup> which is based on the 2011 re-adopted Scoping Plan, whose emission targets vary slightly from 2008 to account for revised estimates for future fuel and energy demand. With the *Newhall Ranch* decision, relating a given project to the achievement of State reduction targets likely requires adjustments to ARB's statewide BAU model not only to isolate new development emissions but also to consider unique geographic conditions that would be

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<sup>20</sup> Note that while *Newhall Ranch* did not explicitly discuss efficiency-based thresholds, they are a form of quantitative threshold and therefore are included in the *Applicability of Available Thresholds* discussion herein.

<sup>21</sup> The NAT scenario does not include any State regulations designed to reduce GHG emissions, including improvements to the Title 24 standards, RPS, LCFS, or Pavley Rules.

required to use the BAU performance-based methodology for a specific project. To date, this type of adjustment to the statewide BAU target has not been formulated and, therefore, is not appropriate for the project's analysis. The primary value of a performance-based target, as indicated in *Newhall Ranch*, is that it can provide a scenario by which to evaluate the effectiveness of a project's efficiency and conservation measures to reduce GHG emissions. As such, future year targets can be used to benchmark performance, using either statewide or regional emission targets, to determine a project's fair share of mitigation.

### **Compliance with a Qualified GHG Reduction Plan**

Under this approach, a qualified plan may be used in the cumulative impact analysis for later projects when the analysis "identifies those requirements specified in the plan that apply to the project." For a GHG reduction plan to be considered a qualified plan, it must meet certain criteria established under State CEQA Guidelines Sections 15183.5 (b) and 15064.4, also specified above. Consequently, if a project is consistent with a local CAP that was created to meet AB 32's GHG targets, then the project would be considered consistent with statewide GHG reduction goals for 2020. Additionally, if a CAP was adopted that was consistent with the State's overall goals for post-2020, including the downward trajectory as clarified in EO B-30-15 and EO S-03-05, and a project is consistent with that CAP, it would be considered consistent with the State's post-2020 GHG emission strategy. Section 15183.5 also specifies that the project's CEQA analysis "must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project." The District adopted a CAP in 2013 that sets forth GHG 2020 and 2035 reduction targets and reduction measures to achieve these targets.

For 2020, the CAP meets the requirements of State CEQA Guidelines Section 15183.5 as specified in Appendix A of the CAP. The CAP quantifies existing and projected GHG emissions by sectors<sup>22</sup> and activity type,<sup>23</sup> as well as identifies and analyzes GHG emission reductions from the same time period within the District. The CAP establishes a 10% reduction goal for the District for 2020, below which the contribution of GHG emissions from activities covered by the plan would not be cumulatively considerable. The GHG emission reduction goal and measures also serve as the CAP's performance standards, with accompanying reduction targets or performance standards across six categories.<sup>24</sup> The CAP also specifies measures that, if implemented on a project-by-project basis, collectively achieve the GHG reduction goals for the District.<sup>25</sup> The plan and its effectiveness are regularly monitored through a process known as *adaptive management* to ensure that it is achieving the GHG reduction goals.<sup>26</sup> The CAP was adopted through a lengthy public process and a CEQA exemption was adopted by the District (with an initial study) prior to the CAP's adoption. For the proposed project, consistency with the CAP is appropriate for 2020 to determine whether

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<sup>22</sup> Sectors include electricity, natural gas, on-road transportation, off-road equipment, water usage and wastewater, and waste.

<sup>23</sup> Activities include industrial, shipbuilding, lodging, ocean-going vessels, recreational boating, other terminal activities, port operations, the convention center, and other activities within the District.

<sup>24</sup> Categories include energy efficiency, alternative energy, transportation and land use, water, waste, and miscellaneous.

<sup>25</sup> The implementation of the measures and performance standards are specified in Appendices A and F of the CAP, as well as Board of Port Commissioners Policy 750, which is incorporated herein by reference.

<sup>26</sup> Board of Port Commissioners Policy 750.



significant GHG emission impacts would result. However, because the CAP does not include post-2020 reduction quantification, consistency with the CAP post-2020 is not appropriate.

## **Quantitative Thresholds**

### ***Numerical Bright-Line***

In general, numerical bright-line thresholds identify the point at which additional analysis and mitigation of project-related GHG emission impacts is necessary. Currently, bright-line thresholds have been developed for commercial projects, residential projects, and stationary sources. Commercial and residential bright-line thresholds are typically based on a market capture rate or a gap analysis,<sup>27</sup> which is tied back to AB 32 reduction targets (1990 levels by 2020).<sup>28</sup> These bright-line thresholds reflect local or regional land use conditions, particularly residential and commercial density and access to transit. For example, the Bay Area Air Quality Management District's bright-line threshold of 1,100 MTCO<sub>2</sub>e captures land use conditions present in the Bay Area at the time of analysis, and does not necessarily reflect conditions in other areas of the state, including within the District, that may display varying land use patterns and density. A stationary source bright-line threshold of 10,000 MTCO<sub>2</sub>e has been adopted by multiple air districts and other agencies as part of the permitting process, and the South Coast Air Quality Management District (SCAQMD) currently recommends use of the same threshold for permitted source projects when SCAQMD is the lead agency.

A numerical bright-line value based solely on District-wide and/or large marine terminal projects does not yet exist. Moreover, no bright-line threshold has been formally adopted by an air district or other lead agencies for use in the San Diego region. Both the City and County of San Diego are recommending an interim 900 MTCO<sub>2</sub>e screening level as a theoretical approach to identify projects that require further analysis and potential mitigation. The screening level identifies projects that would result in sufficiently low GHG emissions to be less than cumulatively considerable without mitigation. This 900 MTCO<sub>2</sub>e screening level threshold, while potentially appropriate for small maritime projects or other land use types, was not devised to include emissions associated with larger goods movement (e.g., OGV, freight rail) projects or larger industrial processes that are typically associated with marine terminals. Consequently, the interim screening level recommended by the City and County of San Diego is inappropriate for the proposed project. The stationary bright-line threshold of 10,000 MTCO<sub>2</sub>e is also inappropriate for goods movement activities because they are typically not an industrial stationary permitted sources with a single point of emissions (e.g., single exhaust pipe or release point), but may be appropriate for stationary-source activities (e.g., boilers) at the Port. Because the proposed project is not a residential, commercial, or industrial stationary source project, established bright-line numerical thresholds would be inappropriate and are not used in the analysis.

### ***Efficiency-Based***

Another type of quantitative threshold is an efficiency-based threshold. Efficiency-based thresholds represent the GHG efficiency needed for development to achieve California's GHG emissions target established under AB 32. While the *Newhall Ranch* dicta did not specifically recommend the

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<sup>27</sup> The gap analysis demonstrates the reductions needed at the residential and commercial land use levels to achieve State targets. Capture is the process of estimating the portion of projects that would result in emissions that exceed a significance threshold and would be subject to mitigation.

<sup>28</sup> The AB 32 scoping plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020.

efficiency-based approach, the ruling did note that numerical threshold approaches may be appropriate for determining significance of GHG emissions and to emphasize the consideration of GHG efficiency. Efficiency-based thresholds are typically calculated by dividing emissions associated with residential and commercial uses (also termed the “land use sector” in the Scoping Plan) within the state (or a certain geographic area) by the sum of jobs and residents within the same geography. The sum of jobs and residents is called the “service population,” and a project’s service population is defined as the people that work and live within the project site. Because typical efficiency-based thresholds are based on the land use sector (residential and commercial uses) and only account for land use-related emissions and residential population and employment, they may be misleading to use for industrial uses, stationary source projects,<sup>29</sup> or marine terminal projects,<sup>30</sup> because these types of uses are specifically excluded from the land use sectors and typically do not directly propose housing or result in population growth. Moreover, the *Beyond Newhall and 2020* white paper discusses the idea that an efficiency threshold could be developed for a specific industrial sector if one were to benchmark GHG emissions by a meaningful industrial output unit, such as twenty-foot equivalent units (TEUs) for ports and goods movement projects. However, no industrial- or port-specific threshold has been adopted or proposed to date. Therefore, the efficiency-based methodology is not used for the proposed project analysis.

### Compliance with Regulatory Programs

Another approach for determining whether a project would result in significant GHG emission impacts is determining whether a proposed project is in compliance with regulatory programs designed to reduce GHG emissions from particular activities. To the extent a project complies with or exceeds those programs adopted by ARB or other State agencies, a lead agency could rely on this compliance to show less-than-significant impacts. However, such analysis is only applicable within the area governed by the regulations. For example, consistency with regulations addressing building efficiency would not suffice to determine that the project would not have significant GHG emissions from transportation. The proposed project’s compliance with regulatory programs adopted by ARB or other State agencies is used, in part, for the proposed project’s GHG emission analysis.

*Newhall Ranch* specifically mentions consistency with both SCS (per SB 375) and AB 32, which are each discussed below. Also, other recent case law mention the need to demonstrate consistency with the long-term targets in B-30-15 (2030) and S-03-05 (2050), which are also addressed below.

- **Compliance/Consistency with AB 32 (2020).** A lead agency could also assess project-level consistency with AB 32 in whole or part by looking to compliance with regulatory programs designed to implement AB 32. To the extent a project’s design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by ARB or other State agencies, a lead agency could appropriately rely on their use as showing compliance with performance-based standards adopted to fulfill the statewide goal for reducing GHG emissions.

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<sup>29</sup>See the Bay Area Air Quality Management District’s October 2009 Threshold Options and Justification Report for additional evidence: <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>.

<sup>30</sup>An example of appropriate use of an efficiency-based threshold at the Port would be for a large visitor-serving commercial project (i.e., has a jobs-based component consistent with the efficiency-based threshold) that accommodates population and employment growth in a way that is consistent with the emissions limit established under AB 32.

- **Consistency with B-30-15 (2030) and S-03-05 (2050) Targets and Planning.** A lead agency could also assess project-level consistency with the targets in the EOs and with current planning for the post-2020 period or substantial progress toward these goals over time. At present, the regulatory framework to achieve the 2030 target is in its infancy and is not sufficiently robust to support a consistency argument, but consistency with the targets is nevertheless a potential approach.

### CEQA Streamlining

The *Newhall Ranch* ruling affirmed that CEQA expressly allows streamlining under SB 375 of certain residential, commercial, and mixed use projects that are consistent with the limits and policies specified in an applicable SCS. The ruling pointed out that a qualifying project need not additionally analyze GHG emissions from cars and light trucks. In San Diego, the SCS is contained within SANDAG's recently adopted 2050 RTP/SCS (SANDAG 2015). Projects eligible for this streamlining can "tier" off the RTP/SCS EIR for CEQA purposes. However, the proposed marine terminal project would not be eligible for streamlined review because it does not meet the qualifying criteria defined in SB 375.

### Post-2020 Thresholds

While the *Newhall Ranch* holding did not rule on whether a post-2020 climate change analysis is required for CEQA documents, the decision mentioned that consistency with 2020 goals will become a less definitive guide over time and consistency with long-term emission reduction targets may be needed in the near future. Although EO B-30-15 has set forth an interim reduction target to reduce GHG emissions by 40% below 1990 levels by 2030 and EO S-03-05 has set forth a long-term reduction target to reduce GHG emissions by 80% below 1990 levels by 2050, and there are proposals at the State legislature to adopt interim (2030) and long-term (2050) binding GHG targets,<sup>31</sup> there is no current statewide GHG reduction plan or framework thereof that extends beyond 2020.<sup>32</sup> Additionally, these EOs have not been codified into law.

However, the State and the District have shown interest in adopting regulatory programs and frameworks designed to support meeting statewide post-2020 reduction goals. For example, the Scoping Plan First Update includes some post-2020 concepts (reduction measures) either currently underway or being considered that may be incorporated in the next Scoping Plan update. Meeting the ambitious targets in EO B-30-15 and EO S-03-05 will require substantial effort at the state, regional, and local levels. Lacking an adopted post-2020 plan, the Association of Environmental Professionals (AEP) (2015, 2016) recommends that CEQA GHG analyses evaluate project emissions in light of the trajectory of State climate change legislation and assess their "substantial progress" toward achieving longer-term reduction targets identified in available plans (e.g., CAPs), legislation, or executive orders. The best measure is thus progress toward long-range targets, and not necessarily meeting milestone targets many years in the future, such as for 2050. Currently there are no proposed or adopted significance thresholds for analyzing post-2020 emissions for development projects in California, and there are no adopted statewide or local plans to reduce emissions 40% below 1990 levels by 2030. Moreover, there are no thresholds, post-2020, that are explicitly applicable to large marine terminal projects.

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<sup>31</sup> The 2030 target of 40% below 1990 levels may be adopted in legislation per the proposed SB 32, which was withdrawn during the 2015 legislative term but is expected to be considered in the 2016 legislative term.

<sup>32</sup> EO B-30-15 requires ARB to update the Scoping Plan to include a plan to achieve the 2030 target, which is expected in late 2016.

## Threshold Approach

As discussed above, there are multiple potential thresholds and methodologies for evaluating project-level GHG emissions consistent with CEQA, depending on the circumstances of a given project. While efforts at framing GHG significance issues have not yet coalesced into any widely accepted set of numerical significance thresholds across the state and within the region, a range of alternative approaches do exist.

Based on the available threshold concepts recommended by air districts or other lead agencies and recent case law, the thresholds of significance that will be applied to the proposed project's GHG emissions for both the 2020 and post-2020 periods are as follows.

- For **2020**, impacts from the project's GHG emissions would be considered less than significant if the project is found to be:
  - (1) consistent with the District CAP (a qualified GHG reduction plan), including a 33% maritime-specific GHG emissions reduction target and reduction measures specified therein, and
  - (2) in compliance with regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies.

The analysis for 2020 is both quantitative with respect to the CAP and AB 32 consistency and qualitative with respect to compliance with the CAP's measures and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies. The analysis for compliance with regulatory programs only applies to the individual area addressed by the regulatory program. Project emissions are compared to unmitigated levels in determining consistency with CAP reduction targets. If the project is (1) determined to be consistent with the District's CAP, including a 33% maritime-specific reduction target required to reduce maritime-related emissions pursuant to the CAP (see Table 4.2-5), and (2) will implement regulatory programs adopted by ARB or other agencies to reduce GHG emissions, then the project's cumulative contribution of GHG emissions would be considered less than significant for 2020. Conversely, if the project is determined to be inconsistent with the measures listed in the CAP, is inconsistent with the 33% reduction required pursuant to the CAP,<sup>33</sup> or will not implement regulatory programs adopted by ARB or other State agencies to reduce GHG emissions, then the project's cumulative contribution of GHG emissions would be considered significant and feasible mitigation measures are required.

- For the **2020 to 2040** period, impacts from the project on GHG emissions would be less than significant if the project is found to be:
  - (1) consistent with the State's overall reduction targets (including EO S-03-05 and EO B-30-15) for post-2020, and
  - (2) in compliance with regulatory programs adopted by ARB or other California agencies for post-2020 GHG emissions.<sup>34</sup>

Based on the available threshold concepts recommended by expert agencies and the "substantial progress" approach, the analysis for the post-2020 time period is both quantitative with respect to consistency with long-term reduction targets and qualitative with respect to compliance with the

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<sup>33</sup> The maritime-related target addresses the *Newhall Ranch* ruling's concerns about difference in location of new development as it represents reductions needed for the local jurisdiction (District) to meet an AB 32 equivalent target.

<sup>34</sup> Because the CAP does not yet quantify reductions for 2035, it is not relied on for the post-2020 analysis.

measures and regulatory programs outlined, adopted, or proposed by ARB or other California agencies. Project emissions are compared to levels without mitigation in determining consistency with the State's overall reduction targets for the post-2020 period. The analysis for compliance with regulatory programs only applies to the topic of the regulatory program. In keeping with the guidance provided in *Newhall Ranch* that the extent to which a project's design features comply with or exceed the regulations outlined in the Scoping Plan or by other State agencies, a lead agency could appropriately rely on showing compliance with performance-based standards (e.g., future reduction targets) adopted to fulfill a statewide plan for the reduction or mitigation of GHG emissions.

To date, pursuant to the EOs, the statewide strategy for the reduction of GHG emissions is the 2030 (40% below 1990 levels) and 2050 (80% below 1990 levels) reduction targets. This EIR uses two separate targets to both benchmark performance and determine the fair share of reductions needed to demonstrate progress in the post-2020 time period. The first post-2020 milestone year is 2030. For 2030, the performance-based standard (reduction targets) uses the *Reference Case* emissions estimate from the *Pathways* analysis (ARB 2015d), after backing out the effect of current GHG policies.<sup>35</sup> The resultant 2030 emissions forecast estimate was then compared to the 2030 target of 40% below 1990 levels to derive a performance benchmark of 48% below 2020 levels for the District and the project. Therefore, in order to demonstrate "substantial progress" by 2030 toward meeting the State's downward trajectory, the project would need to demonstrate that GHG emissions would be consistent with this 48% target. Moreover, the life of the project is the duration of the existing Terminal Operating Agreement, which is set at year 2040. In order to demonstrate "substantial progress" by 2040 toward meeting the State's further downward trajectory, a reduction target was estimated based on the 2050 emissions forecast estimate and then compared to the 2050 target of 80% below 1990 levels to derive a performance benchmark of 66% below 2020 levels for the District and the project.<sup>36</sup> Therefore, in order to demonstrate "substantial progress" by 2040 toward meeting the State's strategy, the project would need to demonstrate that emissions would be consistent with this 66% target. If the project is determined to be consistent with the State's overall reduction strategy by demonstrating a downward trajectory (by using the above reduction targets for 2030 and 2040 as benchmarks of performance), and is determined to be in compliance with regulatory programs adopted by ARB or other California agencies for post-2020 GHG emissions, then the project's cumulative contribution of GHG emissions would be considered less than significant. Conversely, if the project is determined to be inconsistent with the State's overall reduction strategy for 2030 and 2040 and is determined to not be in compliance with regulatory programs adopted by ARB or other California agencies for post-2020 GHG emissions, then the project's cumulative contribution of GHG emissions would be considered significant and feasible mitigation measures are required.

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<sup>35</sup> The Energy + Environmental Economics Reference Case (current GHG policies) 2030 GHG emissions estimate is approximately 400 million MTCO<sub>2e</sub>. In order to derive a 2030 BAU estimate, the effect of current GHG policies was assumed to be equivalent to the percentage statewide reduction from ARB's 2014 estimate of 2020 BAU emissions (539 million MTCO<sub>2e</sub>) to the 1990 emissions level (431 million MTCO<sub>2e</sub>), which is 20% overall. Therefore, the Energy + Environmental Economics *Reference Case* estimate was "inflated" by 20% to result in a 2030 BAU estimate of approximately 500 million MTCO<sub>2e</sub>.

The Energy + Environmental Economics Pathways documentation can be found at:  
[https://ethree.com/public\\_projects/energy\\_principals\\_study.php/](https://ethree.com/public_projects/energy_principals_study.php/).

<sup>36</sup> The 2050 emissions estimate is approximately 409.6 million MTCO<sub>2e</sub>. In order to derive a 2050 BAU estimate, the effect of current GHG policies was assumed to be equivalent to the percentage statewide reduction from ARB's 2014 estimate of 2020 BAU emissions (539 million MTCO<sub>2e</sub>) to the 1990 emissions level (431 million MTCO<sub>2e</sub>), which is 20% overall. Therefore, the Energy + Environmental Economics *Reference Case* estimate was "inflated" by 20% to result in a 2030 BAU estimate of approximately 516.56 million MTCO<sub>2e</sub>.

The comparison to the State's reduction strategy for 2030 (and extrapolating through 2040) is an appropriate approach by which to determine the project's fair share of mitigation because it would result in project emissions that would be consistent with or even exceed the emissions targets for the post-2020 period. Additionally, with the exception of the former tank farm and Weyerhaeuser sites to be used by the applicant, the project constitutes a continuing operation of an existing facility. Furthermore, use of the former tank farm and Weyerhaeuser sites constitutes redevelopment, improvements, and a slight expansion to an existing facility and not development of a new facility. Unlike a new development project, the proposed project does not have the ability to implement a wide range of GHG reduction measures and features given the limited scale of the proposed project's changes to the existing condition. Hence, the project's fair share of GHG reductions to meet California's GHG reduction strategy for the post-2020 period may actually be less than development of a new facility within the District. However, the use of the 48% and 66% performance benchmarks would likely also apply to new development, and, therefore, this approach is considered a conservative worst-case analysis. Moreover, at present, there is no way to define a specific reduction level suitable for this individual project; however, use of these targets will establish a downward trajectory consistent with the EOs.

Feasible mitigation measures have been identified for both 2020 and post-2020. For 2020, mitigation measures are based primarily on the measures presented in the CAP that can be implemented at the project level. For post-2020, mitigation measures are based, in part, on the measures presented in the CAP, as well as measures and potential action items presented in ARB's Sustainable Freight Action Plan and supporting E3 Pathways analysis (2015)<sup>37</sup> document (ARB 2015d), which aims to improve goods movement and freight efficiency, transition to zero-emission technologies, and increase competitiveness of California's freight system. This analysis relies on adopted standards and remains valid regardless if the State adopts a long-term reduction plan (e.g., 2030 Scoping Plan) in the near future, because any approved plan will only provide a framework to meet long-term targets using measures (e.g., RPS 50%) already known at the time of this analysis. The impact analysis includes adopted statewide measures and does not take credit for any prospective measures that are not yet adopted. For example, the Phase 2 heavy-duty truck standards are likely to be approved in 2016 or 2017, but they remain in draft form. Therefore, reductions from Phase 2 are not included in the analysis herein even though reductions will likely be realized over the life of the project.

Note that, consistent with established protocols and published guidance from other lead agencies and air districts, construction emissions are amortized over the expected operational life of the project and added to annual operational emissions.

## Climate Change

There have been recent court cases that have concluded that an EIR need not evaluate the environment's effect on a project, often referred to as "Reverse CEQA."<sup>38</sup> In one case directly discussing the issue of SLR, the California Second District Court of Appeals has held that while an

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<sup>37</sup>The E3 Pathways documentation can be found here and is incorporated by reference:

[https://ethree.com/public\\_projects/energy\\_principals\\_study.php/](https://ethree.com/public_projects/energy_principals_study.php/)

<sup>38</sup>See *South Orange County Wastewater Authority v. City of Dana Point* (2011) 196 Cal.App.4th 1604; *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455; *Baird v. County of Contra Costa* (1995) 32 Cal.App.4th 1464, 1468 (Baird); *City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889 (Long Beach).

EIR must analyze the environmental effects that may result from a project, an EIR is not required to examine the effects of the environment, such as SLR, on a project (see *Ballona Wetlands Land Trust v. City of Los Angeles*, 201 Cal. App. 4th 455). In its decision, the Court called into question the validity of portions of the State CEQA Guidelines that require consideration of impacts of the environment on a project. The *Ballona* decision potentially eliminates the need for lead agencies to consider the impacts of climate change on proposed projects. The *Ballona* decision did not, however, call into question the State CEQA Guidelines amendments enacted in 2010 that establish how GHG emissions are to be analyzed and mitigated under CEQA.

Although the California Supreme Court denied review of the *Ballona* decision,<sup>39</sup> the issue of the environment's effect on a project was raised once again in *California Building Industry Association v. Bay Area Quality Management District*, Supreme Court Case No. S213478. The Supreme Court ruled on December 17, 2015, that CEQA does not direct agencies to analyze the environment's effects on a project unless the project would exacerbate environmental hazards or certain specific exemptions apply. However, the project site is within the Coastal Zone and, pursuant to EO S-13-08, the California Coastal Commission considers the potential impacts of SLR on a proposed project in determining consistency with the Coastal Act.

Specifically regarding SLR, the San Diego Bay Vulnerability Assessment conducted by ICLEI - Local Governments for Sustainability found that the greatest concern from SLR will be an increase in the kind of flooding that the region already experiences due to waves, storm surge, El Niño events, and very high tides. Furthermore, starting around mid-century, the San Diego Bay may become more susceptible to regularly occurring inundation of certain locations and assets, some of which are being planned and built today. As a result, this longer-term risk of inundation should be a concern in today's decision-making. The most vulnerable sectors in the community include stormwater management, wastewater collection, shoreline parks and public access, transportation facilities, commercial buildings, and ecosystems (ICLEI 2012).

Accordingly, a discussion of the issue has been provided below using the following criteria.

- Would the project place people or structures at substantial risk of harm due to predicted climate change effects, particularly sea level rise?

## Energy Consumption

Based on State CEQA Guidelines Appendix F, environmental considerations may include those listed below.

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak- and base-period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.

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<sup>39</sup>On March 21, 2012, the California Supreme Court denied case review and depublication requests submitted by several environmental organizations.

- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The State CEQA Guidelines recommend that the discussion of applicable energy impacts focus on whether the project would result in the wasteful, inefficient, or unnecessary consumption of energy, as this may constitute an adverse effect on energy resources. Efficiency projects that incorporate conservation measures to avoid wasteful energy usage facilitate long-term energy planning and avoid the need for unplanned or additional energy capacity. Accordingly, based on the criteria outlined in State CEQA Guidelines Appendix F, the proposed project would cause significant impacts related to energy if it would lead to a wasteful, inefficient, and unnecessary usage of direct or indirect energy.

As discussed in Section 4.2.3, energy legislation, policies, and standards adopted by California and local governments were enacted and promulgated for the purpose of reducing energy consumption and improving efficiency (i.e., reducing wasteful and inefficient use of energy). Therefore, for the purposes of this analysis, *wasteful* and *inefficient* are defined as circumstances in which the project would conflict with applicable State or local energy legislation, policies, and standards. Accordingly, if the project conflicts with legislation, policies, or standards designed to avoid wasteful and inefficient energy usage, it would result in a significant impact related to energy resources and conservation.

#### 4.2.4.3 Project Impacts and Mitigation Measures

***Threshold 1: For the years up to and including 2020, the project (1) would be consistent with the District CAP, including a 33% maritime-specific GHG emissions reduction target and reduction measures specified therein, and (2) would be in compliance with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs.***

##### Impact Discussion

Construction and operation of the proposed project have the potential to create GHG impacts. A discussion of project-related impacts is presented below.

##### Construction Emissions

Construction of the proposed project would result in direct GHG emissions through the use of heavy-duty construction equipment, construction workers' vehicle trips, and truck haul and material delivery trips. Table 4.2-6 shows that project construction would generate approximately 180 MTCO<sub>2</sub>e over the projected 7-week construction period. This is equivalent to the emissions of 38 passenger vehicles for a single year (EPA 2015c). As described above, total construction emissions are conservatively amortized over a 20-year project life<sup>40</sup> and would equate to

<sup>40</sup> While the project life is expected to be 24 years (construction in year 2016; the end year of Pasha's Terminal Operating Agreement is 2040), standard practice is to assume a 20-year project life. Assuming a 24-year project life would result in a lower amortized total; thus it is more conservative to assume 20 years.



approximately 9 MTCO<sub>2</sub>e per year. On their own, construction GHG emissions are far too low to be considered significant; however, consistent with industry best practices, amortized emissions are added to operational emissions in Table 4.2-7 and Table 4.2-8.

**Table 4.2-6. Estimate of Construction GHG Emissions (Total Metric Tons)**

Construction Element	CO <sub>2</sub> e
Equipment	87
Vehicles	93
<i>Total</i>	180
<i>Amortized Total</i>	9

Source: Appendix E. Totals may not add up exactly due to rounding.

### Operational Emissions

Operational uses at the project site would benefit from the increased storage capacity relative to existing conditions. The level of GHG emissions from the project site would change as a result of the increased throughput, including increases in auto carrier truck travel, locomotive activity, worker trips, car processing and van shuttle activity, and water and electricity consumption, as well as changes in OGV activity, including longer hoteling time. A detailed description of the methodology and activity levels assumed in the analysis is presented in Section 4.2.4.1 above.

Estimates of GHG emissions associated with the existing activity at the project site are shown in Table 4.2-4 above. Estimates of GHG emissions associated with existing plus project conditions in Opening Year 2016 as well as project activity in 2020, 2030, and 2040 (i.e., life of the project) are presented in Table 4.2-7. As shown, the project in 2020 would not achieve the requisite emission reductions before mitigation (**Impact-GHG-1**).<sup>41</sup> Estimates of mitigated GHG emissions that include reductions associated with State regulations not taken into consideration in the District's CAP and implementation of project-specific mitigation measures incorporated over the same time period are presented in Table 4.2-8. As shown, with these additional State regulations and the project-specific mitigation measures, GHG emissions would decline through the life of the project and GHG emissions would trend downward over time, consistent with the need for deeper reductions post-2020 promulgated in EO B-30-15 and EO S-03-05.<sup>42</sup> Impacts would be less than significant after mitigation is incorporated.

<sup>41</sup> Nor would it achieve the requisite emission reductions before mitigation in 2030 and 2040; see Threshold 2 for a complete discussion.

<sup>42</sup> Note that this does not include reductions associated with EPA and ARB's Phase 2 fuel efficiency standards, which, if adopted, would reduce GHG emissions from truck travel up to an additional 24% and begin implementation in model year 2021 and phased in through model year 2027. For informational purposes, this additional 24% reduction translates to a 628 MTCO<sub>2</sub>e reduction per year from truck travel during project operations beyond 2030, but is not included within the analysis. EPA and NHTSA issued a Notice of Proposed Rulemaking for Phase 2 in June 2015 and Notice of Data Availability in March 2016, and are expected to issue a final rule in spring 2016.

**Table 4.2-7. Existing Plus Project-Related GHG Emissions (Metric Tons per Year) with State Measures**

<b>Operational Element</b>	<b>2016</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>
Ocean-Going Vessels – Transit <sup>a</sup>	3,670	3,670	3,670	3,670
Ocean-Going Vessels – Maneuvering	1,464	1,464	1,464	1,464
Ocean-Going Vessels – Hoteling	4,365	4,365	4,365	4,365
Auto-Carrier Truck Travel	8,478	8,390	8,014	8,014
BNSF Rail – At NCMT Switching	854	854	854	854
BNSF Rail – Regional Line-Haul	2,753	2,753	2,753	2,753
Worker Trips	2,602	2,498	2,256	2,256
Imported Car Off-loading	330	317	286	286
Van Shuttles	120	117	110	107
Electricity	1,196	1,146	1,146	1,146
Water	17	17	17	17
Railcar Mover	154	154	154	154
BNSF Rail – NCMT Switching (displaced by Railcar Mover)	-394	-394	-394	-394
Amortized Construction	9	9	9	9
<b>Existing<sup>b</sup> + Project</b>	<b>25,618</b>	<b>25,359</b>	<b>24,703</b>	<b>24,700</b>
<b>Project Only</b>	<b>6,468</b>	<b>6,209</b>	<b>5,554</b>	<b>5,550</b>
<b>Project Only Reduction from Opening Year</b>	<b>--</b>	<b>-259</b>	<b>-915</b>	<b>-918</b>
Percentage Reduction with Mitigation Measures <sup>c</sup>	--	4%	14%	14%
Reduction Target	--	33% <sup>d</sup>	48% <sup>e</sup>	66% <sup>e</sup>

Source: Appendix E. Totals may not add up exactly due to rounding.

<sup>a</sup> Includes compliance with vessel speed reduction similar to existing condition (45% compliance).

<sup>b</sup> Baseline emissions are shown in Table 4.2-4.

<sup>c</sup> Project GHG emissions without mitigation measures are shown in Table 4.2-7.

<sup>d</sup> The District's CAP uses a "10% below existing levels" target, which translates into 28% below BAU in 2020 for the Port as a whole and 33% below BAU for maritime-related emissions in 2020.

<sup>e</sup> The reduction targets identified in the post-2020 period (i.e., 2030, 2040) are based on state-wide reduction targets identified in EO S-3-2005 and EO B-30-2015. Because there are no project-specific targets based on location and project type as is the case in the 2020 period, these targets are used as a guide for the level of reductions needed for the project, but it is understood that the State will need to play a major role to meet these aggressive targets.

Note: 2040 is the end of the lease and therefore represents the entire life of the project.

**Table 4.2-8. Existing Plus Project-Related GHG Emissions (Metric Tons per Year) with Mitigation Measures**

<b>Operational Element</b>	<b>2016</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>
Ocean-Going Vessels – Transit <sup>a</sup>	3,670	3,670	3,670	3,670
Ocean-Going Vessels – Maneuvering	1,464	1,464	1,464	1,464
Ocean-Going Vessels – Hoteling	4,365	4,365	4,365	4,365
Auto-Carrier Truck Travel <sup>b</sup>	8,478	8,390	8,014	8,014
BNSF Rail – On-Port Switching	854	854	854	854
BNSF Rail – Regional Line-Haul	2,753	2,753	2,753	2,753
Worker Trips	2,602	2,498	2,256	2,256
Imported Car Off-loading	330	317	286	286

<b>Operational Element</b>	<b>2016</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>
Van Shuttles	120	117	110	107
Electricity	1,196	1,146	1,146	1,146
Water	17	17	17	17
Railcar Mover	154	154	154	154
BNSF Rail – On-Port Switching (displaced by Railcar Mover)	-394	-394	-394	-394
Amortized Construction	9	9	9	9
<i>MM-GHG-1 Idling<sup>c</sup></i>	<-1	<-1	<-1	<-1
<i>MM-GHG-2 CAP Measures<sup>d</sup></i>	-197	-197	-197	-197
<i>MM-GHG-3 VSR Beyond CAP<sup>e</sup></i>	--	-419	-419	-419
<i>MM-GHG-4 Electric Vans<sup>f</sup></i>	<-1	<-1	<-1	<-1
<i>MM-GHG-5 PV</i>	--	-1,232	-1,426	-2,555
<b>Existing<sup>g</sup> + Project</b>	<b>25,421</b>	<b>23,511</b>	<b>22,493</b>	<b>21,361</b>
<b>Project Only over Baseline</b>	<b>6,271</b>	<b>4,361</b>	<b>3,344</b>	<b>2,212</b>
<b>Project Only Reduction from Opening Year</b>	<b>-</b>	<b>-2,107</b>	<b>-3,125</b>	<b>-4,257</b>
Percentage Reduction with Mitigation Measures <sup>h</sup>	--	33%	48%	66%
Reduction Target	--	33% <sup>i</sup>	48% <sup>j</sup>	66% <sup>k</sup>

Source: Appendix E. Note that totals may not add up exactly due to rounding.

<sup>a</sup> Includes compliance with vessel speed reduction similar to existing condition (45% compliance).

<sup>b</sup> Truck travel does not include the proposed Phase 2 truck standards, which would reduce improve truck fuel economy and reduce emissions by approximately 24% by 2030. This would translate to approximately 628 MTCO<sub>2e</sub> per year for the proposed project if implemented during the life of the project over what is shown above. EPA and NHTSA issued a Notice of Proposed Rulemaking for Phase 2 in June 2015 and Notice of Data Availability in March 2016, and are expected to issue a final rule by August 2016. Upon EPA's adoption of Phase 2, ARB staff plan to bring a proposed California Phase 2 program before the ARB Board, most likely in late 2016 or 2017. Once Phase 2 is adopted and implemented, GHG emissions from truck travel would be reduced, and the mitigation requirements would be reduced by this same amount.

<sup>c</sup> Reductions from idling are not quantified because reductions would be speculative, as it is not fully known how long trucks currently idle at any given location.

<sup>d</sup> Includes VSR compliance with the CAP target of 80% (12 knot speed within 20 nautical miles of Point Loma).

<sup>e</sup> Includes reductions associated with vessel speed reduction beyond 80% compliance starting in 2020. Includes VSR compliance of 90% (12 knot speed within 40 nautical miles of Point Loma) starting in 2020.

<sup>f</sup> Reductions from electric vans are not quantified because reductions would be speculative in that it is unknown to what extent electric vans would be used once purchased because existing non-electric vans may still be used.

<sup>g</sup> Existing/Baseline emissions are shown in Table 4.2-4.

<sup>h</sup> Project GHG emissions without mitigation measures are shown in Table 4.2-7.

<sup>i</sup> The District's CAP uses a "10% below existing levels" target, which translates into 28% below BAU in 2020 for the Port as a whole and 33% below BAU for maritime-related emissions in 2020.

<sup>j</sup> The reduction targets identified in the post-2020 period (i.e., 2030, 2040) are based on state-wide reduction targets identified in EO S-3-2005 and EO B-30-2015. Because there are no project-specific targets based on location and project type as is the case in the 2020 period, these targets are used as a general guide for the level of reductions needed, but it is understood that the State will need to play a major role to meet these aggressive targets.

### **2020 – Project Consistency with CAP**

Project consistency with applicable CAP measures is discussed in Table 4.2-9. Before mitigation, the proposed project would not be completely consistent with the CAP and would not achieve the required 33% reduction by 2020 (**Impact-GHG-1**). As shown in Table 4.2-9, however, the project would implement applicable measures in the CAP that would be enforced through Mitigation Measure MM-GHG-2 and which, correspondingly, would be consistent with State CEQA Guidelines Section 15183.5. With implementation of the measures in Table 4.2-9, several of which are carried out through **MM-GHG-1** through **MM-GHG-5**, the proposed project would be consistent with the

CAP because it would achieve the required 33% reduction by 2020 and would be consistent with the applicable CAP measures. Moreover, all of the project's mitigation measures and its features will be conditions of approval in the proposed CDP and included in any future agreements with the applicant. Impacts associated with GHG emissions through 2020 would be less than significant with mitigation incorporated.

**Table 4.2-9. Project Consistency with Applicable Port CAP Measures for 2020**

No.	Measure Description	Project Consistency Analysis
EA1	Implement on-site renewable energy generation policy for 2020 (solar power, wind power, methane recovery, wave power, etc.).	<b>Consistent After Mitigation.</b> The District has not yet developed an onsite renewable energy generation policy for 2020. However, MM-GHG-5 requires the project proponent to implement an onsite renewable energy by 2020 and running through the remaining life of the project (i.e., 2040), unless the system cannot be built in light of structural and operational constraints, in which case an offsite project would be built or GHG reduction credits purchased. <sup>43</sup>
TA1	Support and promote the use of alternate fueled, electric or hybrid Port owned vehicles and vessels (also includes cargo handling equipment, terminal and stationary equipment).	<b>Consistent After Mitigation.</b> MM-GHG-4 requires the project applicant to purchase an electric passenger van to be used for yard movement associated with vehicle storage operations prior to January 1, 2020.
TA2	Support and promote non-Port owned vehicles and vessels to achieve the lowest emissions possible, using a mix of alternative fueled, electric or hybrid technology.	<b>Consistent After Mitigation.</b> See also TA1. MM-GHG-4 requires the project applicant to purchase an electric passenger van for use in yard movement.
TA3	Implement emissions reduction strategies at loading docks through electrification of docks or idling-reduction systems for use while at loading docks	<b>Consistent After Mitigation.</b> See TA1 and TA2. MM-GHG-1 requires all commercial vehicles, including delivery and drayage trucks, to limit idling times to 3 minutes, which is beyond that required by State law.
TE1	Use of technology and strategies to reduce fuel consumption.	<b>Consistent After Mitigation.</b> See TA1, TA2, and TA3. MM-GHG-1 requires all commercial vehicles, including delivery and drayage trucks, to limit idling times to 3 minutes. MM-GHG-4 requires the project applicant to purchase an electric passenger van for use in yard movement.

<sup>43</sup> Because there may be an insufficient amount of rooftop space to generate a meaningful amount of renewable energy from photovoltaic panels and placing any renewable energy infrastructure on the ground within the leasehold could hinder cargo movements and take up critical cargo storage areas, design plans for an onsite renewable energy project would be required to determine feasibility. Should it be determined that a renewable energy project is infeasible, the project proponent would still be required to reduce GHG emissions in the equivalent numerical amount through the purchase of carbon offsets. Specifically, MM-GHG-5 would require that the proponent purchase the equivalent GHG offsets that would come from developing renewable energy on site and begin its operation prior to January 1, 2020 and continuing through the life of the project.

No.	Measure Description	Project Consistency Analysis
TE2	Implement Vessel Speed Reduction for ocean going vessels.	<b>Consistent After Mitigation.</b> The project proponent's vessels comply with the District's voluntary VSR program, which targets 80% compliance. Vessels that call on NCMT are at 45% compliance as of 2014. The Port's VSR goes beyond State requirement because ARB has not formally adopted a VSR program. MM-GHG-2 requires the project proponent's vessels to achieve 80% compliance starting in 2020 in compliance with the CAP, and MM-GHG-3 requires the project proponent's vessels to achieve 90% compliance starting in 2020.
TE3	Implement anti-idling restrictions for locomotives.	<b>Consistent Prior to Mitigation.</b> As a project feature the project proponent would purchase a railcar mover to help build and tear down trains at the terminal, which would reduce the amount of time locomotives would need to perform switching at the terminal, which primarily includes locomotive idling.
TE7	Support and promote the use of advanced technologies for rail locomotives: advanced technology diesel-fuel injectors; Tier 2 or Tier 3 locomotive engines; gen-set engines; and, hybrid or LNG locomotives.	<b>Consistent Prior to Mitigation.</b> BNSF's locomotives are not controlled by the project proponent and therefore, the project proponent has limited influence over the ability to enact technological changes to BNSF's fleet. BNSF locomotives that operate at the Port currently average between Tier 1 and Tier 2 standards, and the locomotive fleet will continue to turn over with more advanced technologies over time.
TR2	Implement traffic and roadway management strategies to improve mobility and efficiency, and reduce associated emissions at maritime facilities.	<b>Consistent Prior to Mitigation.</b> There are no congested roadways within the project area that can be improved in a manner that would reduce maritime emissions. The project proponent shall decrease onsite movements where practicable. See MM-GHG-2.
TR3	Vehicle Idling: Enforce state idling laws for commercial vehicles, including delivery and construction vehicles.	<b>Consistent After Mitigation.</b> MM-GHG-1 requires all commercial vehicles, including delivery and drayage trucks, to limit idling times to 3 minutes, which is beyond that required by State law.
TR4	Encourage rail freight utilization over trucks to reduce vehicle miles traveled.	<b>Consistent Prior to Mitigation.</b> The project proponent currently distributes 45% of imported vehicles via rail; however, the nature of the operations dictate that the percentage remains fairly constant, with regional cars being delivered by truck and long-distance travel taking advantage of rail freight. As rail freight is more cost effective over long distances, as Pasha's operations increase and more deliveries are sent long distance, it is likely rail freight utilization would increase proportionally.
TL3	Restrict the location of drive-through businesses.	<b>Consistent Prior to Mitigation.</b> The project does not propose any drive-through uses and, therefore, would adhere to this measure.

No.	Measure Description	Project Consistency Analysis
EB6	Replace light fixtures in non-Port facilities with lower energy bulbs such as fluorescent, LEDs, or CFLs.	<b>Consistent After Mitigation.</b> The project proponent would install lower energy outdoor lighting. See MM-GHG-2.
SW1	Increase the diversion of solid waste from landfill disposal.	<b>Consistent After Mitigation.</b> The project would comply with AB 939 by recycling at least 50% of solid waste. See MM-GHG-2.

Source: District 2013.

Notes:

TA: Transportation and Land Use CAP measures – Alternative Powered Vehicles; TE: Transportation and Land Use CAP measures – Alternative Technologies/Miscellaneous; TL: Transportation and Land Use CAP measures – Land Use; EB: Energy Conservation and Efficiency CAP measures – Building Energy Use; SW: Waste Reduction and Recycling; TR: Roadway System Management.

### **2020 – Project Consistency with Regulations and Regulatory Programs Adopted by ARB or Other State Agencies**

As shown in Table 4.2-10, the project would implement several applicable measures from the Scoping Plan, as well as other measures being implemented by ARB. However, without mitigation, the project would ultimately be inconsistent with some state measures (**Impact-GHG-1**). When coupled with the railcar mover replacing some switch-duty locomotive activity and mitigation measures (**MM-GHG-2** through **MM-GHG-4**), each of which are proposed to be incorporated as conditions of approval in the CDP for the project to ensure implementation and any future agreements with the applicant, the project would be consistent with AB 32's Scoping Plan and other ARB measures.

**Table 4.2-10. Project Consistency with AB 32 Scoping Plan and Other ARB Measures for 2020**

No.	Measure Description	Project Consistency Analysis
Scoping Plan Measures		
T-1	Advanced Clean Cars	<b>Consistent Prior to Mitigation.</b> State program that requires no action at the local or project level. Benefits to project-related employee car travel will be realized.
T-2	Low Carbon Fuel Standard	<b>Consistent Prior to Mitigation.</b> State program that requires no action at the local or project level. Benefits will be realized.
T-4	Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low Friction Oil 4. Solar Reflective Automotive Paint and Window Glazing	<b>Consistent Prior to Mitigation.</b> State program that requires no action at the local or project level. Benefits to project-related car and truck travel will be realized.

No.	Measure Description	Project Consistency Analysis
T-6	<p>Goods Movement Efficiency Measures</p> <ol style="list-style-type: none"> <li>1. Port Drayage Trucks</li> <li>2. Transportation Refrigeration Units Cold Storage Prohibition</li> <li>3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification</li> <li>4. Goods Movement System wide Efficiency Improvements</li> <li>5. Commercial Harbor Craft Maintenance and Design Efficiency</li> <li>6. Clean Ships</li> <li>7. Vessel Speed Reduction</li> </ol>	<p><b>Consistent After Mitigation.</b> Project trucks are compliant with ARB's Drayage Truck Rule and consistent with Scoping Plan measure T-6-1.</p> <p>MM-GHG-4 requires the project proponent to purchase an electric shuttle van for yard movements, consistent with T-6-3 and T-6-4. Project proponent vessels comply with the District's voluntary VSR program (45% compliance in 2014), MM-GHG-2 requires 80% compliance (in 2016), consistent with the CAP, and MM-GHG-3 requires compliance beyond the CAP (90% in 2020). Thus, the project is consistent with T-6-7.</p> <p>Measures T-6-2, T-6-4, and T-6-6 are now being considered in the Sustainable Freight Strategy instead of the Scoping Plan, while ARB is still evaluating the need to develop T-6-7. The project is consistent with T-6-4 and T-6-6 because it aims to improve the overall efficiency of the terminal and promotes growth in zero and near-zero technologies (T-6-4), and would require increased compliance with vessel speed reduction (T-6-7).</p>
T-7	<p>Heavy-Duty Vehicle GHG Emission Reduction</p> <ol style="list-style-type: none"> <li>1. Tractor-Trailer GHG Regulation</li> <li>2. Heavy Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)</li> </ol>	<p><b>Consistent Prior to Mitigation.</b> State and federal programs that require no action at the local or project level. Benefits to project-related truck travel will be realized.</p>
E-3	33 Percent Renewable Portfolio Standard	<p><b>Consistent Prior to Mitigation.</b> State program that requires no action at the local or project level. Benefits to project-related electricity consumption will be realized.</p>
W-1	Water Use Efficiency	<p><b>Consistent Prior to Mitigation.</b> The project proposes only minimal water use associated with new employees. State program that requires no action at the local or project level. Benefits will be realized at the project level.</p>
<b>Other ARB Measures</b>		
-	Renewable Portfolio Standard (33% by 2020)	<p><b>Consistent Prior to Mitigation.</b> See E-3, above. State program that requires no action at the local or project level. Benefits to project-related electricity consumption (for lighting and water consumption) will be realized.</p>
-	Pavley (AB 1493)	<p><b>Consistent Prior to Mitigation.</b> See T-1 and T-2. State program that requires no action at the local or project level. Benefits to project-related employee car travel will be realized.</p>
-	Heavy Duty (Tractor-Trailer) GHG Regulation	<p><b>Consistent Prior to Mitigation.</b> See T-7. State and federal programs that require no action at the local or project level. Benefits to project-related truck travel will be realized.</p>
-	OGV fuel switch regulation (to 0.1% sulfur fuel switch),	<p><b>Consistent Prior to Mitigation.</b> See T-6. State program that requires 0.1% sulfur fuel use for all vessel activity within California's Regulated Waters (24 nautical miles). Implementation started January 1, 2014.</p>

No.	Measure Description	Project Consistency Analysis
-	1998 South Coast Locomotive Emissions Agreement	<b>Consistent Prior to Mitigation.</b> BNSF (and Union Pacific) entered into this agreement in 1998 that required the freight railroad fleet operating in the South Coast Air Basin to achieve average emissions equivalent to the NO <sub>x</sub> emission standard established by EPA for Tier 2 locomotives by 2010 and maintain Tier 2 average from 2010 to 2030. BNSF trains that operate in the South Coast Air Basin also operate in San Diego County and serve the Port of San Diego.
-	2005 Railroad Statewide Agreement	<b>Consistent Prior to Mitigation.</b> BNSF (and Union Pacific) entered into this agreement with ARB in 2005, which intended to reduce the emission impacts of railyard operations on local communities. The 2005 agreement includes a locomotive idling-reduction program, early introduction of lower-sulfur diesel fuel in interstate locomotives, and a visible emission reduction and repair program. This also included the preparation of emission inventories and health risk assessments at the 17 major railyards in the state (including San Diego Railyard).

Source: ARB 2008; ARB 2014.

Notes:

T = Transportation Measures; E = Electricity Measures; W = Water Measures; H = High GWP Measures

### **Consistency with Other Regulations**

The Clean Air Program, one of six key areas addressed by the District's Green Port Program, focuses on initiatives to reduce air pollution from Port operations and includes various strategies that the District is employing to reduce GHG emissions from its largest sources, including shore power, truck replacement/retrofits, replacement/retrofits of cargo handling equipment, and the voluntary VSR program. The District, through its Green Port Program, will continue to implement actions to reduce GHG emissions in the future and the project would implement the relevant Green Port Program and Clean Air Program control measures, including drayage truck replacement and retrofits, replacement and retrofits of cargo handling equipment, vessel speed reduction, and shore power, as well as through implementation of the CAP. The project is consistent with the District's Green Port and Clean Air programs because it would comply with current and potential future ARB regulations developed and included as part of the Green Port Program and Clean Air Program and assumed in the CAP, including VSR compliance. Project-related trucks would have to comply with the Clean Truck Program. The project proponent would continue to utilize existing freight rail instead of trucks to the extent practicable, and is purchasing a Tier 3 railcar mover, which would reduce locomotive activity at the terminal. Therefore, the project is consistent with both the overarching Green Port Program and the more specific Clean Air Program.

### **Impact Determination through 2020**

The State is well on its way to reaching 2020 targets and is expected to meet the AB 32 targets in 2020 with recently adopted State regulations. While new projects, such as the proposed project, may add emissions, overall Port and California emissions need to be on a downward trend. The project would comply with and go beyond adopted regulations and regulatory programs, but would not



achieve the requisite emission reductions before mitigation (**Impact-GHG-1**). With implementation of mitigation measures (**MM-GHG-1 through MM-GHG-5**), the project would reduce its GHG emissions by 33% below 2020 levels, pursuant to the maritime-specific target in the CAP, and would comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs. Therefore, because reductions align with the maritime-specific target in the CAP, impacts associated with GHG emissions through 2020 would be less than significant.

### Level of Significance prior to Mitigation

For the years up to and including 2020, the project would not be consistent with the District CAP, including a 33% maritime-specific GHG emissions reduction target and reduction measures specified therein, and would only partially comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs. Potentially significant impact(s) include:

**Impact-GHG-1: Project GHG Emissions through 2020.** Project GHG emissions during combined project construction and operational activities, before mitigation, would achieve a 4% reduction, which is inconsistent with the CAP's reduction target of 33%. Additionally, the proposed project would only partially comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs.

### Mitigation Measures

**MM-GHG-1: Implement Diesel-Reduction Measures During Construction and Operations.**

The project proponent shall implement the following measures during project construction and operations.

- i. The project proponent shall limit all construction equipment, drayage, and delivery truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and shall submit quarterly reports of violators to the San Diego Unified Port District. This measure shall be enforced by Pasha supervisors. The San Diego Unified Port District shall issue penalties pursuant to California airborne toxics control measure 13 California Code of Regulations Section 2485 for repeat violators. The project proponent shall submit evidence of the use of diesel reduction measures to the San Diego Unified Port District through annual reporting with the first report due 1 year from the date of project completion and each report due exactly 1 year after, noting all violations with relevant identifying information of the vehicles and drivers in violation of these measures.
- ii. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, the project proponent shall verify that all equipment has been checked by a certified mechanic and determined to be running in proper condition prior to admittance into any Pasha leasehold. The project proponent shall submit a report by the certified mechanic of the condition of the construction equipment to the San Diego Unified Port District prior to construction.

**MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures.**

Effective opening day, the project proponent shall implement the following measures to be consistent with the Climate Action Plan.

- Vessels shall comply with the San Diego Unified Port District's voluntary vessel speed reduction program, which targets 80% compliance.
- The project proponent shall decrease onsite movements where practicable.
- No drive-through shall be allowed.
- Assembly Bill 939 shall be complied with by recycling at least 50% of solid waste. This measure shall be applied during construction and operation of the proposed project.
- Light fixtures at the project site shall be replaced with lower energy bulbs such as fluorescent, LEDs, or CFLs.

Implementation of Climate Action Plan measures will be included in all real estate agreements associated with this project and the CDP. Evidence of implementation and compliance with this mitigation measure shall be provided to the San Diego Unified Port District on an annual basis through 2040 (the end year of Pasha's Terminal Operating Agreement).

**MM-GHG-3: Implement Vessel Speed Reduction Program Beyond Climate Action Plan**

**Compliance.** Every quarter following approval of the first real estate agreement or issuance of the first Coastal Development Permit associated with the project, whichever occurs first, the project proponent shall provide a report of the annual vehicle throughput to date, and the projected total throughput for the following 6 months to the San Diego Unified Port District's Planning & Green Port Department. Prior to the annual vehicle throughput reaching 480,337 vehicles, which is an increase of 119,065 vehicles over the 2013 vehicle throughput total (361,372 vehicles), the project proponent shall implement vessel speed reduction measures to reduce the project's net-new greenhouse gas emissions. The program shall require that 90% of the vessels calling at the National City Marine Terminal reduce their speeds to 12 knots starting at 40 nautical miles from Point Loma.

Implementation of this vessel speed reduction program will be included in all new real estate agreements and Coastal Development Permit(s) associated with this project. Evidence of implementation and compliance with this mitigation measure shall be provided to the San Diego Unified Port District's Planning & Green Port Department on an annual basis through 2040 (the end year of Pasha's Terminal Operating Agreement).

**MM-GHG-4: Replace Gasoline/Diesel Passenger Van with Electric Passenger Van.** Prior to January 1, 2020, the project proponent shall purchase and operate an electric passenger shuttle to be used for yard movement associated with vehicle storage operations.

**MM-GHG-5: Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry.** The project proponent shall incorporate renewable energy into the leasehold or other areas within the San Diego Unified Port District or purchase greenhouse gas reduction credits as specified herein to achieve requisite reductions to meet the 2020 reduction target. This mitigation measure shall achieve at least 4,351 megawatt-hours per year (MWh/year) of renewable energy or the project proponent may purchase the equivalent amount of greenhouse gas offsets—an amount of 6,159 metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>). This requirement would

result in an annual reduction of 1,231.8 MTCO<sub>2</sub>e by 2020 and running through the life of the project.

In order to achieve 2020 annual reduction target of 1,231.8 MTCO<sub>2</sub>e, the project proponent shall install and operate a renewable energy project that would achieve at least 4,351 MWh/year of renewable energy. Otherwise, the project proponent shall purchase the equivalent amount of greenhouse gas offsets, which is 6,159 MTCO<sub>2</sub>e. The renewable energy project may be submitted to the San Diego Unified Port District as late as January 1, 2018 (no later, but may be submitted sooner) in order to consider the latest advancements in energy technology and future regulatory requirements and must be operational by January 1, 2020.

Because it is unknown how “solar ready” the available rooftop areas are within the leasehold, once at the design phase, the renewable energy project may be determined infeasible. Should this determination of infeasibility be made by the San Diego Unified Port District after considering evidence submitted by the project proponent related to any structural limitations (i.e., the rooftops cannot support a renewable energy system), then two additional options are available. The San Diego Unified Port District shall either require the renewable energy project to be built off site (i.e., at a location not within the proponent leaseholds but within the San Diego Unified Port District’s jurisdiction) or shall require the proponent to purchase the equivalent amount of greenhouse gas offsets from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the California Air Resources Board). The selected option or a combination must achieve a total annual reduction of 1,231.8 MTCO<sub>2</sub>e, which would amount to 6,159 MTCO<sub>2</sub>e over 5 years (relative to the projected San Diego Gas and Electric power mix in 2020).

### Level of Significance after Mitigation

As indicated above, **Impact-GHG-1** would be less than significant after implementation of **MM-GHG-1** through **MM-GHG-5** because the project would reach its GHG reduction target of 33% by 2020 and would be consistent with the AB 32 Scoping Plan and other related programs designed to reduce project GHG emissions.

Mitigation Measure **MM-GHG-5** includes installation of solar panels on available rooftop space within the leasehold or off site but within the District’s jurisdiction. It is assumed that minimal construction activities would be required and would consist of installing poles or infrastructure on the rooftops to mount the solar arrays, electrical connections to the existing grid, potential minor upgrades to the existing onsite electrical system (pending consultation with SDG&E), minor structural improvements to the buildings, and a few associated material deliveries for the solar hardware. Once operational, the use of the solar arrays would not create any glare issues because they are designed and coated to absorb light, not reflect it, require very little maintenance, and in general would not cause any significant impacts on the environment. Therefore, environmental impacts associated with the implementation of the solar option under **MM-GHG-5** would be less than significant.

***Threshold 2: For 2020–2040, the proposed project (1) would not parallel the State’s overall reduction targets identified in EO S-03-05 and EO B-30-15, but (2) would be in compliance with plans, policies, and regulatory programs adopted by ARB or other California agencies for post-2020 for the purpose of reducing the emissions of GHGs.***

## Impact Discussion

The proposed project’s GHG emissions during construction and operations are presented under Threshold 1 in Tables 4.2-6, 4.2-7, and 4.2-8. The analysis for the post-2020 period, provided below, is based on the information contained on those pages.

### Consistency with Post-2020 Reduction Targets and “Substantial Progress”

Although the District’s CAP and ARB’s Scoping Plan mention some potential post-2020 strategies, as of the date this analysis was prepared, emission savings from these post-2020 strategies are not quantified. While there has been activity at the legislative, executive, and judicial levels, there are currently no adopted plans or measures that specifically prescribe how the ambitious post-2020 targets will be met. Proposals at the State level such as the proposed SB 32 legislation (adopting interim 2030 GHG targets consistent with EO B-30-15) have recently been considered and are anticipated to be considered again in 2016 by the California legislature; however, to date they have not been adopted into law. Various guidance and white paper documents are in circulation that discuss potential near- and long-term strategies to reduce emissions from all sources, including sources associated with the proposed project (e.g., electricity, OGVs, heavy-duty trucks, locomotives). The District’s CAP, ARB’s Scoping Plan First Update, and other State programs (e.g., ARB’s Sustainable Freight Strategy) are some recent examples that include proposed, recommended, or adopted actions that will reduce emissions over the long term.

### 2020 to 2040 – Consistency with the District CAP

The CAP assumes 2% annual growth in cargo throughput within the District’s marine terminals through 2020, 3.2% annual growth between 2020 and 2030, and 3% annual growth between 2030 and 2050 with growth capped at terminal capacity (District 2013). Therefore, like other GHG reduction emission plans, the CAP is not a “no growth” plan but instead accounts for continued growth of terminal operations in an efficient and sustainable manner, and the project would increase the capacity of the project proponent’s operations at NCMT consistent with the growth projected in the CAP. For example, once the project is operational, it is anticipated that there would be 230 vessel calls and 572,190 vehicles processed annually through the life of the project (from 2016 through 2040). Comparatively, the CAP projects 257 vessel calls and 477,848 vehicles processed annually in 2020, 314 vessel calls and 582,494 vehicles processed annually in 2030, and 401 vessel calls and 745,553 vehicles processed annually in 2040. Thus, the CAP projects similar calls and throughput in 2020 and more calls and throughput in years 2030 and 2040.

As the District’s CAP was completed in 2013, it does include some strategies and shows some progress toward meeting post-2020 statewide targets and does prescribe a 25% reduction goal (below 2006 levels) for 2035, but does not yet include prescribed reduction measures to achieve a post-2020 target. Because the CAP did not estimate reductions from these strategies beyond 2020, emphasis is placed on consistency with the overarching goals of the CAP (to reduce GHG emissions) rather than the specific reductions attached to each strategy. In this sense, it is not considered a

qualifying plan for post-2020 purposes, as described in State CEQA Guidelines Section 15183.5; therefore, the post-2020 analysis does not rely on compliance with the CAP to determine whether the project's impacts would be cumulatively considerable for post-2020 GHG emissions. However, for informational purposes, the project's compliance with CAP measures post-2020 is provided below. Prior to mitigation, the proposed project would not be entirely consistent with the post-2020 CAP measures (**Impact-GHG-2**). As noted in Table 4.2-11, however, once Mitigation Measure **MM-GHG-6** is incorporated, the project would be consistent with the CAP measures in the post-2020 period.

**Table 4.2-11. Project Consistency with Port CAP Strategies Beyond 2020**

No.	Strategy Description	Project Consistency Analysis
EA2	Implement on-site renewable energy generation policy for 2035 (solar power, wind power, methane recovery, wave power, etc.).	<b>Consistent After Mitigation.</b> The District has not yet developed an onsite renewable energy generation policy for 2035. However, MM-GHG-6 requires the project proponent to implement an onsite renewable energy project by 2025 and running through the remaining life of the project (i.e., 2040), unless the system cannot be built in light of structural and operational constraints, in which case an offsite project would be built or GHG reduction credits purchased. <sup>44</sup>
EA3	Implement on-site renewable energy generation policy for by 2050 (solar power, wind power, methane recovery, wave power etc.).	<b>Consistent After Mitigation.</b> See EA2. The District has not yet developed an onsite renewable energy generation policy for 2050. MM-GHG-6 requires the project proponent to implement an onsite renewable energy project by 2025 that would run through the remaining life of the project (i.e., 2040), unless the system cannot be built in light of structural and operational constraints, in which case an offsite project would be built or GHG reduction credits purchased.
EA11	Implement a program to install technologies for generating energy from renewable sources such as solar power, wind power, and/or wave power on Port Tidelands. Establish progressively more ambitious production goals the years 2020, 2035 and 2050.	<b>Consistent After Mitigation.</b> See EA2 and EA3. MM-GHG-6 requires the project proponent to implement a renewable energy project by 2025 that would run through the remaining life of the project (i.e., 2040), unless the system cannot be built in light of structural and operational constraints, in which case an offsite project would be built or GHG reduction credits purchased.

<sup>44</sup> Because there may be an insufficient amount of rooftop space to generate a meaningful amount of renewable energy from photovoltaic panels or structural issues could exist that would make such installation prohibitive and placing any renewable energy infrastructure on the ground within the leasehold could hinder cargo movements and take up critical cargo storage areas, an onsite renewable energy project may not be able to be developed to ensure the required offsets are achieved. The design should not occur until 2025 to best achieve the benefits associated with any advancements in technology and any additional regulations that take effect. Should it be determined that a renewable energy project cannot be built considering structural and operational constraints, the project proponent would still be required to reduce GHG emissions in the equivalent numerical amount through the purchase of carbon offsets. Specifically, MM-GHG-6 would require that the proponent purchase the equivalent GHG offsets that would come from developing renewable energy on site and begin its operation prior to January 1, 2025 and continuing through the life of the project.

No.	Strategy Description	Project Consistency Analysis
MP6	Pursue off-site GHG mitigation strategies.	<b>Consistent After Mitigation.</b> MM-GHG-6 requires the project proponent to purchase offsite carbon credits or develop offsite renewable energy if renewable energy is not a feasible mitigation strategies. The resulting offset would be identical to use of renewable energy.
Source: District 2013.		
Notes:		
EA: Alternative Energy Generation; MP: Miscellaneous– Programs and Outreach		

### **2020 to 2040 – Consistency with the State’s Overall Reduction Targets (Including EO S-03-05 and EO B-30-15)**

There are a number of studies that discuss potential mechanisms for limiting California’s economy-wide emissions to the equivalent of 40% below the 1990 level by 2030 and 80% below the 1990 level by 2050. For instance, ARB and other State agencies are developing GHG reduction scenarios for 2030 that would set the State on the course toward its 2050 GHG reduction goal (CEC 2015). Other studies include a report by the California Center for Science and Technology (2012), a California Department of Transportation report that discusses GHG emission reductions from the transportation sector alone (California Department of Transportation 2015), and a study published in *Science* that analyzes the changes that will be required to reduce GHG emissions to 80% below 1990 levels by 2050 (*Science* 2012). In general, these studies reach similar conclusions. Deep reductions in GHG emissions can be achieved only with significant changes in electricity production, transportation fuels, and industrial processes (e.g., decarbonizing electricity production, electrifying transportation, implementing widespread adoption of low-carbon or no-carbon transportation fuels, electrifying non-transportation direct fuel uses, increasing energy efficiency, avoiding waste emissions, increasing carbon sequestration, replacing high global warming potential gases, and other measures).

The systemic changes that will be required to achieve the 2030 and 2050 GHG reduction goals set forth by executive order will require significant policy, technical, and economic solutions. Decarbonization of the transportation fuel supply will require electric and plug-in hybrid electric vehicles to make up the vast majority of light-duty vehicles. Some changes, such as the use of biofuels to replace petroleum for aviation, cannot be accomplished without action by the federal government. Furthermore, achieving the 2050 GHG reduction goals will require California to increase the amount of electricity that is generated by renewable generation sources dramatically and, correspondingly, advance the deployment of energy storage technology and smart-grid strategies, such as price-responsive demand and the smart charging of vehicles. This would entail a significant redesign of California’s electricity system.

In qualitatively evaluating the project’s emissions for consistency with EO S-03-05 and EO B-30-15, it is important to note that some of these broad-scale shifts in how energy is produced and used are outside of the control of the project. The changes necessitated by the State’s long-term climate policy will require additional policy and regulatory changes, which are unknown at this time. As a consequence, the extent to which the project’s emissions and resulting impacts will be mitigated through implementation of such changes is not known. Furthermore, implementation of such additional policy and regulatory changes is in the jurisdiction of State-level agencies (e.g., ARB), not the District or the project. However, some of these measures (e.g., decarbonization, energy efficiency, and reduced fossil-fuel-based vehicle miles traveled) can be facilitated, at least to some extent, through implementation of specific GHG reduction measures for developments such as the

proposed project. Under this same rationale, if the proposed project did not implement measures to maximize energy efficiency or utilize renewable energy, the reductions may not be sufficient for an individual project to meet the aggressive 2030 and 2050 cumulative reduction goals (**Impact-GHG-2**). Mitigation Measures **MM-GHG-1 through MM-GHG-6** are required to support progress toward the 2030 and 2050 GHG reduction goals of EO S-03-05 and EO B-30-15,<sup>45</sup> but project emissions would remain significant due to the lack of a known project-specific reduction target.

Estimates of GHG emissions associated with unmitigated project activity in 2030 and 2040 are presented in Table 4.2-7. As shown, GHG emissions before mitigation would be significant (**Impact-GHG-2**).

GHG emissions after implementation of mitigation measures over the same time period are presented in Table 4.2-8. As shown in Table 4.2-8, GHG emissions with Mitigation Measures **MM-GHG-1 through MM-GHG-6** incorporated would decline through the life of the project, and GHG emissions would trend downward over time, consistent with the need for deeper reductions post-2020 promulgated in EO B-30-15 and EO S-03-05.

As discussed above, in order to demonstrate “substantial progress” toward long-term targets, the project would need to demonstrate that emissions would be consistent with the 48% performance benchmark (below 2020 levels) in 2030 and the 66% performance benchmark (below 2020 levels) in 2040. As shown in Table 4.2-8, the project would achieve both the 2030 and 2040 performance targets. However, as mentioned in Section 4.2.4.2, the framework to achieve post-2020 targets (e.g., 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050) at the State level is unknown until ARB develops such a framework. The project and District as a whole cannot meet these long-term targets by themselves without statewide efforts. Further implementation of adopted statewide measures, particularly the RPS of 50% per SB 350, would reduce project-related electricity, as shown in Table 4.2-8. Proposed regulations and measures, including Phase 2 truck standards, will further reduce emissions in the post-2020 timeframe once adopted. Moreover, the Port has not yet adopted a framework to meet long-term (i.e., post-2020) reduction targets. As such, it is possible that the proposed project’s needed reductions would have to be even greater (or less) than the statewide targets in order to achieve the statewide targets. For example, an appropriate project target would need to take into account: (1) existing development that may not be able to achieve the deeper reductions and thus place a higher reduction burden on new development; (2) the level of reductions necessary for a maritime terminal project (as compared to other land use types such as residential, commercial, and institutional or other sectors such as agriculture, industrial point source emitters, etc.), which may be greater or less than other development projects or sectors, and (3) the project’s location, such as which regions or jurisdictions need to have greater reduction targets that are proportionate to their overall contribution to statewide GHG emissions.

Therefore, statewide reduction targets and the levels of effort required at the local levels to help the State meet these targets are uncertain and speculative at this point. Consequently, the impact would be significant and unavoidable.

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<sup>45</sup>It would be speculative to attempt to identify the exact amount of project-level mitigation needed to meet a 2030 goal without an updated AB 32 Scoping Plan for 2030 that identifies the state reductions.

***2020 to 2040 – Consistency with Regulations and Regulatory Programs Adopted by ARB or Other State Agencies***

Specifically, at the State level, ARB's Scoping Plan and the Sustainable Freight Strategy provide insight into the strategies that will likely be included and adopted into long-term planning documents in the near future.

***Post-2020 Scoping Plan Strategies***

The Scoping Plan First Update discusses the fact that there are a number of strategies underway that have led to significant emission reductions and provides a summary of recommended actions the State could take to meet long-term reduction goals. For purposes of discussing post-2020 GHG emissions, the quantified emissions presented in Table 4.2-7 and Table 4.2-8 only include the project features, adopted State measures, and proposed mitigation measures. For the consistency analysis, adopted measures (like SB 350) are reviewed in order to disclose the project's consistency with such regulations. For informational purposes only, the project's consistency with conceptual strategies under consideration but not yet adopted is also provided, but is not relied on in determining whether the project would have significant GHG emission impacts. The upcoming post-2020 Scoping Plan update will include a detailed roadmap by accelerating the focus on zero and near-zero technologies for moving freight, continued investment in renewables, greater use of low-carbon fuels including electricity and hydrogen, stronger efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases), and further efforts to create walkable communities with expanded mass transit and other alternatives to traveling by car. Continuing the cap-and-trade program and ensuring that natural lands become carbon sinks provide additional emissions reductions and flexibility in meeting the target (ARB 2014). Project consistency with post-2020 Scoping Plan strategies is discussed in Table 4.2-12 and project consistency with anticipated regulations is discussed in Table 4.2-13. Project impacts before mitigation would be significant and, after implementation of Mitigation Measures **MM-GHG-1 through MM-GHG-6**, would remain significant and unavoidable.



**Table 4.2-12. Project Consistency with AB 32 Scoping Plan Strategy Beyond 2020**

No.	Strategy Description	Project Consistency Analysis
T-3	Regional Transportation-Related Greenhouse Gas Targets	<b>Consistent Prior to Mitigation.</b> State program that requires no action at the local or project level. Benefits to project-related employee car travel will be realized.
T-6	Goods Movement Efficiency 1. Port Drayage Trucks (2020 strategy) 2. Transportation Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	<b>Consistent After Mitigation.</b> Project trucks are compliant with ARB's Drayage Truck Rule and consistent with Scoping Plan measure T-6-1. MM-GHG-4 requires that the project proponent purchase an electric shuttle van for yard movements, consistent with T-6-3 and T-6-4. Project proponent vessels comply with the District's voluntary VSR program (45% compliance in 2014), MM-GHG-2 requires 80% compliance (in 2016), consistent with the CAP, and MM-GHG-3 requires compliance beyond the CAP (90% in 2020). Thus, the project is consistent with T-6-7. Measures T-6-2, T-6-4, and T-6-6 are now being considered in the Sustainable Freight Strategy instead of the Scoping Plan, while ARB is still evaluating the need to develop T-6-7. The project is consistent with T-6-4 and T-6-6 because it aims to improve the overall efficiency of the terminal and promotes growth in zero and near-zero technologies (T-6-4), and would require increased compliance with vessel speed reduction (T-6-7).
E1 and CR1	1. Building Energy Efficiency – Electricity and Natural Gas	<b>Consistent Prior to Mitigation.</b> The project does not propose construction of buildings.
W2	Water Recycling	<b>Consistent Prior to Mitigation.</b> The project proposes minimal water use associated with new employees. State program that requires no action at the local or project level. Benefits will be realized.
Recommended Transportation Action	Propose "Phase 2" heavy-duty truck GHG standard standards.	<b>Consistent Prior to Mitigation.</b> State program that requires no action at the local or project level. Benefits to project-related truck travel will be realized independently.
Recommended Transportation Action	Complete the first phase of the Sustainable Freight Strategy, which will identify and prioritize actions through 2020 to move California toward a sustainable freight system.	<b>Consistent After Mitigation.</b> See Table 4.2-13. The project would implement various strategies included in the draft Strategy, including MM-GHG-2 and MM-GHG-3 (CAP and VSR compliance) and MM-GHG-4 (electric van).
Source: ARB 2014.		
Notes:		
T = Transportation; E = Electricity; W = Water		

### *Sustainable Freight Strategy*

The Scoping Plan notes that many transportation strategies related to Goods Movement Efficiency (T-6-2 through T-6-7) are being implemented as part of the Sustainable Freight Initiative. Recently, ARB released the *Pathways to Zero and Near-Zero Emissions (Pathways)* discussion document that presents near- and long-term actions toward zero to near-zero emissions goods movement, which includes trucks, ships, locomotives, aircraft, harbor craft, and all types of equipment used to move freight at seaports, airports, railyards, warehouses, and distribution centers. ARB acknowledges that efforts in response to climate change (via executive orders, legislation, and judicial action) are ramping up the pressure for further progress in the 2030 and 2050 timeframes to accelerate the reduction of GHG and short-lived climate pollutants, like black carbon from diesel equipment. ARB's near-term strategies in *Pathways* are to be acted upon or implemented in the next few years, with most implementation occurring in or around 2020. Long-term *Pathways* strategies, known as "Vision for the Future," would be implemented after 2020 and are thus relevant beyond 2020, as discussed in the post-2020 analysis below and presented in Table 4.2-13. Both the near- and long-term strategies pertain to goods movement sources of emissions, most of which are present at the Port. The majority of these near- and long-term actions are regulatory in nature and require developing regulations or guidance or cooperating with and petitioning other agencies, including EPA (for trucks and locomotives) and the International Maritime Organization (for OGVs), to adopt rulemaking or new emission standards, and investigating usefulness of renewable fuels in OGVs (as part of LCFS). Many of these actions are beyond the scope of a project-level analysis or even the District to achieve by itself. However, there are strategies that ARB has drafted that can be applied or tailored at the project level. In particular, the action of recommending zero-emission demonstration projects is first presented in the near-term actions and further reiterated as a long-term vision. Before mitigation, the project would not be completely consistent with the Sustainable Freight Strategy (**Impact-GHG-2**). As shown in Table 4.2-13, however, after incorporating Mitigation Measures **MM-GHG-2 through MM-GHG-4**, the project would implement technologies that help achieve the relevant strategies of the Sustainable Freight Strategy. These mitigation measures would also be incorporated into the CDP and any real estate agreements between the District and the project proponent to ensure implementation.

**Table 4.2-13. Project Consistency with Sustainable Freight Strategy and other ARB Strategies Post-2020**

Strategy	Strategy Description	Project Consistency Analysis
<i>Near-Term</i>		
Incentive programs	Develop modifications to existing incentive programs to increase the emphasis on and support for zero and near-zero equipment used in freight operations, including introduction of truck engines certified to optional low-NO <sub>x</sub> standards.	<b>Consistent After Mitigation.</b> Action was expected by ARB in 2015 and 2016 with implementation between 2016 and 2020, but action has not occurred. Operations associated with the proposed project do not use conventional freight equipment like yard trucks, forklifts, and cargo stackers. Instead, operations consist of drivers that directly drive vehicles to their designated storage space, who are then picked up by a shuttle and taken back to the terminal. MM-GHG-4 requires the project proponent to purchase and operate an electric van/shuttle for these yard movements.
<i>Long-Term “Vision for the Future”</i>		
Short haul—Heavy Duty (e.g., Drayage)	Provide incentives to demonstrate viability of zero emission technology and hybrids capable of zero emission miles.	<b>Consistent After Mitigation.</b> MM-GHG-4 would require a zero-emissions electric van shuttle to be operated on site in 2020, and this equipment would continue to operate into the post-2020 timeframe.
Potential Incentives	Develop incentives to attract cleaner more efficient ships to California seaports by leveraging port and air agency funds.	<b>Consistent After Mitigation.</b> The project proponent would require VSR compliance (see MM-GHG-2 and MM-GHG-3).
Cargo Handling Equipment	Support programs for technology demonstrations including battery electric, fuel cell, and pathway hybrids.	<b>Consistent After Mitigation.</b> Action was expected by ARB in 2015 and 2016 with implementation between 2016 and 2020, but action has not occurred. MM-GHG-4 requires the project proponent to secure and operate an electric shuttle for yard movements.
50 Percent Renewables Portfolio Standard	State program that requires large utilities to meet this 50% by 2030.	<b>Consistent Prior to Mitigation.</b> State program that requires no action at the local or project level. Benefits to project-related electricity consumption will be realized.
Phase 2 Truck Efficiency	Draft EPA and NHTSA program to reduce GHG emissions from heavy-duty vehicles starting in model year 2021.	<b>Consistent Prior to Mitigation.</b> State and federal program that requires no action at the local or project level. Benefits to project-related truck travel will be realized once approved.
Source: ARB 2015a.		

**Impact Determination for 2020 to 2040**

As discussed above, further implementation of major statewide measures (particularly RPS of 50%) along with mitigation measures for the project would reduce annual project operational GHG

emissions. As shown in Table 4.2-8, project emissions with mitigation measures implemented would be approximately 48% lower than emissions in 2030 and 66% lower than emissions in 2040 without implementation of mitigation, which would align with substantial progress toward the statewide reductions set by EO B-30-15 and EO S-03-05. Moreover, the proposed project's GHG emission reductions demonstrate substantial progress on a downward trajectory relative to unmitigated emissions. This downward trend over time would be consistent with the need for deeper reductions post-2020 consistent with long-term reduction targets promulgated in EO B-30-15 and EO S-03-05. However, because the project and District as a whole are reliant on the State to develop regulations and guidance, and to cooperate with and petition other agencies to reduce emission from the largest sources, it is not certain if the project's post-2020 emissions through 2040 would meet the specific reduction targets required by the project in order to achieve the overall state targets promulgated in EO B-30-15 and EO S-03-05.

Therefore, post-2020 project GHG emission impacts are considered significant (**Impact-GHG-2**). As mentioned, after implementation of Mitigation Measures **MM-GHG-1 through MM-GHG-6**, project emissions would be substantially reduced and would be on a downward trajectory, but would remain significant because there is no certainty that the project's reduced emissions, after mitigation, would represent its fair share of the requisite reductions to achieve statewide post-2020 targets. Consequently, the project may not result in sufficient progress toward long-term local, regional, and statewide reduction targets and its contribution of GHG emissions to global climate change in the post-2020 period would still be considered cumulatively considerable after mitigation is incorporated.

### Level of Significance prior to Mitigation

For the years between 2020–2040, the proposed project would not parallel the State's overall reduction targets identified in EO S-03-05 and EO B-30-15 and would not be in compliance with all plans, policies, and regulatory programs adopted by ARB or other California agencies for post-2020 for the purpose of reducing the emissions of GHGs. Potentially significant impact(s) include:

**Impact-GHG-2: Project GHG Emissions Beyond 2020.** Although proposed project emissions would be on a downward trajectory in the post-2020 period, the proposed project's reduction in GHG emissions during combined project construction and operational activities, before mitigation, may not contribute sufficiently to post-2020 progress toward statewide 2030 and 2050 reduction targets and would not always be in compliance with plans, policies, and regulatory programs adopted by ARB or other California agencies for post-2020 for the purpose of reducing the emissions of GHGs.

### Mitigation Measures

**MM-GHG-6: Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry.** The project proponent shall incorporate renewable energy into the leasehold or other areas within the San Diego Unified Port District or purchase greenhouse gas reduction credits as specified herein to achieve requisite reductions to meet the 2030 and 2040 reduction targets. This mitigation measure shall combine with MM-GHG-5 to achieve at least 12,095 megawatt-hours per year (MWh/year) of renewable energy or the project proponent may purchase the equivalent amount of greenhouse gas offsets—an initial amount of 14,262 metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>) by 2030 and a final amount of 25,554 MTCO<sub>2e</sub> by 2040. This

requirement would result in an annual reduction of 1,462.2 MTCO<sub>2</sub>e by 2030 and 2,555.4 MTCO<sub>2</sub>e by 2040.

*2030 Reduction Requirement.* In order to achieve 2030 annual reduction target of 1,462.2 MTCO<sub>2</sub>e, the project proponent shall install and operate a renewable energy project that, combined with MM-GHG-5, would achieve at least 6,750 MWh/year of renewable energy (i.e., First Phase). Otherwise, the project proponent shall purchase the equivalent amount of greenhouse gas offsets, which is 7,131 MTCO<sub>2</sub>e. The First Phase of the renewable energy project may be submitted to the San Diego Unified Port District as late as January 1, 2023 (but no later) in order to consider the latest advancements in energy technology and future regulatory requirements, but may be submitted sooner and must be operational by January 1, 2025.

*2040 Reduction Requirement.* In order to achieve 2040 annual reduction target of 2,555.4 MTCO<sub>2</sub>e, the project proponent shall install and operate a renewable energy project that, combined with MM-GHG-5 and the First Phase, would achieve at least 12,095 MWh/year of renewable energy (i.e., Second Phase). Otherwise, the project proponent shall purchase the equivalent amount of greenhouse gas offsets, which is 25,554 MTCO<sub>2</sub>e. The Second Phase of the renewable energy project may be submitted to the San Diego Unified Port District as late as December 31, 2028 (but no later) in order to consider the latest advancements in energy technology and future regulatory requirements, but may be submitted sooner and must be operational by January 1, 2030.

Because it is unknown how “solar ready” the available rooftop areas are within the leasehold, once at the design phase, the renewable energy project may be determined infeasible. Should this determination of infeasibility be made by the San Diego Unified Port District after considering evidence submitted by the project proponent related to any structural limitations (i.e., the rooftops cannot support a renewable energy system), then two additional options are available. The San Diego Unified Port District shall either require the renewable energy project to be built off site (i.e., at a location not within the proponent leaseholds but within the San Diego Unified Port District’s jurisdiction) or shall require the proponent to purchase the equivalent amount of greenhouse gas offsets from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the California Air Resources Board). The selected option or a combination of the above-mentioned options must achieve a total annual reduction of 1,426.2 MTCO<sub>2</sub>e beginning on January 1, 2025 and lasting until December 31, 2029. Beginning on January 1, 2030, the annual reductions must increase to 2,555.4 MTCO<sub>2</sub>e until the end of the project life in 2040. The aggregated annual reductions between 2025 and 2030 would amount to 7,131 MTCO<sub>2</sub>e (relative to the projected San Diego Gas and Electric power mix in 2030) and would increase to an aggregated amount of 25,554 MTCO<sub>2</sub>e between 2030 and 2040 (relative to the projected San Diego Gas and Electric power mix in 2040).

### Level of Significance after Mitigation

Even after implementation of **MM-GHG-1** through **MM-GHG-6**, **Impact-GHG-2** would remain significant due to the lack of a known project type and location-specific reduction target; therefore, it cannot be stated with certainty that the project would result in emissions that would represent a fair share of the requisite reductions to achieve post-2020 targets.

Mitigation Measure **MM-GHG-6** includes installation of solar panels on available rooftop space within the leasehold or off site but within the District’s jurisdiction. It is assumed that minimal

construction activities would be required and would consist of installing poles or infrastructure on the rooftops to mount the solar arrays, electrical connections to the existing grid, potential minor upgrades to the existing onsite electrical system (pending consultation with SDG&E), possible minor structural improvements to the buildings and roofs, and a few associated material deliveries for the solar hardware. Once operational, the use of the solar arrays would not create any glare issues because they are designed and coated to absorb light, not reflect it, require very little maintenance, and in general would not cause any significant impacts on the environment. Therefore, environmental impacts associated with the implementation of the solar option under **MM-GHG-6** would be less than significant.

***Threshold 3: Implementation of the proposed project would not place people or structures at substantial risk of harm due to predicted climate change effects***

CEQA does not require an analysis of how existing environmental conditions will affect a project's future users or residents unless the project would exacerbate those conditions (see *California Building Industry Assoc. v. Bay Area Air Quality Management District* [Dec. 17, 2015] Cal.4<sup>th</sup>). However, the project site is within the Coastal Zone and, pursuant to EO S-13-08, the California Coastal Commission considers this issue in determining consistency with the Coastal Act. Therefore, the extent to which existing environmental conditions will affect a project's future users and infrastructure, particularly in terms of SLR, is provided herein.

As discussed above, several impacts on the environment are expected throughout California as a result of global climate change. The extent of these effects is still being defined as climate modeling tools become more refined. Regardless of the uncertainty in precise predictions, it is widely understood that substantial climate change is expected to occur in the future. Potential climate change impacts in the area include, but are not limited to, SLR, extreme heat events, increased water and energy consumption, and changes in species distribution and range.

Projected SLR as an effect of climate change is expected to increase the number of areas that experience coastal flooding along San Diego Bay in the future. Coastal and low-lying areas, such as the project site, are particularly vulnerable to future SLR. More specifically, SLR is a concern for the future, particularly in combination with future storm events and coastal flooding. A scenario with 100-year flood flows that coincide with high tides, taking into account SLR over a 50- or 100-year horizon, would dramatically increase the risk of flooding in the project vicinity. The concern here is the impact on the project from SLR, as opposed to the impact of the project on SLR.

According to the National Oceanic and Atmospheric Administration's (NOAA) *Sea Level Rise and Coastal Flooding Impacts Viewer* (NOAA 2014), portions of the project site would be inundated at 5 and 6 feet of SLR. Historically in San Diego, the mean sea level trend was 2.08 millimeters/year with a 95% confidence interval of +/- 0.18 millimeters/year based on monthly mean sea level data from 1906 to 2014, which is equivalent to a change of 0.68 foot in 100 years. SLR is anticipated to accelerate over the next century. According to NOAA, there is very high confidence (greater than 90% chance) that global mean sea level will rise at least 8 inches (0.2 meter) and no more than 6.6 feet (2.0 meters) by 2100 (NOAA 2014). Furthermore, the June 2012 National Research Council report *Sea-Level Rise for the Coasts of California, Oregon, and Washington* projects SLR south of Cape Mendocino to be 0.13 to 0.98 foot (4 to 30 centimeters) by 2030, 0.39 to 2.0 feet (12 to 61 centimeters) by 2050, and 1.38 to 5.48 feet (42 to 167 centimeters) by 2100, as shown in Table 4.2-13. Note that this report was updated in March 2013 but the projections did not change.

Based on the best available science, there is potential for project site inundation near the end of the century. Nevertheless, after mid-century, projections of SLR become more uncertain. These projections vary with future projections due in part to modeling uncertainties, but primarily due to uncertainties about future global GHG emissions and uncertainties associated with the modeling of land ice melting rates. Therefore, for projects with timeframes beyond 2050, it is especially important to consider adaptive capacity, impacts, and risk tolerance to guide decisions about whether to use the low or high end of the ranges presented. However, the project applicant (Pasha) has a Terminal Operating Agreement that lasts through 2040. Should the tenant wish to continue operations beyond 2040, the lease would need to be renewed, which would be a discretionary action that would trigger CEQA. Therefore, the life of the project is to 2040.

In the foreseeable future the terminal is sufficiently above sea level (approximately 7–9 feet above existing mean sea level) to prevent any adverse effects from SLR. Table 4.2-14 shows project site elevation and SLR projections for the 2030, 2050, and 2100 timeframes; however, the life of the project is until 2040. As shown in Table 4.2-14, the project site would remain sufficiently above SLR projections until the upper end of the 2100 timeframe, which is well beyond the life of the project (2040). In 2100, inundation is projected to occur during mean high-tide conditions. When accounting for storm surge events (temporary inundation), the project site would remain sufficiently above SLR projections until the upper end of the 2050 and 2100 timeframes. Therefore, during the life of the Terminal Operating Agreement, the project site would remain sufficiently above sea level (approximately 4.56–6.43 feet above projections by 2050 without storm surge) and no significant impacts would occur from SLR through the reasonably foreseeable life of the project. Note that the information, particularly projected SLR beyond the life of the project in 2050 and 2100, is presented in Table 4.2-14 and herein for informational purposes only.

**Table 4.2-14. Sea Level Rise Elevation and Projections (feet)**

Year	Existing Tidal Datum <sup>a</sup>		Sea Level Rise Projection <sup>b</sup>		Project Elevation Relative to Projection <sup>c</sup> – Permanent SLR		Project Elevation Relative to Projection <sup>d</sup> – plus Storm Surge	
	Site Elevation above MSL	Mean Higher High Water Elevation above MSL	Lower End	Upper End	Lower End	Upper End	Lower End	Upper End
2030	9.32	2.76	0.13	0.98	6.43	5.58	4.03	3.18
2050	9.32	2.76	0.39	2.00	6.17	4.56	3.77	2.16
2100	9.32	2.76	1.38	5.48	5.18	1.08	2.78	-1.32

MSL = mean sea level

<sup>a</sup> Mean Higher High Water Elevation above MSL calculated based on the difference between mean higher high water (5.64 feet) and MSL (2.89 feet). Obtained from: <https://www.portofsandiego.org/maritime/check-port-and-harbor-conditions/424-tides-and-currents.html>.

<sup>b</sup> Based on projections for south of Cape Mendocino. Obtained from: [http://www.opc.ca.gov/webmaster/ftp/pdf/docs/2013\\_SLR\\_Guidance\\_Update\\_FINAL1.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/docs/2013_SLR_Guidance_Update_FINAL1.pdf).

<sup>c</sup> Based on the difference between site elevation, mean high water elevation above MSL, and SLR projects. For example, the lower end elevation for 2030 is calculated as follows: 9.32 – 2.76 – 0.13 = 6.43 feet.

<sup>d</sup> Based on the difference between permanent SLR above mean higher high water and 100-year (1% return probability) surge events. For example, the lower end elevation for 2030 is calculated as follows: 6.43 – 2.40 = 4.03 feet. Surge event obtained from: <http://tidesandcurrents.noaa.gov/est/curves.shtml?stnid=9410170>.

In addition to SLR, a range of other potential climate change impacts may affect the project, including increased temperatures, heat stress days, and water supply. However, implementation of the project would not lead to an increase in wildfires, onsite flooding, or a direct increase in surrounding temperatures. Moreover, although regional water supplies are subject to potential future climate change effects, the project does not propose any significant increase in water consumption, with consumption being limited to typical uses associated with additional employees (restroom use, drinking), water for vehicle cleaning, and occasional site cleaning in compliance with water quality runoff standards. Therefore, the project would result in a less-than-significant impact related to subjecting persons or property to climate change effects.

### **Level of Significance prior to Mitigation**

Implementation of the proposed project would not place people or structures at substantial risk of harm due to predicted climate change effects. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Level of Significance after Mitigation**

Impacts would be less than significant.

***Threshold 4: Implementation of the proposed project would not result in a wasteful, inefficient, and unnecessary usage of direct or indirect energy.***

### **Impact Discussion**

This impact analysis follows the guidance put forth by Appendix F of the State CEQA Guidelines. As noted in Appendix F, the means of achieving the goal of conserving energy include the following.

1. Decreasing overall per capita energy consumption
2. Decreasing reliance on fossil fuels such as coal, natural gas and oil
3. Increasing reliance on renewable energy sources

CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Both construction and operation are addressed below.

#### **Construction**

Project construction would primarily consume diesel through operation of heavy-duty construction equipment, material deliveries, and debris hauling. As indicated in Table 4.2-15, energy use associated with project construction is estimated to result in the short-term consumption of 3,172 million BTUs. This represents a small demand on local and regional fuel supplies that would be easily accommodated. Moreover, this demand for fuel would have no noticeable effect on peak or baseline demands for energy. Therefore, construction of the project would not result in a wasteful, inefficient, and unnecessary usage of direct or indirect energy.



**Table 4.2-15. Estimated Construction Energy Consumption**

Source	Million BTUs/year <sup>a</sup>
	Net New with Project
<i>Diesel</i>	
Truck Travel	1,204
Equipment	1,968
<b>Total</b>	<b>3,172</b>

Source: Appendix E

<sup>a</sup> Energy is provided in million BTU for comparison purposes.**Operations**

The primary components of the proposed project include increased storage capacity and associated throughput, which would increase vessel hotel time, locomotive activity, and truck activity. Thus, once operational, the project would require more energy than the existing condition. Table 4.2-16 summarizes estimated incremental increases in operational energy consumption, assuming Opening Year 2016.

**Table 4.2-16. Estimated Annual Operational Energy Consumption**

Source	Million BTUs/year <sup>a</sup>		
	Existing	Existing Plus Project	Existing Plus Project - with Project Features and Mitigation Measures
<i>Electricity<sup>b</sup></i>			
Lighting	5,540	7,811	7,811
<i>Total Electricity</i>	<i>5,540</i>	<i>7,811</i>	<i>7,811</i>
<i>Diesel</i>			
Ocean-Going Vessels	94,223	110,847	103,048
Locomotives	39,225	45,762	40,763
Railcar Mover	--	1,953	1,953
Truck Travel	67,832	106,518	106,518
<i>Total Diesel</i>	<i>201,280</i>	<i>265,080</i>	<i>252,282</i>
<i>Gasoline</i>			
Additional Workers	18,563	28,825	28,825
Car Processing	1,295	2,591	2,591
Van Shuttle	662	1,051	1,051
<i>Total Gasoline</i>	<i>18,563</i>	<i>28,825</i>	<i>28,825</i>
<b>Total</b>	<b>225,383</b>	<b>301,716</b>	<b>288,918</b>

<sup>a</sup> Energy is provided in million BTU for comparison purposes. However, electricity use can be converted to kWh by multiplying 1 million BTUs by 293.1 kWh.

<sup>b</sup> Because MM-GHG-5 and MM-GHG-6 include options to purchase GHG offsets in place of installing renewable energy on site, reductions associated with renewable energy are not included.

Source: Appendix E

As shown in Table 4.2-16, the addition of the railcar mover, when considered in conjunction with conservation and renewable energy State measures and the mitigation measures<sup>46</sup> provided to ensure consistency with the District's CAP and related State GHG emission reduction regulations, the proposed project would reduce the amount of fuel consumed and energy required for the net new demand by 4%. Note that this reduction does not include savings associated with statewide measures that would reduce the carbon intensity, and associated energy consumption, of transportation fuels and electricity. This reduction is consistent with strategies being implemented by the District and the State via the Energy Policy Act (see Section 4.2.3.2) and AB 2076 (see Section 4.2.3.3) to reduce energy consumption, and the project would be consistent with these strategies.

Table 4.2-17 provides a consistency analysis with questions raised in Appendix F.

**Table 4.2-17. Proposed Project Comparison to State CEQA Guidelines Appendix F**

<b>Project Impact Considerations from Appendix F</b>	<b>Project Applicability and Analysis</b>
Energy requirements and energy use efficiencies by amount and fuel type for each stage of the project.	<b>Applies.</b> See Tables 4.2-15 and 4.2-16, both of which break down energy use by amount and fuel type. As indicated, the project would increase the use of electricity and the need for fossil fuels such as diesel fuel compared to existing conditions.
Effects on local and regional energy supplies and the need for additional capacity	<b>Applies.</b> There would be no adverse effects on local or regional energy supplies, and all project-related energy demands would be accommodated by existing infrastructure without the need to expand capacity.
Effects of the project on peak and base period demands for electricity and other forms of energy	<b>Applies.</b> Energy load would vary over this time, but current supply and infrastructure would be able to accommodate the additional demand without interruption or issues to existing customers and without the need for new infrastructure. The project does not propose demand that would affect peak and base period demand.
Degree to which the project complies with existing energy standards	<b>Applies.</b> The proposed project would be fully compliant with all existing energy standards, including the Energy Policy Act and AB 2076. The project would include energy-efficient lighting within the project sites.
Effects of the project on energy resources	<b>Applies.</b> The proposed project would not result in an adverse impact on energy resources. There are sufficient energy resources to accommodate the additional project energy demand.
Projected transportation energy use requirements and overall use of efficient transportation alternatives	<b>Applies.</b> The proposed project would increase the need for fossil fuels and electricity, but would see reduced locomotive use at the terminal due to the replacing of locomotive activity with smaller and more efficient equipment. Moreover, mitigation to reduce vessel speeds would reduce emissions and fuel consumption associated with OGV transit, thus reducing the amount of fossil fuels needed compared to typical vessel transit and terminal operation and beyond state targets.

In summary, the proposed project would assist with energy conservation goals because it would (1) decrease reliance on fossil fuels and (2) would increase reliance on renewable energy sources

<sup>46</sup> Mitigation measures that would reduce energy demand or provide additional sources of clean renewable energy include an electric van shuttle (MM-GHG-4) and renewable energy systems (MM-GHG-5 and MM-GHG-6).

via the electrical grid, which includes RPS targets of 33% by 2020 and 50% by 2030. Impacts would be less than significant.

### **Level of Significance prior to Mitigation**

Implementation of the proposed project would not result in a wasteful, inefficient, and unnecessary usage of direct or indirect energy. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required, but MM-GHG-1, MM-GHG-2, MM-GHG-3, MM-GHG-4, MM-GHG-5, and MM-GHG-6 would further reduce the project's energy demand and reduce fossil fuel use in favor of increased renewable energy sources (e.g., RPS and direct installed renewable energy or purchase of GHG offsets).

### **Level of Significance after Mitigation**

Impacts would be less than significant.

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## Section 4.3

# Hazards and Hazardous Materials

### 4.3.1 Overview

This section describes the existing conditions and applicable laws and regulations for hazards and hazardous materials, followed by an analysis of the proposed project's potential to create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. All other potential hazards and hazardous material impacts were analyzed in Section VIII of the Revised Initial Study/Environmental Checklist (see Appendix B-1), which is incorporated here by reference, and were determined to be insignificant. The analysis and conclusions regarding these impacts are summarized in Section 6.4, *Effects Not Found to be Significant*, of Chapter 6. Note that this section does not address air or water pollutants, which are discussed in Section 4.1, *Air Quality and Health Risk*, and Section 4.4, *Hydrology and Water Quality*, respectively.

Table 4.3-1 summarizes the significant impacts and mitigation measures discussed in Section 4.3.4.3, *Project Impacts and Mitigation*.

**Table 4.3-1. Summary of Significant Impacts and Mitigation Measures**

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
<b>Impact-HAZ-1:</b> Potential of Encountering Burn Ash from Former National City Dump.	<b>MM-HAZ-1:</b> Prepare a Site-Specific Site Safety and Health Plan to Address Potential Burn Ash Presence and Other Contaminants.	Less than significant	Any discovery of burn ash would be identified and ground-disturbing work in the area would cease immediately, followed by measures to notify the appropriate oversight agency to ensure that a significant hazardous materials impact does not occur. Therefore, with implementation of MM-HAZ-1, Impact-HAZ-1 would be less than significant.

### 4.3.2 Existing Conditions

The proposed project has several components that consist of the former NCMT tank farm, streets closures, short-term use permits, the former Weyerhaeuser site, and the PMPA. The latter is required to redesignate portions of the streets proposed for closure to Marine Related Industrial land use, to include the two uplands sites into the PMP as Commercial Recreation land uses, and to include a Marine Related Industrial Overlay on two of the project sites.

The Revised Initial Study/Environmental Checklist (Appendix B-1) determined that construction activities (i.e., grading and excavation) related to the tank farm component may encounter residual soil contamination as a result of the tank farm's environmental history. The tank farm and streets

closures (and possibly the former Weyerhaeuser site) components would each require ground disturbance, such as excavation and grading. Therefore, these components would have the potential to create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Consequently, this section addresses the existing conditions at these three project sites.

The former tank farm site is mostly dirt with some remnant paving from an access road. Heavily disturbed vegetation is present, with a slightly greater concentration in the southwest and north portions. The placement of the former liquid bulk storage tanks are still partially evident; however, no habitable structures or buildings exist within the tank farm project boundaries, and, as such, no hazardous materials are being stored or handled.

The street closures sites (portions of Quay Avenue, 28th Street and 32nd Street) are all District roadways, paved with asphalt, and striped with stop sign controlled intersections. All three street segments allow on-street parking. Quay Avenue, 28th Street, and the north side of 32nd Street permit parallel parking, whereas the south side of 32nd Street is striped to allow diagonal parking. Landscaping is present on the east side of Quay Avenue, on each side of 28th Street, and on the north side of 32nd Street. Exposed soil is present on the west side of Quay Avenue and the south side of 32nd Street. Medians are also present on 32nd Street and these contain exposed soil. There is a small guard shack at the western end of 32nd Street. However, no hazardous materials are stored or handled at any of the street closure sites.

The former Weyerhaeuser site was utilized by Weyerhaeuser Lumber until 2014. There are two structures on this site. One is a 20,000-square-foot warehouse built in the early 1970s. The second is a 1,800-square-foot office building built in the 1990s. Buildings constructed prior to 1980 potentially used asbestos containing materials (ACM) and lead-based paints, both of which are hazardous to human health if not removed and disposed of in accordance with state and local regulations. No hazardous materials are stored or used at the site; however, the former Weyerhaeuser site is part of the former Western Lumber property (see Section 4.3.2.1 below) and previously had underground storage tanks containing petroleum products. These underground storage tanks were removed and closed under the oversight of the San Diego County Department of Environmental Health (DEH) in the mid-1990s.

### **4.3.2.1 Hazardous Materials Database Results**

Database searches were conducted using the State Water Resources Control Board's (SWRCB's) GeoTracker and Department of Toxic Substances Control's (DTSC's) EnviroStor. The search was performed using a 0.25-mile radius around the project sites where ground disturbance is proposed or may occur. This includes the tank farm site (and the adjacent Quay Avenue and 28th Street), 32nd Street, and the former Weyerhaeuser site.

### **Project Sites**

Results of the database searches, along with documents obtained from DEH, indicate that the former tank farm site has undergone remedial activities for two separate hydrocarbon releases to onsite soil. Both cases were granted closure by DEH, the first event in 2005 and the second in 2009 (State Water Resources Control Board 2014). In addition, the former Weyerhaeuser site is part of the former Western Lumber property, which had a soil contamination clean-up for former underground storage

tanks in the mid-1990s and was closed under oversight of DEH. The remaining project sites were not listed on any of the databases.

Seven hazardous materials sites identified during the database search are within a 0.25-mile radius of the proposed project (State Water Resources Control Board 2014). Table 4.3-2 provides more information on these sites.

**Table 4.3-2. Contamination Sites Within 0.25 Mile of the Project Sites**

Site Name	Location/Address	Onsite	Database	Description	Status
Dixieline Lumber Company	1400 West 28th Street	No	Geotracker	LUST (No contaminant specified)	Closed
Western Lumber	2745 Tidelands Avenue	Yes, former Weyerhaeuser site	Geotracker	Clean-Up Program Site (Soil Contamination)	Closed
National City Marine Terminal, San Diego Gas & Electric	2600 Terminal Avenue	Yes, tank farm site	Geotracker	Clean-up Program Site (Soil contamination, Chlorinated Hydrocarbons)	Closed
San Diego Unified Port District (Former Jamac-Dixieline Site)	3040 Tidelands Avenue	No	Geotracker	LUST (Chlorinated Hydrocarbons)	Closed
Goesno Place Repository at Goesno Place	South of W 32nd Street and east of Goesno Place at Pier 32	No	Geotracker	Land Disposal Site (Sediment Contamination)	Closed
Fletcher Gen/Sweetwater Facility	3040 Terminal Avenue	No	Geotracker	Clean-up Program Site (Soil Contamination/Waste Oil)	Closed
<b>Pepper Oil Company</b>	<b>2300 Tidelands Avenue</b>	<b>No</b>	<b>Geotracker, Envirostor</b>	<b>Clean-up Program Site (Corrective Action for Fuel Terminals; LUST)</b>	<b>Open</b>

Notes:

LUST = Leaking Underground Storage Tank

**BOLD = Open Sites**

All sites have been granted closure, with the exception of the Pepper Oil Company site. The Pepper Oil Company is undergoing site assessments for contaminated groundwater. The site is approximately 300 feet northeast of the Quay Avenue and Marina Bay Drive intersection. Figure 4.3-1 shows the location of known contaminated sites within 0.25 mile of the proposed project.

## Former National City Dump

In addition to the hazardous materials sites that have been identified within 0.25 mile of the proposed project area, the former National City Dump (also known as Davies Dump), Solid Waste Information System #37-CR-0084, is approximately 0.4 mile to the east of the tank farm and street

closures sites, and 0.4 mile northeast of the former Weyerhaeuser site.<sup>1</sup> The Davies Dump operated during the 1940s and 1950s as a burn dump and the exact perimeter of the disposal site is not well known. Consequently, it is possible some areas may contain burn ash.<sup>2</sup>

Burn ash is a hazardous material because it may contain elevated levels of heavy metals regulated under California Code of Regulations (CCR), Title 22. Fortunately, the predominant metals of concern in burn ash, which can include arsenic, beryllium, cadmium, chromium, copper, mercury, nickel, lead, and zinc. Burn ash has limited potential to leach into groundwater. However, burn ash does pose a risk if it becomes airborne, is eroded into surface water, or comes in contact with skin. The potential routes of human exposure to the contaminants in burn ash are inhalation, ingestion, and direct skin contact.

### 4.3.3 Applicable Laws and Regulations

#### 4.3.3.1 Federal

##### **Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act**

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program, which is administered by the U.S. Environmental Protection Agency (EPA), to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” system of regulating hazardous materials.

##### **Department of Transportation Hazardous Materials Regulations**

U.S. Department of Transportation (DOT) Hazardous Materials Regulations (Code of Federal Regulations [CFR], Title 49, Parts 100–185) cover all aspects of hazardous materials packaging, handling, and transportation. Parts 107 (Hazardous Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), 173 (Packaging Requirements), 177 (Highway Transportation), 178 (Packaging Specifications), and 180 (Packaging Maintenance) would all apply to goods movement to and from the project site and/or surrounding areas.

Enforcement of the aforementioned DOT regulations is shared by each of the following administrations under delegations from the Secretary of the DOT.

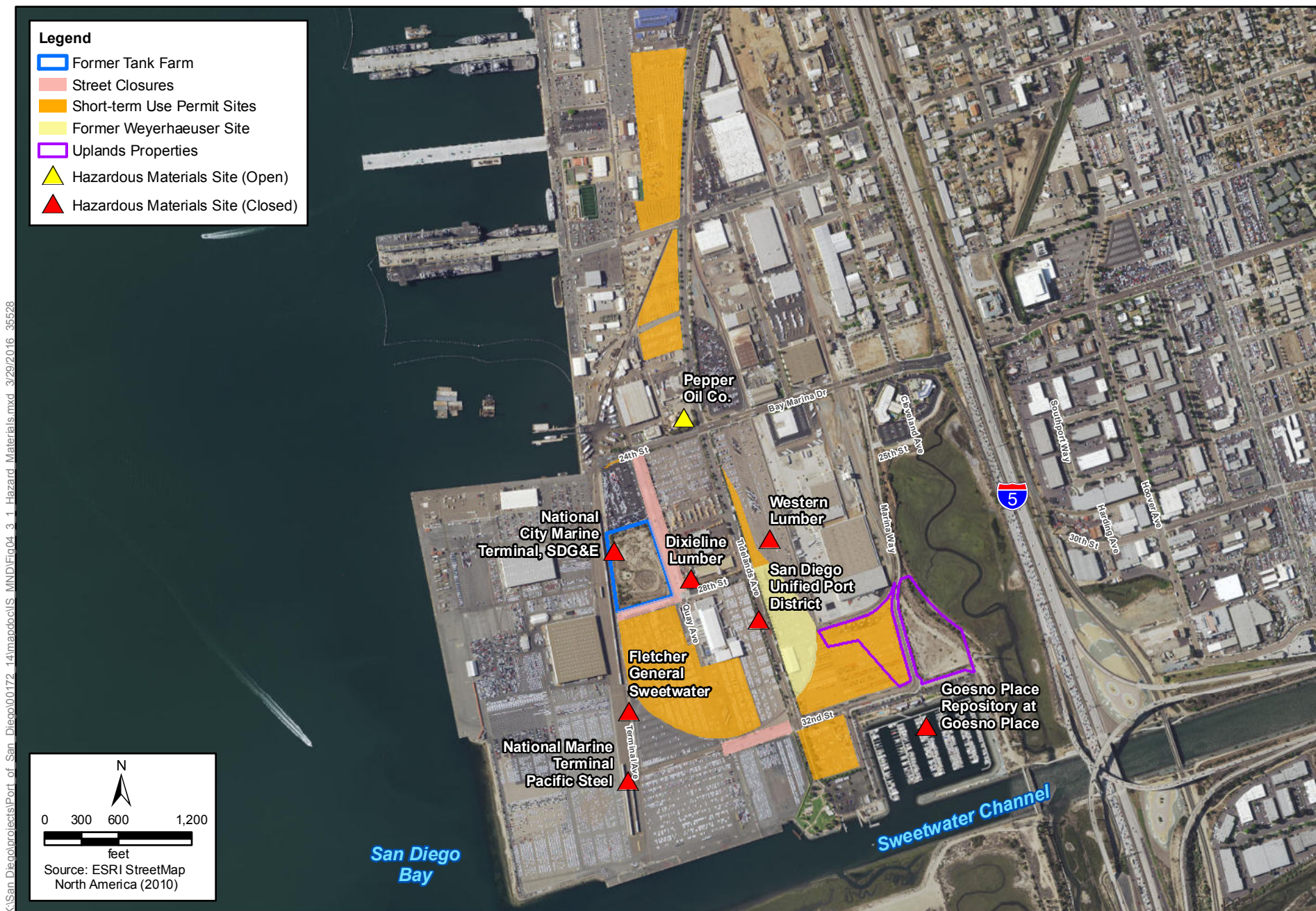
- **Research and Special Programs Administration** is responsible for container manufacturers, reconditioners, and retesters and shares authority over shippers of hazardous materials.
- **Federal Highway Administration** enforces all regulations pertaining to motor carriers.
- **Federal Railroad Administration** enforces all regulations pertaining to rail carriers.
- **Federal Aviation Administration** enforces all regulations pertaining to air carriers.

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<sup>1</sup> These sites are the only locations where some earthwork would occur and thus where burn ash may be encountered.

<sup>2</sup> Burn ash as defined here is residual ash that results from low temperature combustion of solid waste.





**Figure 4.3-1**  
**Hazardous Materials Site Locations**  
**NCMT Tank Farm Paving and Streets Closures Project & PMPA**



- **U.S. Coast Guard** enforces all regulations pertaining to shipments by water.

## **Comprehensive Environmental Response, Compensation, and Liability Act**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted in 1980 to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The corresponding regulation in 42 CFR 103 provides the general framework for response actions and managing hazardous waste.

## **United States Coast Guard 33 CFR and 46 CFR**

The U.S. Coast Guard (USCG), through Title 33 (Navigation and Navigable Waters) and Title 46 (Shipping) of the CFR, is the federal agency responsible for vessel inspection, marine terminal operations safety, coordination of federal responses to marine emergencies, enforcement of marine pollution statutes, marine safety (such as navigation aids), and operation of the National Response Center for spill response, and is the lead agency for offshore spill response. USCG implemented a revised vessel-boarding program in 1994 designed to identify and eliminate substandard ships from U.S. waters. The program pursues this goal by systematically targeting the relative risk of vessels and increasing the boarding frequency on high risk (potentially substandard) vessels. The relative risk of each vessel is determined through the use of a matrix that factors the flag of the vessel, owner, operator, classification society, vessel particulars, and violation history. Vessels are assigned a boarding priority from I to IV, with priority I vessels being the potentially highest risk and priority IV having relatively low risk. USCG is also responsible for reviewing marine terminal Operations Manuals and issuing Letters of Adequacy upon approval.

## **Emergency Planning and Community Right-To-Know Act (U.S. Code, Title 42, Section 11001 et seq.)**

Also known as Title III of the Superfund Amendments and Reauthorization Act, the Emergency Planning and Community Right-to-Know Act was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. To implement this act, Congress required each state to appoint a State Emergency Response Commission. These commissions are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district. The act provides requirements for emergency release notification, chemical inventory reporting, and toxic release inventories for facilities that handle chemicals.

## **Occupational Safety and Health Act of 1970**

The Occupational Safety and Health Act (OSHA) establishes the framework for safe and healthful working conditions for working men and women by authorizing enforcement of the standards developed under the act. The act also provides for training, outreach, education, and assistance related to establishing a safe working environment. Regulations defining safe standards have been developed for general industry, construction, maritime, recordkeeping, and agriculture. OSHA standards specific to hazardous materials are listed in 29 CFR 1910 Subpart H. Safety and health

regulations pertaining to construction are listed in 29 CFR 1926 Subpart H. Finally, site-specific site safety and health plans are required by 29 CFR 1910.120 to ensure that disturbed and excavated soil is screened for the presence of hazardous materials and appropriately characterized and disposed of or reused onsite if determined suitable for reuse.

### 4.3.3.2 State

#### Cortese List

California Government Code 65962.5 (commonly referred to as the *Cortese List*) includes hazardous waste facilities and sites listed by DTSC, Department of Health Services lists of contaminated drinking water wells, sites listed by the SWRCB as having underground storage tank leaks or a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

#### California Health and Safety Code Section 25100 et seq. (Hazardous Waste Control Act)

DTSC, a department of the California Environmental Protection Agency (Cal/EPA), is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6) and CCR Title 22, Division 4.5. Division 20, Chapter 6.5, of the California Health and Safety Code deals with hazardous waste control through regulations pertaining to transportation, treatment, recycling, disposal, enforcement, and the permitting of hazardous waste. Division 20, Chapter 6.10, contains regulations applicable to the cleanup of hazardous materials releases. Title 22, Division 4.5, contains environmental health standards for the management of hazardous waste. This includes standards for the identification of hazardous waste (Chapter 11) as well as standards that are applicable to generators of hazardous waste (Chapter 12) and transporters of hazardous waste (Chapter 13). Whereas the California Health and Safety Code is statutory law, the CCR is state regulation.

#### Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (California Health and Safety Code Chapter 6.11, Sections 25404–25404.9 [also CCR Title 27])

This program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of environmental and emergency response programs and provides authority to the Certified Unified Program Agency (CUPA). The CUPA for San Diego County is DEH's Hazardous Materials Division (HMD), which has responsibility and authority for implementing and enforcing the requirements listed in Chapter 6.5 (commencing with Section 25100), Chapter 6.67 (commencing with Section 25270), Chapter 6.7 (commencing with Section 25280), Chapter 6.95 (commencing with Section 25500), and Sections 25404.1 and 25404.2, including the following.

- **Aboveground Petroleum Storage Act Requirements for Spill Prevention, Control, and Countermeasure (SPCC) Plans.** Facilities with a single tank or cumulative aboveground storage capacities of 1,320 gallons or greater of petroleum-based liquid product (e.g., gasoline, diesel, lubricants) must develop an SPCC plan. An SPCC plan must be prepared in accordance with the

oil pollution prevention guidelines in 40 CFR 112. This plan must describe the procedures, methods, and equipment needed at the facility to prevent discharges of petroleum from reaching navigable waters. A registered professional engineer must certify the SPCC plan, and a complete copy of the plan must be maintained on site.

- **California Accidental Release Prevention Program.** This program requires any business that handles more than threshold quantities of an extremely hazardous substance to develop a Risk Management Plan. The Risk Management Plan is implemented by the business to prevent or mitigate releases of regulated substances that could have offsite consequences through hazard identification, planning, source reduction, maintenance, training, and engineering controls.
- **Hazardous Materials Business Plan/Hazardous Materials Inventory Statements.** Hazardous Materials Business Plans contain basic information regarding the location, type, quantity, and health risks of hazardous materials and/or waste. Each business must prepare a Hazardous Material Business Plan if that business uses, handles, or stores a hazardous material and/or waste or an extremely hazardous material in quantities greater than or equal to the following.
  - 55 gallons for a liquid
  - 500 pounds for a solid
  - 200 cubic feet for any compressed gas
  - Threshold planning quantities of an extremely hazardous substance
- **Hazardous Waste Generator Program.** This program regulates businesses that generate any amount of a hazardous waste. Proper handling, recycling, treating, storing, and disposing of hazardous waste are key elements to this program.
- **Tiered Permitting Program.** This program regulates the onsite treatment of hazardous waste.
- **Underground Storage Tank Program.** This program regulates the construction, operation, repair, and removal of underground storage tanks that store hazardous materials and/or waste.

## California Code of Regulations, Title 8—Industrial Relations

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The federal Occupational Safety and Health Administration and the California Division of Occupational Safety and Health (Cal/OSHA) are responsible for ensuring worker safety in the workplace. Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. These standards would be applicable to both construction and operation of the proposed project. Title 8 includes regulations pertaining to hazard control (including administrative and engineering controls), hazardous chemical labeling and training requirements, hazardous exposure prevention, hazardous material management, and hazardous waste operations.

Title 8 also specifies requirements for the removal and disposal of ACM. In addition to providing information regarding how to remove ACM, specific regulations limit the time of exposure, regulate access to work areas, require demarcation of work areas, prohibit certain activities in the presence of ACM removal activities, require the use of respirators, require monitoring of work conditions, require appropriate ventilation, and require qualified persons for ACM removal.



Title 8 also covers the removal of lead-based paint. Specific regulations cover the demolition of structures that contain lead-based paint, the process associated with its removal or encapsulation, remediation of lead contamination, the transportation/disposal/storage/containment of lead or materials containing lead, and maintenance operations associated with construction activities involving lead, such as lead-based paints. Similar to ACM removal, lead-based paint removal requires proper ventilation, respiratory protection, and qualified personnel.

### **California Labor Code (Division 5, Parts 1 and 7)**

California Labor Code regulations ensure appropriate training regarding the use and handling of hazardous materials and the operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5, ensures that employees who handle hazardous materials are appropriately trained and informed about the materials. Division 5, Part 7, ensures that employees who work with volatile flammable liquids are outfitted with appropriate safety gear and clothing.

### **State Water Resources Control Board Construction General Permit (2009-0009-DWQ)**

The general permit requirements apply to construction or demolition activities, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than 1 acre.

The Construction General Permit requires the development and implementation of a site-specific Storm Water Pollution Prevention Plan (SWPPP), which should contain a site map(s) showing the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect stormwater runoff and the placement of those BMPs.

### **4.3.3.3 Regional**

#### **San Diego County Code, Title 6, Division 8**

San Diego County Code of Regulatory Ordinances under Title 6, Division 8, Chapters 8 through 11 establishes the HMD as the local CUPA. The HMD inspects businesses or facilities that handle or store hazardous materials, generate hazardous waste, generate medical waste, and own or operate underground storage tanks. The HMD also administers the California Accidental Release Prevention Program and the Aboveground Petroleum Storage Act Program, and provides specialized instruction to small businesses through its Pollution Prevention Specialist.

### **Operational Area Emergency Plan**

The San Diego County Operational Area was formed to help the county and its cities develop emergency plans, implement such plans, develop mutual aid capabilities between jurisdictions, and improve communications between jurisdictions and agencies. The San Diego County Operational Area consists of the county and all jurisdictions within the county. The Operational Area Emergency Plan is for use by the county and all of the cities within the county to respond to major emergencies

and disasters. It defines roles and responsibilities of all county departments and many city departments.

Cities within the county are encouraged to adopt the Operational Area Emergency Plan, with modifications that would be applicable to each city. The plan is updated once every 4 years by the County of San Diego Office of Emergency Services and the Unified Disaster Council of the Unified San Diego County Emergency Services Organization.

### 4.3.3.4 Local

#### Jurisdictional Runoff Management Plan

Under the Regional Water Quality Control Board Municipal Stormwater Permit (MS4 permit or Municipal Permit), the permittees covered under the permit are required to prepare individual Jurisdictional Runoff Management Plans (JRMPs) specific to their jurisdictions. Each jurisdictional plan must contain a component that addresses issues related to construction activities and a component that addresses issues related to existing development. Additionally, each co-permittee prepares and submits an annual report that describes the implementation of programs and strategies to reduce the discharge of pollutants of concern to the Municipal Separate Storm Sewer System (MS4) and receiving waters to the maximum extent practicable. Enforcement of the JRMP helps to prevent stormwater pollutants from entering into the local storm drains and ultimately the San Diego Bay.

#### BMP Design Manual

Previous municipal stormwater permits (Order Nos. 2001-01 and 2007-0001) required the development and implementation of a Standard Urban Stormwater Management Program (SUSMP) to address urban runoff pollution issues in new development and redevelopment projects. As directed under the current Municipal Permit, the District's SUSMP is to be replaced with a BMP Design Manual. Pursuant to the permit, the District began implementing the BMP Design Manual by February 16, 2016. The BMP Design Manual provides updated procedures for planning, selecting, and designing permanent structural stormwater BMPs based on specific performance standards outlined in the permit. The District's BMP Design Manual is consistent with the *Model BMP Design Manual* that was developed collectively with the other San Diego County jurisdictions. The District's BMP Design Manual identifies updated post-construction stormwater requirements for both tenant and District-sponsored major maintenance or capital improvement projects as required by the Municipal Permit. Specific BMPs to be implemented during project operation and maintenance may include, but not be limited to, the following.

- Properly maintain stormwater conveyance system.
- Keep the site clear of unauthorized non-stormwater discharges.
- Conduct routine inspections of BMPs and stormwater conveyance.
- Train employees in stormwater, spill response, and pollution prevention.

The BMP Design Manual identifies BMP requirements for both standard projects and Priority Development Projects (PDPs) as outlined in the permit. All new development and redevelopment projects are required to implement standard source control and site design BMPs to eliminate or reduce stormwater runoff pollutants. For PDPs, the BMP Design Manual describes additional

structural treatment controls that must be incorporated into the site design and, where applicable, addresses potential hydromodification impacts from changes in flow and sediment supply. The proposed project is a PDP because it would involve the redevelopment of a site that would create, add, or replace at least 5,000 square feet of impervious surface area (Section D.1.d(1) of Order No. R9-2007-0001).

### **San Diego Unified Port District, Article 10**

The District's own Article 10, the Port Stormwater Management and Discharge Control Ordinance, prohibits the deposit or discharge of any chemicals or waste to the tidelands or San Diego Bay and makes it unlawful to discharge pollutants directly into non-stormwater or indirectly into the stormwater conveyance system. The proposed project would be obligated to abide by Article 10.

### **San Diego Bay Watershed Water Quality Improvement Plan**

The District operates MS4s through which it discharges waste that is commonly found in urban runoff to San Diego Bay, subject to the terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit and the Waste Discharge Requirements for Discharges from MS4s Draining the Watersheds within the San Diego Region (Order No. R9-2013-0001) (MS4 permit). In compliance with the requirements of the MS4 permit, the District implements its JRMP as well as the San Diego Bay Watershed Water Quality Improvement Plan (WQIP) for each watershed in collaboration with local agencies that have jurisdiction within the watershed. The Pueblo San Diego Hydrologic Unit, which is where the project site is located, is within the San Diego Bay Watershed Management Area and covered by the WQIP. The primary goal of the WQIP is to improve the water resources of the San Diego Bay watershed while balancing economic, social, and environmental constraints.

## **4.3.4 Project Impact Analysis**

### **4.3.4.1 Methodology**

The following is a project-level analysis that evaluates the effects from hazards and hazardous materials that would result should the proposed project be implemented. Based on the analysis conducted in the Initial Study, which is incorporated by reference, and the actions that would be associated with each of the project components, this analysis is generally limited to the tank farm, street closures, and former Weyerhaeuser sites. These sites are the only project components that propose some ground disturbance. However, use of hazardous materials (such as products used for automobile detailing and repair) is discussed more generally as it relates to the proposed project and its effect on the entire project site. Based upon the existing conditions described above, the impact analysis assesses the direct and indirect impacts related to hazards and hazardous materials and determines whether the proposed project would exceed a threshold listed below.

### **4.3.4.2 Thresholds of Significance**

The following significance criteria are based on Appendix G of the State CEQA Guidelines and provide the basis for determining significance of impacts associated with hazards and hazardous materials resulting from the implementation of the proposed project. The determination of whether a hazards



and/or hazardous materials impact would be significant is based on the professional judgment of the District as Lead Agency supported by the recommendations of qualified personnel at ICF and the evidence in the administrative record.

Impacts are considered significant if the project would result in any of the following.

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
5. Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area.
6. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
8. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The analysis of whether the proposed project would have a significant impact related to hazards and hazardous materials under Thresholds 1 and 3 through 8 is provided in Section VIII of the Revised Initial Study/Environmental Checklist (Appendix B-1), which determined that the project would not result in significant impacts related to the routine transport, use, or disposal of hazardous materials; releases near schools; being listed on the Cortese List; being within a hazards area indicated by the Airport Land Use Compatibility Plans or near private airstrips; interfere with emergency response; or result in risk from wildfires. The analysis and conclusions in Section VIII of the Initial Study/Environmental Checklist are incorporated here by reference in this section of the EIR and are summarized in Chapter 6, *Additional Consequences of Project Implementation*. Therefore, only Threshold 2 is discussed in the impact analysis that follows.

### 4.3.4.3 Project Impacts and Mitigation Measures

***Threshold 2: Implementation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.***

#### Impact Discussion

##### Construction

Searches of GeoTracker and EnviroStor online records, along with documents obtained from DEH, indicate that the tank farm site has had a history of hydrocarbon releases to onsite soil. The site was granted closure by DEH in 2009. No other violations were noted. Although unlikely, there is a possibility that construction activities (i.e., grading and excavation) related to the project may encounter residual soil contamination as a result of the site's environmental history. As noted in the closure letter from DEH, if previously unidentified contamination is discovered, additional site assessment and cleanup would be required (County of San Diego 2009), pursuant to the existing laws summarized under Section 4.3.3, *Applicable Laws and Regulations*. In addition, the project area potentially contains residual contamination from the former National City Dump (also known as Davis Dump), a former burn dump disposal site. Potentially elevated levels of metals associated with burn ash may be encountered anywhere in the project area and may be hazardous to the health of construction workers that come into contact with these metals (**Impact-HAZ-1**). Incorporation of construction BMPs required by the project SWPPP and the District's JRMP would minimize site runoff that could carry any existing contaminants off site, and compliance with worker safety laws and regulations, such as those enforced by OSHA and the County of San Diego DEH requirements, would minimize human exposure to potential residual contaminants. However, **MM-HAZ-1** is required to ensure that any discovery of burn ash is handled according to existing laws, including CFR 1910.120 and CCR Title 22 and Title 27. Finally, the tank farm site is subject to an existing Terminal Operating Agreement with the District. The agreement requires Pasha to comply with all laws, which will also be a condition of the proposed CDP.

Moreover, demolition of the 20,000-square-foot warehouse at the former Weyerhaeuser site would require compliance with Title 8, *Industrial Relations*, of the California Code of Regulations. Compliance would ensure removal of any ACM and/or lead-based paint would be conducted in a safe manner, including proper disposal in an approved facility. In addition, treated wood building materials would be tested, handled, and disposed of in accordance with applicable regulations. Also, there is a record of site contamination in proximity to the existing warehouse and office building during the time of the former Western Lumber Company site (i.e. former Weyerhaeuser site) at 2745 Tidelands Avenue. Excavation and grading are not anticipated to encounter any contaminated soils given the site was remediated and closed in 2000 and considering only limited grading would occur to allow for demolition of the structures and repaving the surface lot. However, as mentioned above, compliance with 29 CFR 1910.120 and CCR Title 22 and Title 27 is required by law and steps to help ensure its implementation are provided with **MM-HAZ-1**. As specified, **MM-HAZ-1** would necessitate a site-specific site safety and health plan and a soil and groundwater management plan to further minimize any exposure to construction workers. Moreover, the proposed real estate agreement with

the District that would allow Pasha to occupy the site, as well as the CDP that would be required for development of the site, would require Pasha to comply with all such laws and regulations.

Typical construction-related hazardous materials would be used during construction of the proposed project, including fuel, solvents, paints, oils, and grease. It is possible that any of these substances could be released during construction activities. However, compliance with federal, state, and local regulations described under Section 4.3.3, in combination with construction BMPs, would minimize any impacts. As part of this process, the project proponent must submit a Storm Water Quality Management Plan (SWQMP), accurately describing how the project will meet applicable stormwater requirements. District staff facilitates a technical review of the SWQMP document and drainage design plans, as applicable, to ensure that structural BMP requirements are met. The SWQMP is evaluated for compliance with the Municipal Permit and with design criteria outlined in the District's BMP Design Manual. Once the approval process is complete, the project would commence and routine inspections would be conducted throughout the duration of project construction. Upon completion of construction activities, District staff would conduct close-out inspections to verify all project conditions of approval have been met. Close-out inspections for PDPs include an inspection of all project structural BMPs to ensure accurate installation and implementation per the approved SWQMP.

No construction would occur at the Marine Related Industrial Overlay sites (east portion of Lot K and Port Parcel 028-007). With the proposed project, activities would continue as they currently exist. Upon the expiration of the Marine Related Industrial Overlay, future Commercial Recreation developments may be proposed. However, no proposals have been submitted to the District at the time of this writing, and it is unclear what type of commercial development may occur on the sites, which could be one of several types of Commercial Recreation developments. Once a development is proposed, it would undergo environmental review by the District, and CEQA compliance would be required prior to any construction occurring.

Therefore, construction of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts from hazards and hazardous materials from project construction would be less than significant.

### **Operation**

Implementation of the proposed project is not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Hazardous materials expected to be used, stored, or handled on site during normal project operations would consist of materials typical of vehicle maintenance and repair and would be located at the NCMT's warehouses where they are currently stored. These materials could include oils, greases, bonding materials, and other chemicals for maintenance and repair work. All materials would be stored and handled in accordance with federal, state, and local regulations and subject to inspection and requirements of the CUPA, in this case, the County DEH. This is currently the requirement for onsite storage of commonly used vehicle-related maintenance and repair hazardous materials and would continue to be with the proposed project. Compliance with these regulations and laws is included in the TOA, the existing short-term use permits, and would also be included in any future short-term use permits, real estate agreements, and the proposed CDPs.

Moreover, operational BMPs would be required to ensure water runoff would not be contaminated from project site operations. Specifically, the project would be required to implement a combination of design and source control BMPs pursuant to the District's JRMP and the required BMP Design Manual (see Chapter 4 of the JRMP). For all proposed development projects, the District will review all BMP requirements and a project's consistency with those requirements prior to project approval. In addition to construction phase BMPs (as identified in Chapter 5 of the JRMP), all minimum BMP requirements and any applicable post-construction structural BMPs must be identified for each project. See Section 4.4, *Hydrology and Water Quality*, for more detail on potential water quality impacts.

In addition, given the coastal location of the project site, the project site is at risk of inundation due to sea-level rise (SLR) sometime in the long-term future. A storm surge associated with elevated sea levels could possibly result in the release of hazardous materials used on site for vehicle maintenance into the San Diego Bay. However, as discussed in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*, during the life of the project (the TOA with Pasha would expire in 2040), the terminal would be sufficiently above sea level to prevent any adverse effects from SLR. Therefore, impacts related to the potential release of hazardous materials into the San Diego Bay due to SLR would be less than significant.

With the proposed project, activities currently on site would continue, and, as addressed above, Pasha would be required to comply with all regulations and laws pertaining to hazardous materials and other hazards. Upon the Overlay's expiration, future Commercial Recreation developments may be proposed. However, no proposals have been submitted to the District, and it is unclear what type of commercial development may occur on the sites and when such a development may begin to operate. Operation of such development would be required to comply with all regulations and laws, and the potential environmental effects of such an operation would be analyzed under a project-specific environmental review to comply with CEQA. Therefore, operation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts from hazards and hazardous materials from project operations would be less than significant.

### Level of Significance prior to Mitigation

Implementation of the proposed project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Potentially significant impacts include:

#### **Impact-HAZ-1: Potential of Encountering Burn Ash from Former National City Dump.**

Because the exact boundaries of the former National City Dump are unknown, it is possible that during ground-disturbing activities at the tank farm site, street closures sites, or former Weyerhaeuser site, burn ash may be encountered. Without proper precautions and a safety and health plan in place, the disturbance of burn ash may result in inhalation or direct contact by construction workers.

### Mitigation Measures

**MM-HAZ-1: Prepare a Site-Specific Site Safety and Health Plan to Address Potential Burn Ash Presence and Other Contaminants.** Prior to the commencement of ground-disturbing activities, a site-specific site safety and health plan (prepared in accordance with CFR 1910.120

Appendix C) and a soil and groundwater management plan (prepared in accordance with CCR Title 22 and Title 27) is required to ensure that all soil disturbed or excavated at the site is screened for the presence of hazardous materials and appropriately characterized and disposed of or reused on site if determined to be suitable for reuse. These plans would be submitted to the District's Planning & Green Port Department, and approval would be required prior to the commencement of ground-disturbing activities. The plans shall specify that in the event that indicators of burn ash material are encountered during ground-disturbing activities, work shall cease and the San Diego County Department of Environmental Health's Local Enforcement Agency shall be notified immediately and prior to any continuation of ground or soil work.

### **Level of Significance after Mitigation**

With implementation of **MM-HAZ-1**, any discovery of burn ash would be identified and ground-disturbing work in the area would cease immediately, followed by measures to notify the appropriate oversight agency to ensure that a significant hazardous materials impact does not occur. Therefore, after implementation of **MM-HAZ-1**, **Impact-HAZ-1** would be less than significant.

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### **4.4.1 Overview**

This section describes the existing hydrology and water quality conditions that could be adversely affected by the proposed project; discusses the applicable laws and regulations related to hydrology and water quality; and concludes with an analysis of the proposed project's potential to: (1) violate water quality standards or waste discharge requirements and (2) substantially degrade water quality. All other hydrology and water quality issues, including impacts on groundwater supplies, erosion or siltation, storm drainage, as well as hazards from flooding, tsunamis, seiches, and mudflows, were analyzed in Section IX of the Revised Initial Study/Environmental Checklist (Appendix B-1), which is incorporated here by reference, and were determined to be insignificant. The analysis and conclusions regarding these impacts are summarized in Section 6.4, *Effects Not Found to be Significant*, of Chapter 6.

Based on the analysis that follows, all impacts related to hydrology and water quality would be less than significant. No mitigation is required.

### **4.4.2 Existing Conditions**

#### **4.4.2.1 Surface Water Hydrology**

The proposed project lies within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego Region is divided into 11 hydrologic units (HUs) for administrative purposes. Each of the HUs flow from elevated regions in the east to lagoons, estuaries, or bays in the west and feature similar water quality characteristics and issues. The proposed project is within the Pueblo San Diego HU, as shown on Figure 4.4-1. Table 4.4-1 shows the hierarchical structure of the HU, Hydrologic Area (HA) and Hydrologic Subarea (HSA) where the project site is located. Sweetwater River lies outside the watershed of the project sites but is just south of the sites. Paradise Creek flows to the east of the project sites within the Pueblo watershed and discharges into the Sweetwater River Mouth before reaching San Diego Bay approximately 0.8 mile downstream. A portion of the Sweetwater Marsh is located just east of the project sites and drains into the Sweetwater Channel. Drainage within the project area primarily flows to nearby storm drain inlets that lead to the San Diego Bay, Sweetwater River Channel, Paradise Creek, or other nearby water bodies.

The Pueblo San Diego HU lies within the San Diego Bay watershed management area and covers approximately 60 square miles of urbanized land along San Diego Bay within the cities of San Diego, La Mesa, Lemon Grove, and National City. It is the smallest HU in the region and contains the smallest proportion of unincorporated area (0.3%). It is the most densely populated HU in San Diego County, with a population of approximately 500,000. A relatively large percentage of the land in the Pueblo HU is used for transportation corridors and highways and, due to the high level of existing urbanization in the watershed, only small amounts of additional land are projected for development

over the next 15 years. No potable water supply is currently taken from sources within the Pueblo HU (City of National City 2012).

**Table 4.4-1. Project Vicinity Hydrologic Unit, Hydrologic Areas, and Hydrologic Subareas**

Hydrologic Unit	Hydrologic Areas	Hydrologic Subareas
<b>Pueblo San Diego (908.00)</b>	Point Loma (908.10)	N/A
	San Diego Mesa (908.20)	Lindbergh (908.21) Chollas (908.22)
	<b>National City (908.30)</b>	El Toyon (908.31)
		<b>Paradise (908.32)</b>

Source: San Diego Regional Water Quality Control Board 2011  
**Bold** = Project sites.

## 4.4.2.2 Surface Water Quality

The beneficial uses of surface waters with potential to be affected by the proposed project—the Pueblo San Diego watershed and the San Diego Bay—are shown in Table 4.4-2.

**Table 4.4-2. Beneficial Uses for Surface Waters of Water Bodies with Potential to be Affected by the Project**

Water Body	Designated Beneficial Uses
Pueblo San Diego	Contact (potential use) and non-contact recreation, warm freshwater habitat, and wildlife habitat
San Diego Bay	Industrial, navigation, contact recreation, non-contact recreation, commercial and sport fishing, preservation of biological habitats of special significance, estuarine habitat, wildlife habitat, preservation of rare and endangered species, marine habitat, fish migration, fish spawning, and shell fish harvesting

Source: San Diego Regional Water Quality Control Board 2011

The watershed drainage consists of a group of relatively small local creeks and pipe conveyances, many of which are concrete-lined and drain directly into San Diego Bay. The creeks in the watershed are highly affected by urban runoff, such as contaminants from roadways, industry, and other urban sources. As shown in Table 4.4-3, water bodies with 303(d) impairments with potential to be affected by the proposed project are Paradise Creek and the San Diego Bay. There were no 303(d) impairments designated for the reach of the Sweetwater River near the project site.

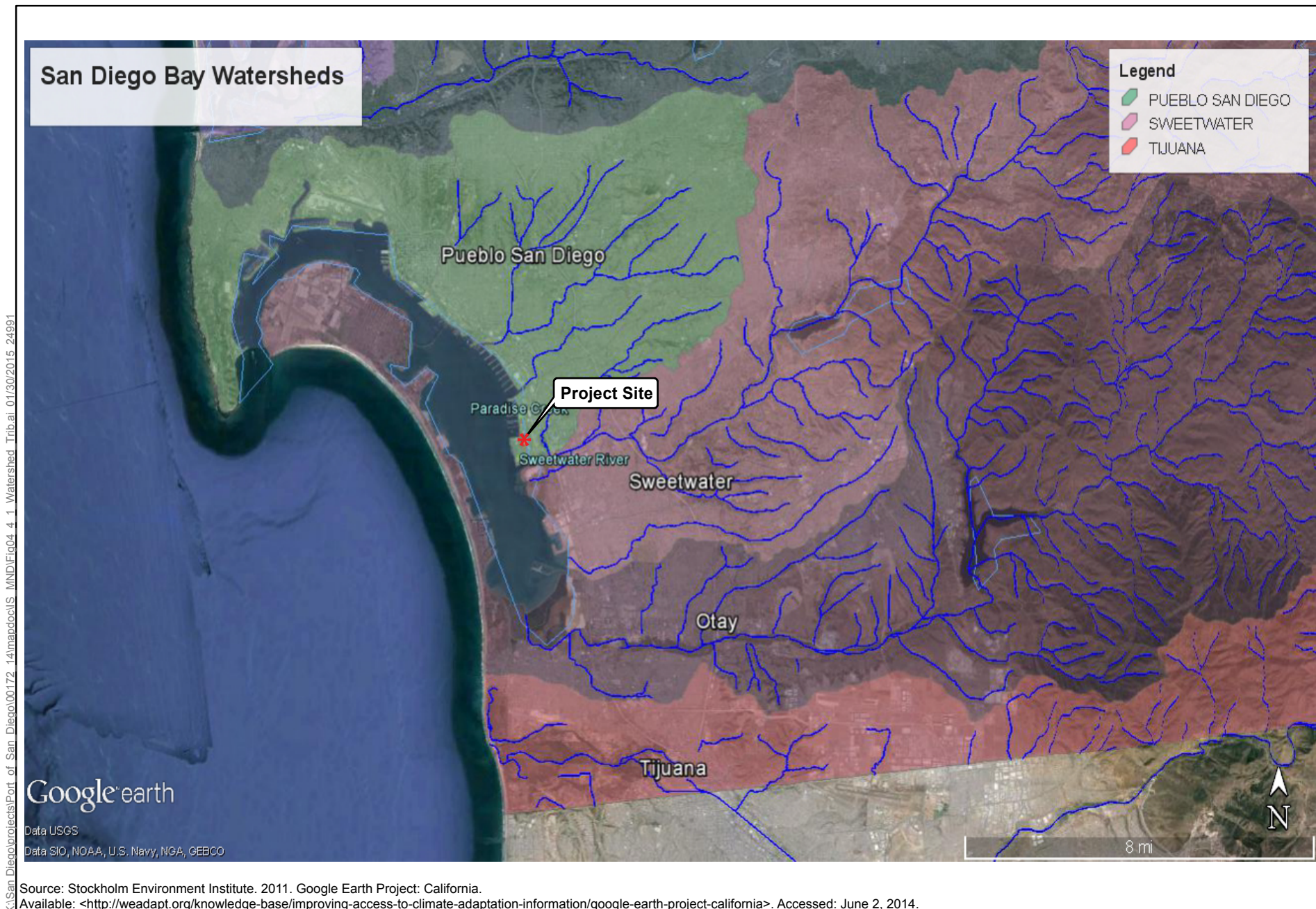
**Table 4.4-3. Water Quality Impairments within the Project Alignment**

Water Body	Listed Impairments per 2010 303(d) List	Potential Sources	EPA TMDL Completion
San Diego Bay	PCBs	Unknown	Est. 2019
Paradise Creek	Selenium	Unknown	Est. 2021

Source: California State Water Resources Control Board 2011.  
 Est. = estimated completion date; PCBs = polychlorinated biphenyls; TMDL = total maximum daily load

The principal constituents of concern for surface water quality in the project area include coliform bacteria, sediment, salinity, toxic inorganics, and toxic organics.





**Figure 4.4-1**  
**Regional Watershed and Nearby Tributaries**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**



## 4.4.3 Applicable Laws and Regulations

### 4.4.3.1 Federal

#### Federal Emergency Management Agency

FEMA administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues FIRMs that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection is established by FEMA. FEMA's minimum level of flood protection for new development is the 100-year flood event, also described as a flood that has a 1-in-100 chance of occurring in any given year.

Additionally, FEMA has developed requirements and procedures for evaluating earthen levee systems and mapping the areas affected by those systems. Levee systems are evaluated for their ability to provide protection from 100-year flood events, and the results of this evaluation are documented in the FEMA Levee Inventory System. Levee systems must meet minimum freeboard standards and must be maintained according to an officially adopted maintenance plan. Other FEMA levee system evaluation criteria include structural design and interior drainage.

#### Clean Water Act

The primary goals of the Clean Water Act are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. EPA is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) of 1972 is the primary federal law that governs and authorizes water quality control activities by EPA as well as the states.

Under Section 401 of the CWA, an applicant for a Section 404 permit to discharge dredged or fill material into waters of the United States must first obtain a certificate from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant water quality certification or waive the requirement is delegated by the State Water Resources Control Board (SWRCB) to the nine RWQCBs.

Under federal law, EPA has published water quality regulations under Volume 40 of the CFR. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question and (2) criteria that protect the designated uses. Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. In California, EPA has designated the SWRCB and its RWQCBs with authority to identify beneficial uses and adopt applicable water quality objectives.

#### National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established by the CWA to regulate discharges to surface waters of the United States. Federal NPDES permit

regulations have been established for broad categories of discharges, including point-source municipal and industrial discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, or other activities.

### **4.4.3.2 State**

#### **Porter-Cologne Water Quality Control Act**

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) of 1969 is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the state must adopt water quality policies, plans, and objectives that protect its waters for the use and enjoyment of the people. The Porter-Cologne Act sets forth the obligations of the SWRCB and RWQCBs to adopt and periodically update water quality control plans (Basin Plans). Basin Plans are the regional water quality control plans required by both the CWA and Porter-Cologne Act in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. National City falls under the San Diego Region Hydrologic Basin Planning Area Map.

The Porter-Cologne Act also requires waste dischargers to notify the RWQCBs of their activities through the filing of Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals.

#### **SWRCB Construction General Permit (Order 2009-0009-DWQ)**

Construction activities that disturb 1 acre or more of land that could adversely affect hydrologic resources must comply with the requirements of the SWRCB Construction General Permit (Order 2009-0009-DWQ). Under the terms of the permit, applicants must file a complete and accurate Notice of Intent with the SWRCB. Applicants must also demonstrate conformance with required and applicable best management plans (BMPs) through the preparation of a stormwater pollution prevention plan (SWPPP) that identifies type and location of construction BMPs and shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project sites.

### **4.4.3.3 Local**

#### **San Diego Integrated Regional Water Management Plan**

In the San Diego Region, there is a complex array of water supply, water management, water quality protection, pollution prevention, habitat protection, flood protection, and recreational needs. Numerous water management plans have been developed within the region to address these needs. However, jurisdictional and water management conflicts exist among the individual water management plans, and many challenges exist to identifying, addressing, and resolving water management issues. The Integrated Regional Water Management Plan (IRWMP) was developed in 2007 to bring stakeholders together and coordinate a regional approach to water management

issues, pursuant to statewide IRWMP Guidelines established by the SWRCB and State of California Department of Water Resources in 2004 and updated in 2007. In addition, the 2013 Final Draft IRWMP is now available.

### **RWQCB Municipal Stormwater Permit**

On May 8, 2013, the RWQCB adopted Order R9-2013-0001, NPDES Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region (Municipal Permit).<sup>1</sup> The Municipal Permit, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, is a regional permit that requires the owners of storm drain systems to implement management programs to limit discharges of non-stormwater runoff and pollutants from the storm drain systems.

The Municipal Permit requires the District and other municipalities to develop Water Quality Improvement Plans (WQIP) that establish watershed-level priorities and goals aimed at achieving improved water quality in MS4 discharges and receiving waters. In response to the requirements of the Municipal Permit, the co-permittees of the San Diego Bay Watershed developed the San Diego Bay Watershed WQIP. The goal of the WQIP is to reduce pollutants and other stressors from the MS4 discharges in order to achieve water quality improvements in the receiving waters.

The WQIP is used to help focus jurisdictional level resources and efforts on activities and programs designed to help achieve water quality improvements described in the WQIP. Overall, the intent of the Municipal Permit is to accomplish the following:

- Effectively prohibit non-stormwater discharges to its MS4.
- Reduce pollutants in stormwater discharges from its MS4.
- Achieve the interim and final (WQIP) numeric goals.

The Municipal Permit requires the District and other co-permittees to mandate BMPs in all phases of development including planning, construction, post construction and existing development. The BMPs, inspection process and enforcement activities for each phase of development are described in the Jurisdictional Runoff Management Plan (JRMP).

### **San Diego Bay Watershed Water Quality Improvement Plan**

The Municipal Permit required the development of the San Diego Bay WQIP for the San Diego Bay Watershed Management Area (WMA). The purpose of the WQIP is to guide the stormwater-related activities and programs of the District and other municipalities in the San Diego Bay watershed toward improving water quality in MS4 discharges and receiving waters. In the WQIP, priorities and goals are established, and each jurisdiction identified strategies to assist in attaining the goals. This approach establishes the foundation that the District uses to develop and implement its JRMP. The District implements the WQIP in collaboration with other local agencies that have jurisdiction within the San Diego Bay WMA. The San Diego Bay WMA comprises three hydrologic units: Pueblo

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<sup>1</sup> The full title of the permit is “California Regional Water Quality Control Board San Diego Regional Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100 National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges From the Municipal Separate Storm Sewer Systems (MS4s) Draining the San Diego Region,” which is herein incorporated by reference.

San Diego, Sweetwater River, and Otay River. The project site is located within the Pueblo San Diego hydrologic unit.

Available reports, plans, and data were analyzed to identify water quality conditions for consideration as priority conditions. The District's jurisdictional approach focuses on reducing trash, bacteria and metals.

### **Jurisdictional Runoff Management Plan**

Under the Municipal Permit, the Permittees covered under the Municipal Permit are required to prepare individual JRMPs specific to their jurisdiction. Each JRMP must contain a component that addresses issues related to construction activities, new development, and existing development. Additionally, each co-permittee prepares and submits an annual report that describes the implementation of programs and strategies to reduce the discharge of pollutants of concern to the MS4 and receiving waters to the maximum extent practicable.

The District's JRMP document serves as an informational document that provides an overall account of the program to be conducted by the District during the five-year term of the Municipal Permit. The District's JRMP has been developed to meet the conditions of the Municipal Permit and to assist the District in achieving the goals identified in the WQIP. District-specific WQIP based strategies have been incorporated into the JRMP. The JRMP program's focus is on controlling stormwater discharges to the MS4 with the overall goal of achieving receiving water quality improvements. The JRMP utilizes District-specific jurisdictional activities, as well as watershed-based strategies. Enforcement of the JRMP helps to prevent stormwater pollutants from entering into the local storm drains and ultimately the San Diego Bay.

The District has developed a list of pollution prevention BMPs applicable to industrial and commercial facilities within the District's jurisdiction as required by the Municipal Permit. Because pollution prevention BMPs eliminate pollutants at their source, they are a preferred means of preventing discharge of priority pollutants into the receiving waters. The list of pollution prevention BMPs includes the following.

- Keep waste containers covered or lids closed (trash).
- Minimize outdoor storage (trash, metals).
- Capture, contain and/or treat wash water (bacteria, metals).
- Conduct employee training (bacteria, trash, metals).

In addition, Table 7-4 of the JRMP<sup>2</sup> provides an extensive list of minimum BMPs for commercial and industrial facilities. Categories of BMPs include general operations and housekeeping, non-stormwater management, waste handling and recycling, outdoor material storage, outdoor drainage from indoor activity, outdoor parking, vehicles and equipment, education and training, overwater activity, and outdoor activity and operation.

#### **BMP Design Manual**

Previous municipal stormwater permits (Order Nos. 2001-01 and 2007-0001) required the development and implementation of a Standard Urban Stormwater Mitigation Plan (SUSMP) to

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<sup>2</sup> The JRMP is available at: <https://www.portofsandiego.org/environment/clean-water/6845-00-port-of-san-diego-2015-jrmp-final-report-and-appendices/file.html>.



address urban runoff pollution issues in new development and redevelopment projects. As directed under the current Municipal Permit, the District's SUSMP is to be replaced with a BMP Design Manual. Pursuant to the Municipal Permit, the District began implementing the BMP Design Manual on February 16, 2016.<sup>3</sup> The District's BMP Design Manual is consistent with the *Model BMP Design Manual* that was developed collectively with the other San Diego County jurisdictions. The District's BMP Design Manual identifies updated post-construction stormwater requirements for both non-District and District-sponsored major maintenance or capital improvement projects as required by the Municipal Permit. All applicable BMPs are required to be implemented pursuant to law. Below are examples of BMPs to be implemented during project operation and maintenance.

- Properly maintain stormwater conveyance system.
- Keep the site clear of unauthorized non-stormwater discharges.
- Conduct routine inspections of BMPs and stormwater conveyance.
- Train employees in stormwater, spill response, and pollution prevention.

The BMP Design Manual identifies BMP requirements for both standard projects and Priority Development Projects (PDPs) as outlined in the Municipal Permit. All new development and redevelopment projects are required to implement standard source control and site design BMPs to eliminate or reduce stormwater runoff pollutants. For PDPs, the BMP Design Manual describes additional structural treatment controls that must be incorporated into the site design and, where applicable, addresses potential hydromodification impacts from changes in flow and sediment supply.

The hierarchy for implementing pollutant control BMPs on a PDP is as follows: the standard for stormwater pollutant control is retention of the 24-hour 85<sup>th</sup> percentile stormwater volume, defined as the event that has a precipitation total greater than or equal to 85% of all daily storm events larger than 0.01 inches over a given period of record in the project area. For situations where onsite retention of the 85<sup>th</sup> percentile storm volume is technically not feasible, biofiltration must be provided to satisfy specific standards. For situations where biofiltration is technically not feasible, flow-thru treatment BMPs must be implemented on site, and the developer must participate in an alternative compliance project. Project applicants must submit a Stormwater Quality Management Plan (SWQMP) accurately describing how the project will meet source control site design and pollutant control BMP requirements. District staff provide technical review of and approve SWQMP documents and drainage design plans to ensure that all pollutant control BMP requirements are met. The SWQMP is evaluated for compliance with the Municipal Permit and with design criteria outlined in the District's BMP Design Manual.

#### **Source Control and Site Design Requirements**

The Municipal Permit directs the District to require the development of a SWQMP during the planning process for all development projects. Both standard and PDP projects must implement source control and site design requirements.

General requirements for these BMPs include the following.

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<sup>3</sup> The Municipal Permit is available at:  
[http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/stormwater/docs/2015-1118\\_AmendedOrder\\_R9-2013-0001\\_COMPLETE.pdf](http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/2015-1118_AmendedOrder_R9-2013-0001_COMPLETE.pdf).

1. Onsite BMPs must be located so as to remove pollutants from runoff prior to its discharge to any receiving waters, and as close to the source as possible.
2. Structural BMPs must not be constructed within waters of the U.S.
3. Onsite BMPs must be designed and implemented with measures to avoid the creation of nuisance or pollution associated with vectors (e.g., mosquitos, rodents, or flies).

Source control BMPs must be implemented at all development projects where applicable and feasible. Source control BMP requirements include the following.

1. Prevention of illicit discharges into the MS4.
2. Storm drain system stenciling or signage.
3. Protection of outdoor material storage areas from rainfall, run-on, runoff, and wind dispersal.
4. Protection of trash storage areas from rainfall, run-on, runoff, and wind dispersal.
5. Minimization of potential to generate trash, metals and/or bacteria pollutants in runoff.
6. Any additional BMPs determined to be necessary by the Copermittee to minimize pollutant generation at each project.

Site Design BMPs must be implemented at all development projects where applicable and feasible. Site Design BMP requirements include the following.

1. Maintenance or restoration of natural storage reservoirs and drainage corridors (including topographic depressions, areas of permeable soils, natural swales, and ephemeral and intermittent streams).
2. Buffer zones for natural water bodies (where buffer zones are technically infeasible, project applicant is required to include other buffers such as trees, access restrictions, etc.).
3. Conservation of natural areas within the project footprint including existing trees, other vegetation, and soils.
4. Construction of streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided public safety is not compromised.
5. Minimization of the impervious footprint of the project.
6. Minimization of soil compaction to landscaped areas.
7. Disconnection of impervious surfaces through distributed pervious areas.
8. Landscaped or other pervious areas designed and constructed to effectively receive and infiltrate, retain and/or treat runoff from impervious areas, prior to discharging to the Municipal.
9. Small collection strategies located at, or as close as possible to, the source (i.e. the point where stormwater initially meets the ground) to minimize the transport of runoff and pollutants to the Municipal and receiving waters.
10. Use of permeable materials for projects with low traffic areas and appropriate soil conditions.
11. Landscaping with native or drought tolerant species.
12. Collecting and using precipitation.



**Stormwater Pollutant Control Requirements for PDP**

Redevelopment projects that create or replace 2,500 square feet of impervious surface adjacent to an environmentally sensitive waterbody like the San Diego Bay and/or fit into a specific use category as identified in the BMP Design Manual are categorized as PDPs. In addition to the site design and source control BMPs discussed in Chapter 4 of the JRMP, PDPs are required to implement stormwater pollutant control BMPs to reduce the quantity of pollutants in stormwater discharges. Stormwater pollutant control BMPs are engineered facilities that are designed to retain (i.e., intercept, store, infiltrate, evaporate, and evapotranspire), biofilter, and/or provide flow-thru treatment of stormwater runoff generated on the project site. Table 4-5 of the JRMP identifies the PDP categories as defined by the Municipal Permit and outlined in the District's BMP Design Manual.

The Municipal Stormwater Permit prioritizes the use of retention BMP either as "harvest and use" or though infiltration. When infiltration is infeasible biofiltration must be considered, biofiltration requires a BMP minimum footprint of 3% of the site area. If biofiltration is not feasible then flow-thru BMP plus participation in alternative compliance is the remaining option. Participation in alternative compliance requires construction of a BMP off site to treat an equivalent pollutant load.

**Construction-Related Best Management Practices**

The Municipal Permit directs the District to require minimum BMPs at all construction and grading projects. The minimum BMPs are required to ensure a reduction of potential pollutants from the project site to the maximum extent practicable and to effectively prohibit non-stormwater discharges from construction sites to the MS4. These BMPs also ensure that all construction and grading activities are in compliance with applicable District ordinances and other environmental laws and are supportive of the WQIP goals.

The required minimum BMPs fall into several major categories as outlined in the Municipal Permit, including project planning, good site management, non-stormwater management, erosion control, sediment control, run-on and runoff controls, and, where applicable, active/passive sediment treatment. The BMPs chosen to be implemented at a particular project must be site specific, seasonally appropriate, and construction phase appropriate. Notwithstanding seasonal variation, projects occurring during the dry season will be required to plan for and must be able to address rain events that may occur.

The District also chose to include minimum BMPs that support the WQIP priorities and integrate WQIP strategies PO-12 and PO-13.<sup>4</sup> Good Housekeeping BMPs prevent discharges of WQIP high priority pollutants including metals, bacteria, and trash to the MS4. Additionally, pursuant to strategy PO-13, the District also requires sites to cover construction material stockpiles that contain metals, such as treated timber during wet weather. Table 4.4-4 provides a list of the minimum BMPs for construction sites.

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<sup>4</sup> PO-12 Calls for the Implementation of the Core JRMP Program to require and to oversee implementation of BMPs during the construction phase of land development. PO-13 calls for the addition of a BMP to construction BMPs that requires covering construction materials (metals and treated wood) during wet weather.

**Table 4.4-4. Minimum BMPs For Construction Sites**

<b>BMP Category</b>	<b>BMP</b>
Project Planning	Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction Develop and implement a SWPPP or Construction BMP Plan Contractor Training (formal training or District staff training)
Non-Stormwater Management	Water Conservation Practices (NS-1) Illicit Connection/Illegal Discharge Detection and Reporting (NS-6) Dewatering Operations (NS-2) Paving and Grinding Operations (NS-3) Potable Water/Irrigation (NS-7) Vehicle and Equipment Cleaning (NS-8) Vehicle and Equipment Fueling (NS-9) Vehicle and Equipment Maintenance (NS-10)
Good Housekeeping/ Waste Management	<b>Cover construction material stockpiles such as treated lumber during wet weather. (WQIP Strategy PO-13)</b> <b>Material delivery and storage (WM-1)</b> <b>Material Use (WM-2)</b> <b>Solid Waste Management (WM-5)</b> Stockpile Management (WM-3) <b>Spill Prevention and Control (WM-4)</b> <b>Hazardous Waste Management (WM-6)</b> <b>Contaminated Soil Management (WM-7)</b> Concrete Waste Management (WM-8) <b>Sanitary/Septic Waste Management (WM-9)</b> Construction Road Stabilization (TC-2) Stabilized Construction Entrances (TC-1) Entrance/Outlet Tire Wash (TC-3)
Erosion Control <sup>a</sup> (choose at least one or a combination based on site conditions)	Preservation of Existing Vegetation (EC-2) Minimization of exposure time of disturbed soil areas Scheduling (EC-1) <sup>b</sup> Hydraulic Mulching (EC-3) Soil Binders – (EC-5) Straw Mulches (EC-6) Wood Mulching – (EC-8) Geotextiles and Mats (EC-7) Wind Erosion Control (WE-1) Soil Preparation/Roughening (EC-15) Preservation of natural hydrologic features where feasible Permanent revegetation or landscaping as early as feasible

<b>BMP Category</b>	<b>BMP</b>
Sediment Control (choose at least one or a combination based on site conditions)	Silt Fence (SE-1) Street Sweeping and Vacuuming (SE-7) Sand Bag Barrier (SE-8) Storm Drain Inlet Protection (SE-10) Sediment Trap (SE-3) Sediment Basin (SE-2) Check Dams (SE-4) Fiber Rolls (SE-5) Gravel Bag Berms (SE-6) Compost socks and berms (SE-13)
Run-on and Run-off Control	Protect site perimeter to prevent run-on from entering the site and site run-off

BMPs in **bold** target WQIP priority pollutants including metals, trash, and bacteria.

<sup>a</sup> Erosion controls must be implemented in all inactive disturbed soil areas (DSA). An inactive DSA is where construction activities such as grading, clearing, excavation or disturbances to ground are not occurring and those that have been active and are not scheduled to be re-disturbed for at least 14 days.

<sup>b</sup> Limitation of grading to a maximum disturbed area, determined by the District to be 5 acres during the rainy season and 17 acres during the non-rainy season, before either temporary or permanent erosion controls are implemented to prevent stormwater pollution (see Section 5.6.1 of the JRMP for additional information).

## San Diego Unified Port District, Article 10

The District's own Article 10, the Stormwater Management and Discharge Control Ordinance, prohibits the deposit or discharge of any chemicals or waste to the tidelands or San Diego Bay and makes it unlawful to discharge pollutants directly into non-stormwater or indirectly into the stormwater conveyance system. The proposed project would be obligated to abide by Article 10.

Where enforcement is required to maintain compliance, the District will use its enforcement authority established by Article 10. Article 10 of the Port Code enables the District, including District inspectors, to prohibit discharges and require BMPs so that discharges on tidelands do not cause or contribute to water quality problems. Article 10 establishes enforcement procedures to ensure that responsible dischargers are held accountable for their contributions and/or flows.

## 4.4.4 Project Impact Analysis

### 4.4.4.1 Methodology

Impacts were analyzed qualitatively based on professional judgment of qualified personnel in light of information provided by the project applicant and from analyses conducted for similar projects in the same region. The analysis is focused on water quality-related construction and operation as other issues such as surface water hydrology, flooding, and groundwater quality were analyzed in the Revised Initial Study/Environmental Checklist (Appendix B-1), incorporated here by reference in this section of the EIR, and were determined to be less than significant.

Impacts of the project on surface water quality were analyzed using available information on potential existing sources of pollution and water quality conditions in the project study area. These conditions were then compared to potential project-related sources of pollution during

construction, such as sediments and other construction materials, and operation, such as operation and maintenance activities, trash, and storage of hazardous materials. The project was analyzed for potential impacts on beneficial uses and water quality objectives (i.e., pollutants of concern) of receiving waters. Receiving waters with CWA Section 303(d) impaired water quality were identified, along with the impairment (pollutant/stressor) and an indication of whether the impairment has the potential to be further affected by the proposed project.

On the Overlay properties (eastern portion of Lot K and Port Parcel 028-007), activities would continue as they currently exist at these two sites (though an increase in throughput is anticipated and analyzed within this EIR). The Overlay would allow for the same uses specified in the Marine Related Industrial land use designation for a maximum of 7 years or until commercial recreational developments are approved by the BPC, whichever occurs first. However, no proposals have been submitted to the District for review at the time of the revised NOP (August 2015), and it is unknown what type of Commercial Recreation development may occur on the sites and when such a development may be initiated. The Overlay would have temporary (up to 7 years) environmental effects from storing vehicles and their possible increase in throughput associated with the use of these additional acreages. Any future project would be required to comply with all applicable laws and regulations.

#### 4.4.4.2 Thresholds of Significance

The following significance criteria are based on Appendix G of the State CEQA Guidelines and provide the basis for determining the significance of impacts associated with hydrology and water quality resulting from implementation of the proposed project. The determination of whether a hydrology and water quality impact would be significant is based on the professional judgment of the District as Lead Agency supported by the recommendations of qualified personnel at ICF and is based on the evidence in the administrative record.

Impacts are considered significant if the proposed project would result in any of the following.

1. Violate any water quality standards or waste discharge requirements.
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on or off site.
4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site.
5. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
6. Otherwise substantially degrade existing water quality.
7. Place housing within a 100-year flood hazard area.
8. Place within a 100-year flood hazard area structures that would impede or redirect flood flows.

9. Expose people or structures to a significant risk of loss, injury, or death involving flooding.
10. Contribute to inundation by seiche, tsunami, or mudflow.

The analysis of whether the proposed project would have a significant impact on hydrology/water quality under Thresholds 2 through 5 and 7 through 10 was provided in Section IX of the Revised Initial Study/Environmental Checklist (Appendix B-1). As analyzed therein, it was determined that the project would not result in significant impacts related to groundwater supplies; erosion or siltation; flooding; exceeding existing and planned stormwater drainage systems; housing being placed within flood hazard areas; structures being placed within flood hazard areas that may then redirect or impede flows; people or structures being exposed to harm or damage from flooding; or inundation by seiche, tsunami, and mudflow. The analysis and conclusions in Section IX of the Initial Study/Environmental Checklist are incorporated here by reference in this section of the EIR and are summarized in Chapter 6, *Additional Consequences of Project Implementation*. Therefore, only Thresholds 1 and 6 are discussed in the impact analysis that follows.

#### 4.4.4.3 Project Impacts and Mitigation Measures

***Threshold 1: Implementation of the proposed project would not violate any water quality standards or waste discharge requirements.***

##### Impact Discussion

The proposed project consists of the tank farm site, the street closures sites, the former Weyerhaeuser site, the short-term use permit sites, and a PMPA for the street closures and to incorporate the Uplands Properties into the PMP and establish a temporary Overlay on two properties. Construction and operation of the proposed project would not violate any water quality standards or waste discharge requirements. Details of the analysis for both construction and operations are provided below.

##### Construction

The only components of the proposed project that would have construction elements would be the tank farm component, street closures component, and the former Weyerhaeuser site component. During construction, they could result in an increase in surface water pollutants such as sediment, oil and grease, and miscellaneous wastes from construction activities. Water quality would be temporarily affected if disturbed sediments were discharged via existing stormwater collection systems or directly into the San Diego Bay from surface runoff. In significant quantities, increased turbidity and pollutants resulting from construction-related sediment and petrochemical discharge can introduce compounds toxic to aquatic organisms, increase water temperature, and stimulate the growth of algae.

The delivery, handling, and storage of construction materials and wastes, along with use of construction equipment, could also introduce the risk of stormwater contamination. Staging areas or building sites can be sources of pollution because of the use of paints, solvents, cleaning agents, and metals during construction. Impacts associated with metals in stormwater include toxicity to aquatic organisms, such as bioaccumulation, and the potential contamination of drinking supplies (though no such sources are present). Herbicides, fungicides, and pesticides associated with site preparation work (as opposed to their use for landscaping) are another potential source of stormwater

contamination during construction. Pesticide impacts on water quality include toxicity to aquatic species and bioaccumulation in larger species. Larger pollutants, such as trash, debris, and organic matter, are additional pollutants that could be associated with construction activities. Impacts include health hazards and aquatic ecosystem damage associated with bacteria, viruses, and vectors and physical changes to the aquatic ecosystem. However, pursuant to the Municipal Permit, the District JRMP and the General Construction Permit, the project applicant is required to implement BMPs (discussed in more detail below), reducing construction impacts on water quality to below a level of significance and avoiding exceedance of water quality objectives or criteria.

No construction would take place on the short-term use permit sites; however, construction at the tank farm site and street closures sites, as well as the potential demolition of the buildings on the former Weyerhaeuser site, would disturb more than 1 acre. Therefore, pursuant to law, a Construction General Permit would be required. Compliance with the Construction General Permit is overseen by the SWRCB and requires the development and implementation of a SWPPP, which requires BMPs to prevent unauthorized discharges to receiving waters. At a minimum, BMPs would include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The SWPPP would specify properly designed, centralized storage areas that keep these materials out of the rain. Because grading is being conducted as part of the project, both erosion and sediment control BMPs would be required to keep sediment on the site. Consequently, according to established law and regulations, the project will be required to implement all minimum BMPs for construction activities.

In addition to the State-required SWPPP, the project applicant will also be required to implement the minimum BMPs that the District has identified for construction activities within its jurisdiction pursuant to the Municipal Permit and the District JRMP (listed above). Although one SWPPP may be prepared for the project, the SWPPP will be required to incorporate both the SWRCB General Construction Permit requirements and the District's JRMP requirements. As required by the JRMP, the SWPPP would be subject to review and approval by the District. All of the construction-related minimum BMPs listed in the District JRMP will be required to be implemented for the project.

Implementation of the required BMPs during construction would minimize the potential for water quality objectives, standards, and wastewater discharge thresholds to be violated. With their implementation, the District's stormwater requirements, local grading ordinances, and other related requirements, impacts from construction on water quality would be less than significant, and no mitigation is required.

No construction is proposed at the two sites that would include a Marine Related Industrial Overlay. With the Overlay, activities would continue as they currently exist (though an increase in throughput is anticipated).

Upon expiration of the Overlay, the two project sites would sit unused until a future Commercial Recreation development is proposed and undergoes environmental review pursuant to the requirements of CEQA.

Therefore, construction of the proposed project would not violate any water quality standards or waste discharge requirements. Impacts would be less than significant.

#### **Operation and Maintenance**

Operations at the project sites would involve an increase in vehicle traffic as vehicles are driven to the sites and temporarily stored. Although the vehicles are typically new and in good working order,

there is the potential for leakage of vehicle fluids (oil, grease, and petrochemicals), which could potentially build up over time on impervious surfaces and discharge in runoff when the wet season begins.

The District's Article 10 (Stormwater Management and Discharge Control Ordinance) and the JRMP include specific requirements for all development and redevelopment activities. Pursuant to the District's JRMP and the District BMP Design Manual, post-construction BMPs are required for all priority development projects. As discussed earlier, minimum BMPs consistent with the District BMP Design Manual require the use of site design BMPs, as well as source control and treatment control BMPs. Additionally, a post-construction SWQMP must also be included for all priority development projects. These requirements are discussed under Section 4.4.3, *Applicable Laws and Regulations*, and primarily under 4.4.3.3, *Local*.

As shown in Figure 3-1 of the Project Description chapter, porous asphalt concrete swales have been incorporated into the tank farm site and street closures sites design to treat runoff and prevent degradation of receiving waters as required by the District's JRMP. Routine maintenance would be required to maintain the effectiveness of these swales and would be subject to routine inspection by District stormwater staff, both of which must be conducted pursuant to Section E.3 of the Municipal Permit. In addition to porous asphalt concrete swales at these project sites, other source control and site design BMPs, consistent with the District's JRMP and BMP Design Manual, would be implemented to further ensure water quality standards or wastewater discharge requirements are not violated.

Moreover, three of the four short-term use permit sites currently store vehicles, and the fourth short-term use permit site is a strip of landscape in which no vehicles are stored. Under the proposed project, these activities would continue, and the water quality condition with the proposed project would be similar to the existing condition. Pasha's proposed use of the former Weyerhaeuser site would be consistent with the historic use of the site, as Marine Related Industrial activities. Weyerhaeuser Lumber formerly used the site for conducting and maintaining a wholesale building materials yard, which included utilizing the site for the import, export, and cutting of lumber.

Project operations related to all project sites would be required to implement BMPs consistent with the minimum requirements for industrial facilities as listed under Table 7-4 of the JRMP and discussed above. In accordance with the JRMP, the project would be required to implement all minimum BMPs for industrial facilities. The project would be considered a PDP and, pursuant to the Municipal Permit, would be required to implement pollutant control BMPs, following the hierarchy described in the BMP Design Manual (retention, partial retention with biofiltration, biofiltration, or flow-thru with participation in Alternative Compliance Program).

Car washing would continue to occur within the NCMT using facilities designed to capture and discharge cleaning water into the sanitary sewer for treatment and not the storm drain system. The characteristics and operation of mobile washing would not change with the implementation of the project and is designed to minimize water use so that there is no runoff and wash water is captured and discharged to the sanitary sewer.<sup>5</sup> Hazardous materials used for car maintenance and repair

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<sup>5</sup> This is consistent with the directives prohibiting wasteful water practices listed in Executive Order B-29-15 of April 1, 2015, and SWRCB's Emergency Conservation Regulations of May 18, 2015, which require businesses to implement water efficiency measures.

would continue to be housed within warehouses on the NCMT as well, the BMPs for which include keeping workplaces clean, free of debris, and with spill response materials available at all times.

The project does not propose any physical changes to the Uplands Property that is Port Parcel 027-047, and, therefore, the project would not cause greater runoff or create additional pollutants from bringing this site into the PMP. Port Parcel 027-047 is currently unpaved and undeveloped, and no changes to the existing condition are proposed as part of the project. Activities similar to those currently existing would occur on the eastern portion of Lot K, as well as on Port Parcel 028-007. With respect to the Overlay sites, the two sites would either sit unused or be redeveloped at the time an unknown future Commercial Recreation development is approved and constructed after undergoing project-specific CEQA compliance.

Finally, a comment received by the County of San Diego Department of Environmental Health's Vector Control Program during the NOP scoping period indicated that the analysis should address the potential for the project's construction and operation to create breeding sources for mosquitos. The letter provides examples of where these possible breeding grounds can exist, including within the proposed stormwater control and detention structures, and from construction activities that create depressions such as from grading or wheel ruts. Fountains and ornamental water features are also mentioned; however, no such features are proposed by the project. To ensure that the proposed project does not contribute to any vector problems in the area, the project would be required to implement the following BMP per the District's BMP Design Manual.

- Onsite BMPs must be designed and implemented with measures to avoid the creation of nuisance or pollution associated with vectors (e.g., mosquitos, rodents, flies).

Therefore, all BMPs and stormwater-associated infrastructure would be required to consider the potential creation of a vector breeding site and the system would be designed to ensure any such breeding sites are avoided. This would include both construction and operational BMPs, of which minimization of the areas that are cleared and graded, water conservation practices, careful dewatering operations, limited use of potable water/irrigation, construction road stabilization, stabilized construction entrances, and multiple other construction BMPs would help to avoid any establishment of breeding sites.

Implementation of the required post-construction BMPs, subject to the District's review, would ensure the project is consistent with the District's JRMP and would ensure stormwater quality does not affect local receiving waters such that a significant water quality impact would result. Therefore, impacts would be less than significant.

### **Level of Significance prior to Mitigation**

Construction and operation of the proposed project would not violate any water quality standards or waste discharge requirements; impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Level of Significance after Mitigation**

Impacts would be less than significant.



***Threshold 6: Implementation of the proposed project would not otherwise substantially degrade water quality.***

## **Impact Discussion**

### **Construction and Operation**

As described in Threshold 1 above, the proposed project would result in less-than-significant short-term construction or long-term operational impacts on water quality. Water quality impacts would be reduced through the implementation of BMPs, as required by state and District regulations (Construction General Permit, JRMP, Article 10, etc.). During operation, the inclusion of engineered porous asphalt concrete swales at the tank farm site and street closures sites would reduce runoff and avoid any significant impacts on receiving waters. Pasha's proposed use of the former Weyerhaeuser site would be consistent with the historic use of the site, as Marine Related Industrial activities. Weyerhaeuser Lumber formerly used the site for conducting and maintaining a wholesale building materials yard, which included utilizing the site for the import, export, and cutting of lumber. No physical changes are proposed to the Uplands Property that is Port Parcel 027-047. Port Parcel 027-047 is currently unpaved and undeveloped, and no changes to the existing condition are proposed as part of the project. With the proposed Overlay, the remaining sites, including the short-term use permit sites, would continue to operate as vehicle storage and would not introduce any project features that would result in greater water runoff or pollutants. Upon expiration of the Overlay, the two Overlay sites (eastern portion of Lot K and Port Parcel 028-007) would be placed into an unused state with no operational activities occurring or with an unknown Commercial Recreational development, which would undergo project-specific CEQA compliance prior to approval, construction, or operation.

Both construction and post-construction BMPs would be required to address both the project's implementation and its routine operation. Examples of these BMPs are discussed under Threshold 1 and under Section 4.4.3, *Applicable Laws and Regulations*. Due to the extensive number of BMPs that would be implemented with the project and which are specifically designed to minimize site runoff and contaminants, impacts would be less than significant.

### **Level of Significance prior to Mitigation**

Implementation of the proposed project would not substantially degrade water quality; impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Level of Significance after Mitigation**

Impacts would be less than significant.

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## Section 4.5

# Land Use and Planning

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### 4.5.1 Overview

Land use and planning issues refer to the proposed project's compatibility with surrounding land uses and its consistency with land use plans and policies that have regulatory jurisdiction over the project site. This section describes the existing land uses that could be adversely affected by the proposed project; outlines the applicable laws and regulations related to land use and planning; and analyzes the proposed project's consistency with applicable plans and regulations, such as the California Coastal Act (CCA), and the Port Master Plan (PMP).

As discussed in the analysis below, the proposed project would not result in an inconsistency with applicable plans and regulations that would result in a physical impact on the environment. No mitigation is required.

### 4.5.2 Existing Conditions

The project sites occupy land that is owned by the District and largely within the District's historic tidelands as discussed below. In total, the District has jurisdiction over approximately 5,483 acres of tide and submerged lands, or about 37% of the total tidelands on the Bay. Land use designations are composed of approximately 15% commercial, 24% industrial, 19% public recreation, 28% conservation, 11% public facility, and 3% military (District 2015).

The governing land use plan within the District's jurisdiction is the PMP, which establishes ten planning districts and land use designations. With the exception of the two properties described below, the project sites are located within the PMP's National City Bayfront Planning District (Planning District 5). Figure 4.5-1 identifies the project sites in relation to the Planning District and its subareas.

Two of the project sites—referred to collectively as the Uplands Properties<sup>1</sup>—are located within the coastal zone and are owned by the District but have not yet been incorporated into the PMP. Pursuant to two expired Memoranda of Understanding (collectively MOUs) between the District and the City of National City (City), the District and City agreed that the land use jurisdiction of the two properties would remain with the City until the expiration of the MOUs and that the District would process a PMPA to incorporate all District-acquired lands into the PMP, including the Uplands Properties. Accordingly, the City incorporated the properties into its Local Coastal Program (LCP)/Harbor District Specific Area Plan as Tourist Commercial. The LCP currently has provisions to allow for maritime cargo storage to be conditionally permitted on the eastern half of Lot K. Historically, the project proponent has operated on a portion of one of these parcels under a City-issued CDP. The operations currently exist.

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<sup>1</sup> The Uplands Properties are east of the mean high tide line and the District's historic tidelands, as shown on Figure 4.5-2.

### 4.5.2.1 Existing Land Use Designations

PMP land use designations in the project sites include Marine Related Industrial, Street, and Commercial Recreation. In addition, the Uplands Properties are currently not in the PMP, and are designated as Tourist Commercial under the City of National City's Harbor District Specific Area Plan. The allowable uses for each are described in Table 4.5-1. Designated land uses within the project site are shown in Figure 4.5-2.

**Table 4.5-1. Project Site Land Use Designations/Allowed Uses**

<b>Designation</b>	<b>Acres (Approximate)</b>	<b>Allowed Uses</b>
Marine Related Industrial (PMP)	51.34	Marine terminals, passenger terminals; railroad switching and spur tracks; cargo handling equipment; berthing facilities; warehouses, silos, fueling facilities; bulk liquid storage tanks and pipelines; shipping offices and custom facilities; power generation plants; ship building, repair and conversion yards; marine rails, lifts, and graving docks; steel fabrication and foundry; storage, repair, and maintenance of marine machinery and construction equipment; kelp and seafood processing, canning, and packaging; aquaculture; and marine-related support and transportation facilities
Street (PMP)	5.09	Roadways
Commercial Recreation (PMP)	3.35	Hotels, restaurants, convention center, recreational vehicle parks, specialty shopping, pleasure craft marinas, water dependent educational and recreational program facilities and activities, and sport fishing.
Tourist Commercial under the City's Harbor District Specific Area Plan	11.46	Hotels, motels, restaurants, marina-related office and/or retail commercial space, boat dry storage and ancillary services.
<b>Total</b>	<b>71.24</b>	<b>--</b>
Source: District PMP 2015		

### 4.5.2.2 Existing Community Characteristics

The existing characteristics on the project site and the surrounding community are described in Chapter 2, *Environmental Setting*. For the reader's convenience, this section restates the existing site conditions provided in Chapter 2 as they apply to land use and planning.

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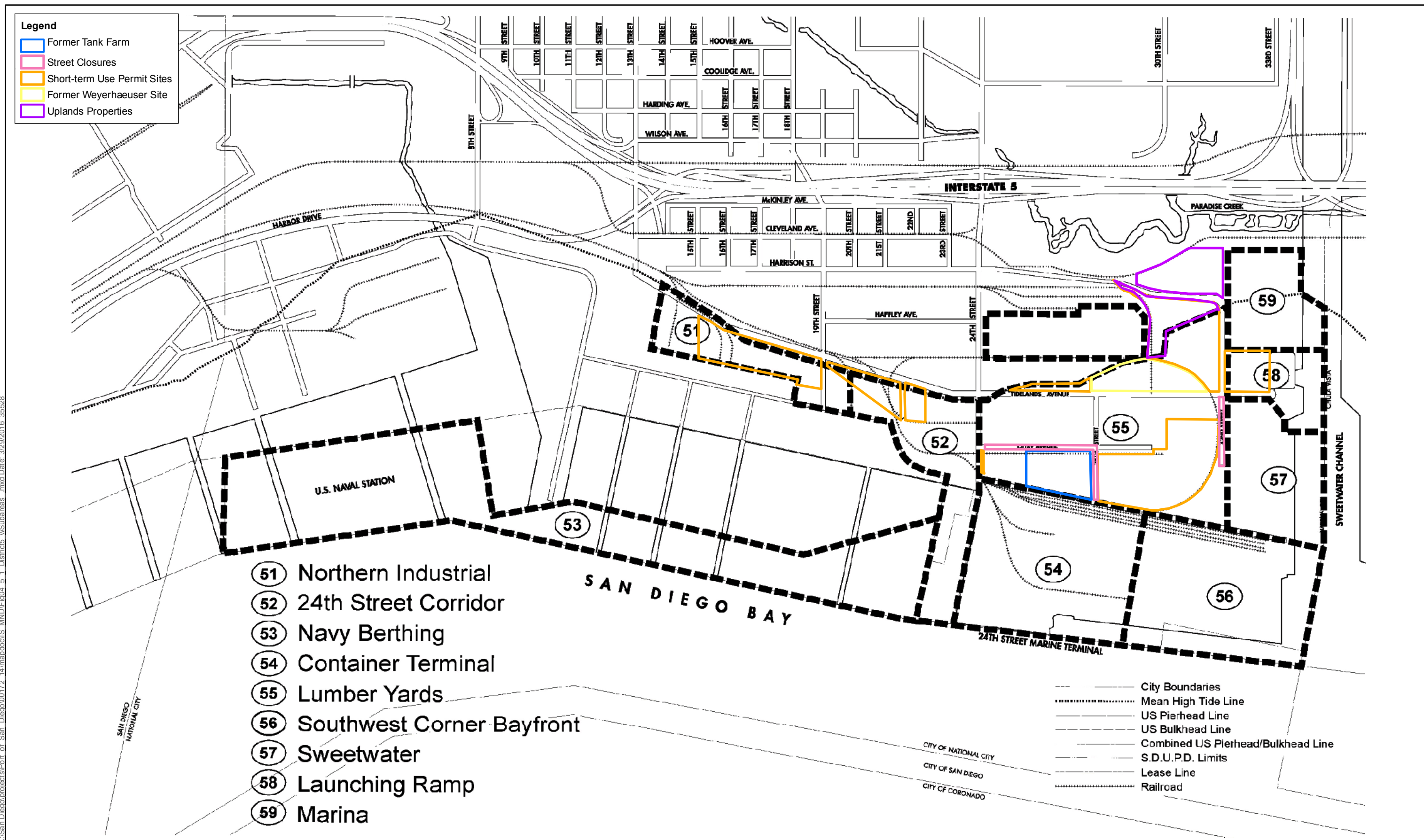
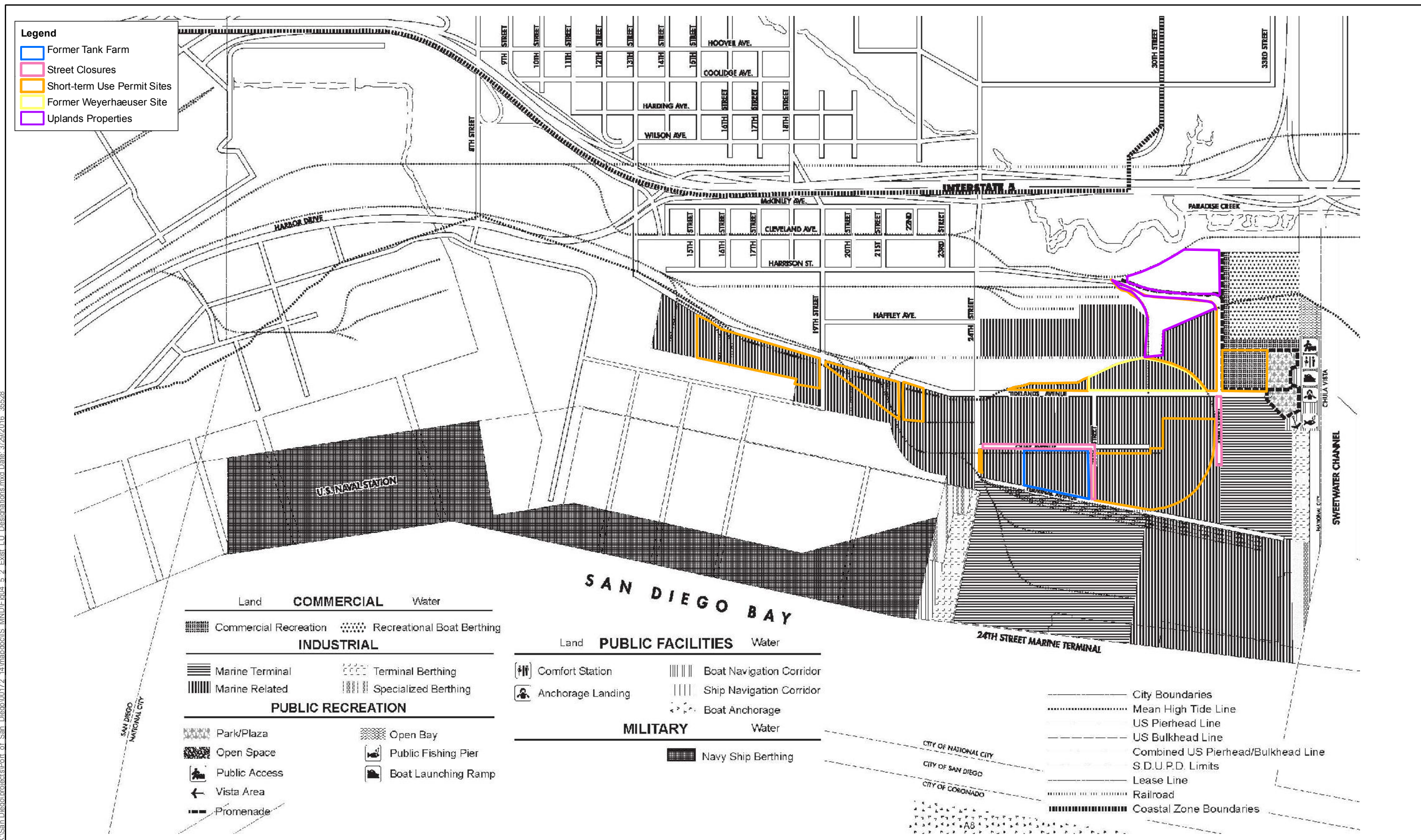


Figure 4.5-1  
Port Master Plan Planning District 5 with Subareas  
NCMT Tank Farm Paving and Street Closures Project & PMPA





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**Figure 4.5-2**  
**Existing Land Use Designations**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





## Project Sites

### Tank Farm

The tank farm covers approximately 5.71 acres composed mainly of exposed soil and disturbed vegetation with some remnant paving (from access roads). Vegetation on site consists of various ruderal weeds and landscape plantings, including ornamental shrubs and groundcovers. No habitable structures or buildings are present within the tank farm site boundaries. The tank farm site is surrounded by an earthen berm approximately 4–5 feet high and a chain-link fence. The existing elevation is approximately 13.5 feet AMSL. Figure 4.5-3 shows an aerial of the site. This site is currently designated as Marine Related Industrial in the PMP.

### Streets Closure Sites

Quay Avenue, 28th Street, and 32nd Street are District roads and are not dedicated city streets. The roads are between active industrial areas and, due to tenant consolidation and reconfiguration, are no longer necessary for access in this area of the NCMT. However, some marine terminal employees utilize these roadways, particularly Quay Avenue, for parking their personal vehicles during business hours. A BNSF rail spur also runs along the western side of Quay Avenue.<sup>2</sup> The existing elevation of Quay Avenue and 28th Street is approximately 12 feet AMSL, whereas 32nd Street is 14 feet AMSL. Figure 4.5-4 shows an aerial of the street closure sites. These streets are designated as Street in the PMP.

### Existing Short-Term Use Permit Sites

Pasha has use of parcels near the NCMT through the current short-term use permits issued by the District. The allowable uses for these parcels are marine terminal operations, including import, export, handling, and storage of motor vehicles, and cargo transported aboard a Pasha Hawaii Transport Lines vessel (with the exception of varying uses as allowed under the use permits—see Table 2-1 in Chapter 2, *Environmental Setting*). However, under normal operations, these sites are primarily used for vehicle throughput. The use permits for these parcels are currently for durations of 5 years or less. The parcels, parcel sizes, uses, and land use designations are summarized in Table 4.5-2; and the site locations are shown on Figure 4.5-5. All of the short-term use permit parcels are located on District-owned land. Each of the sites is paved and contains no vegetation other than ornamental plants along sidewalks. There are no buildings on the parcels. With the exception of Port Parcel 028-007, which is designated as Commercial Recreation in the PMP, all of the short-term use permit sites are designated Marine Related Industrial in the PMP.

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<sup>2</sup> A railroad spur is a type of secondary track used by railroads to allow customers at a location to load and unload railcars without interfering with other railroad operations.

**Table 4.5-2. Short-Term Use Permit Parcels, Area, and Current Uses**

<b>Parcel #</b>	<b>Area</b>	<b>Use</b>	<b>Land Use Designation</b>
027-016	739,409 sf (16.97 acres)	Import/export, handling, storage of vehicles, cargo transported by Pasha vessels, and other general cargo.	Marine Related Industrial
025-010-A, -B, -C, and -D and 027-042 <sup>b</sup>	1,174,904 sf (26.97 acres)	Import/export, handling, storage of vehicles, cargo transported by Pasha vessels, and other general cargo. A portion can be used for vehicle sales.	Marine Related Industrial, except for the eastern half of Lot K, which is not in the PMP and is designated Tourist Commercial in the City's Harbor District Specific Area Plan
027-043	1,459 sf (0.03 acre)	Maintenance of landscaping, irrigation, and signage.	Marine Related Industrial
028-007	145,811 sf (3.35 acres)	Preferential, non-exclusive use for temporary storage of vehicles.	Commercial Recreation
TOTAL	2,061,583 sf (47.32 acres <sup>a</sup> )	--	

Note: Any discrepancy in the conversion of square feet to acres is due to rounding of numbers for ease of presentation. The square foot value is closer to the actual area.

sf = square feet

<sup>a</sup> Approximately 5 acres of short-term use permit sites are not usable for vehicle storage (Mercator 2013) because they have other uses (i.e., maintenance, haul-away operations).

<sup>b</sup> Parcels 025-010 and 027-042 are part of one short-term use permit.

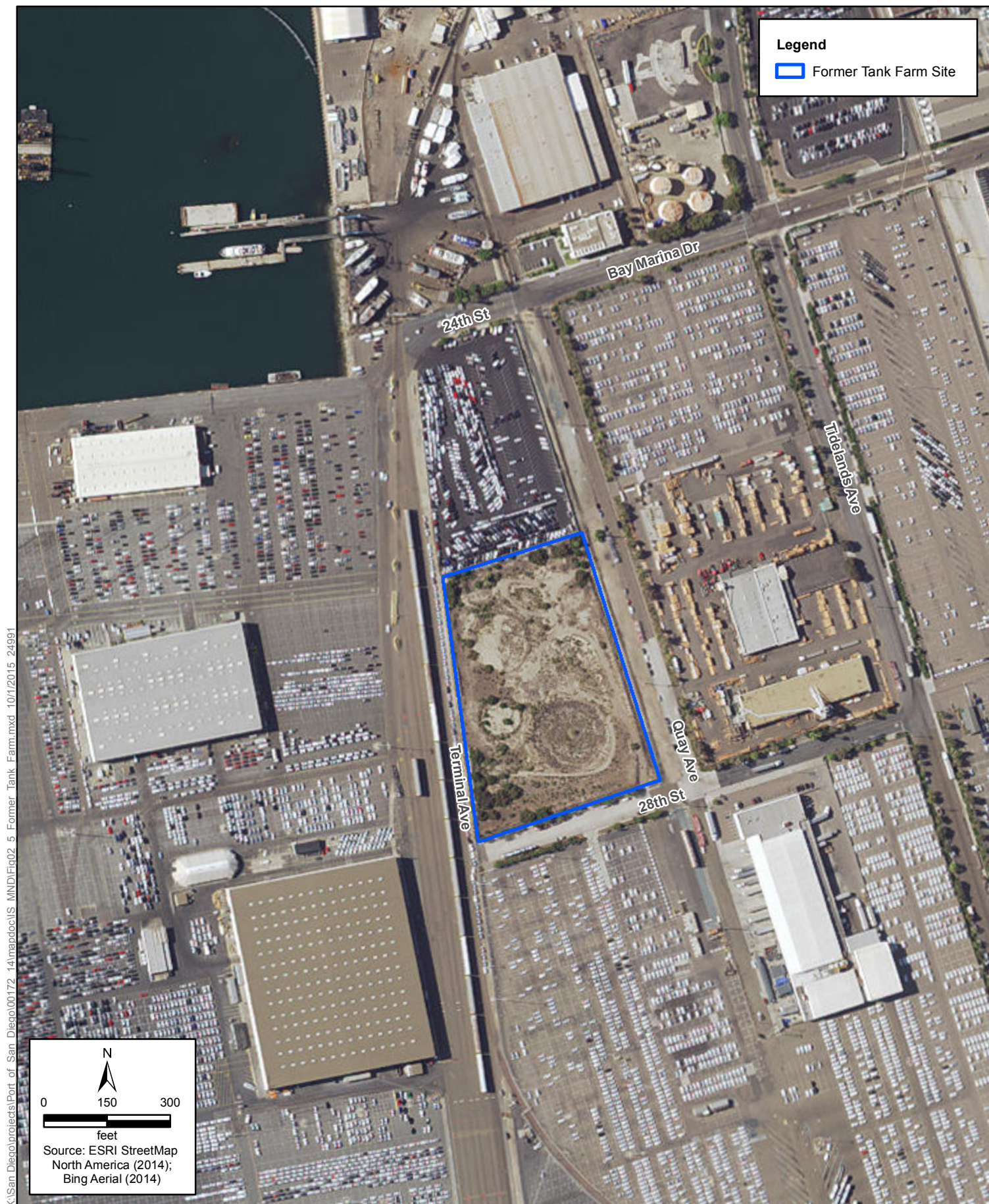
### Former Weyerhaeuser Site

The proposed project includes a potential new real estate agreement (i.e., Tideland Use and Occupancy Permit, Temporary Use Permit, or lease) for the approximately 6.14-acre former Weyerhaeuser site. This site is paved and contains two buildings, which may be demolished as part of the project: a 1,800-square-foot office building built in the 1990s and a 20,000-square-foot warehouse built after 1972, neither of which exceed the 50-year threshold for potentially significant historical structures. Figure 4.5-6 shows an aerial of the former Weyerhaeuser site. This site is currently designated as Marine Related Industrial in the PMP.

### Uplands Properties

The Uplands Properties consist of two sites—the eastern half of Lot K and the site east of Marina Way (Port Parcel 027-047). The eastern half of Lot K, which is described above as part of the *Existing Short-Term Use Permit Sites* section and is paved, does not contain vegetation other than ornamental vegetation along the sidewalks, and no buildings are present. Port Parcel 027-047 is vacant and unpaved, and no buildings are present. Ruderal vegetation is present on Port Parcel 027-047. The Uplands Properties are not currently in the PMP area, but are designated as Tourist Commercial in the City of National City's Harbor District Specific Area Plan. The LCP currently has provisions to allow for maritime cargo storage to be conditionally permitted on the eastern half of Lot K.



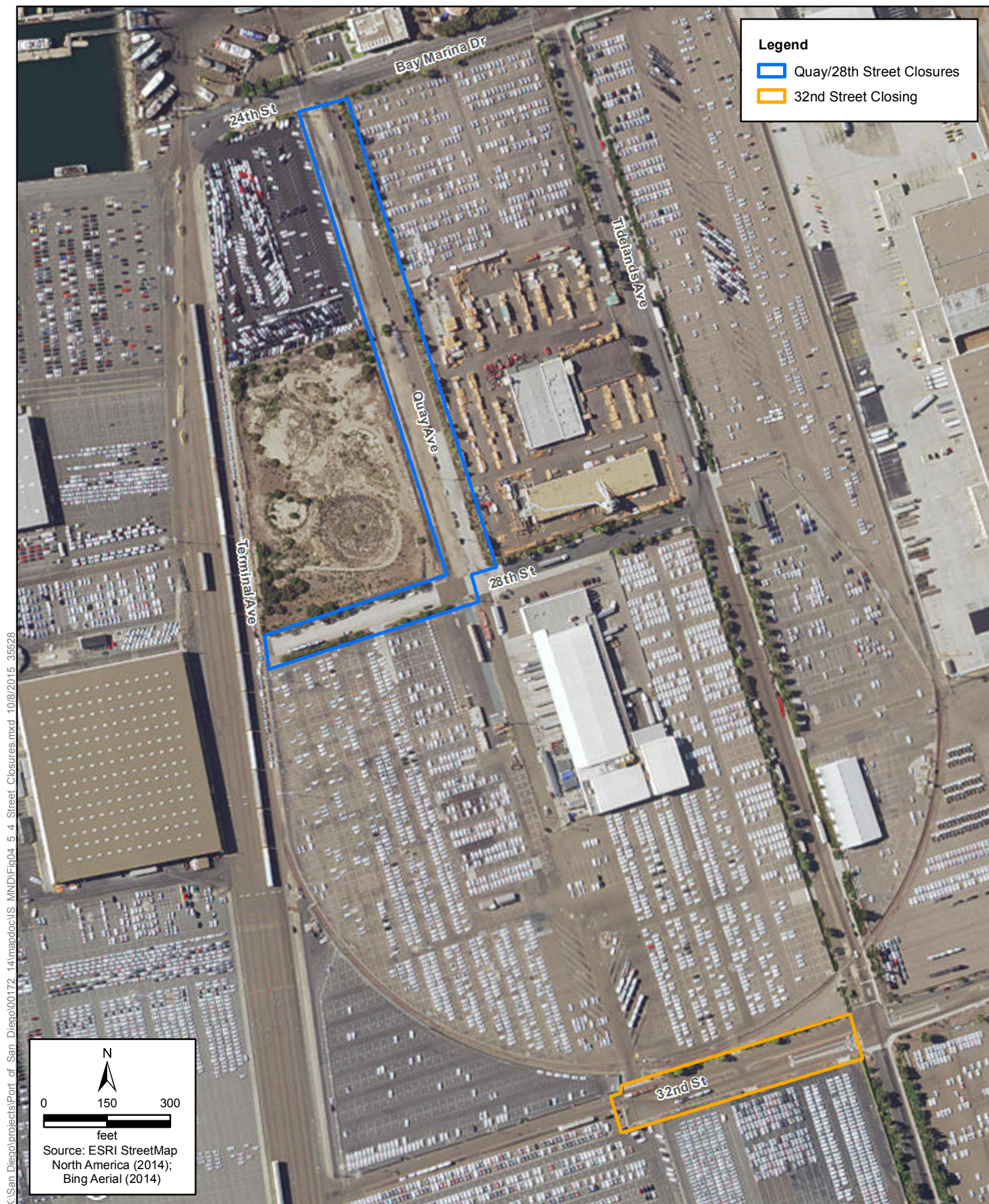


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**Figure 4.5-3**  
**Former Tank Farm Site Existing Conditions**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





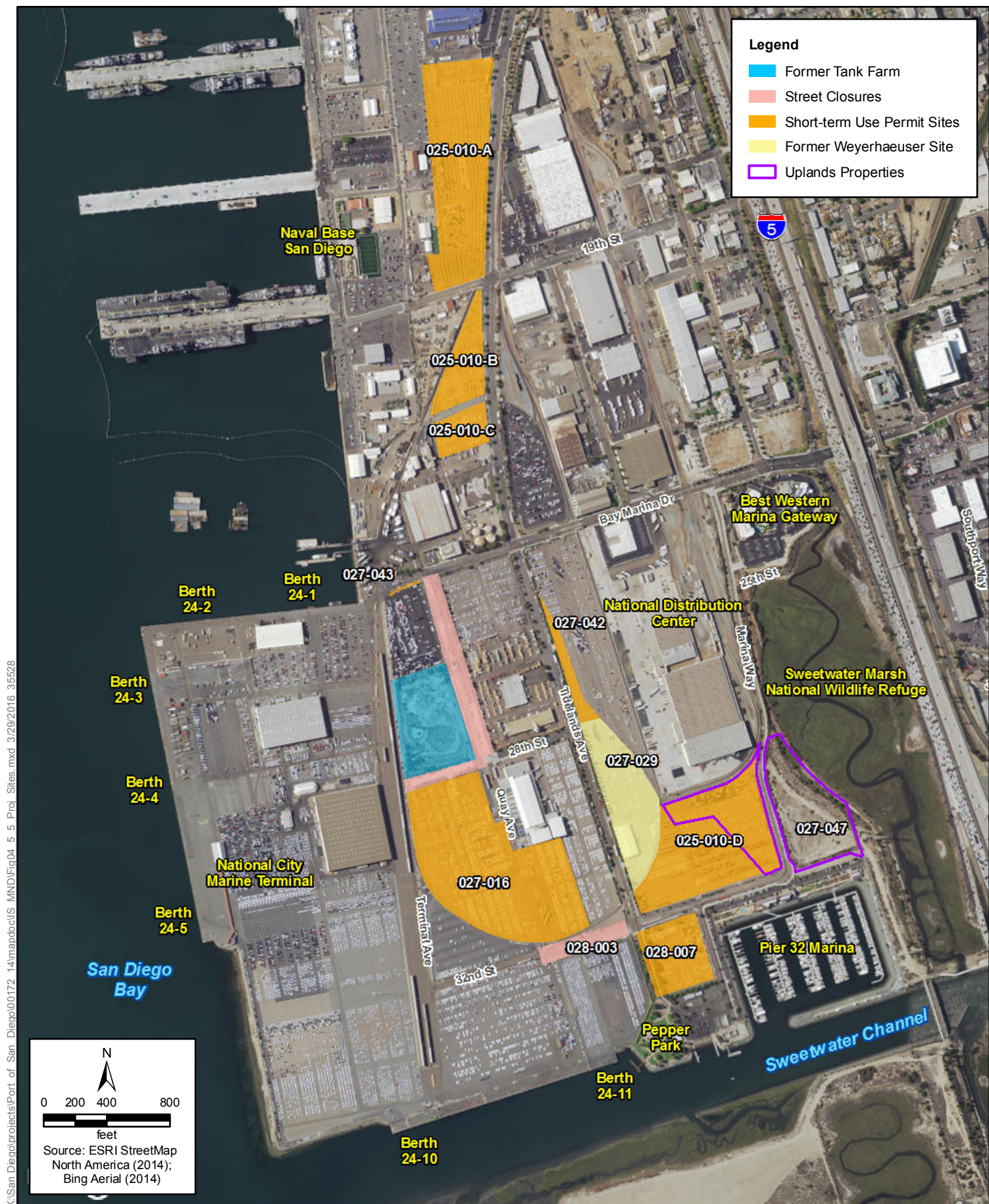


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**Figure 4.5-4**  
**Street Closures Sites' Existing Conditions**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**







**Figure 4.5-5**  
**Project Sites**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**







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**Figure 4.5-6**  
**Former Weyerhaeuser Site Existing Conditions**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





## Overlay Properties

The Marine Related Industrial Overlay is proposed on two properties—the eastern half of Lot K and the parcel north of the boat launch ramp (Port Parcel 028-007). The eastern half of Lot K, which is described above as part of the *Existing Short-Term Use Permit Sites* and *Uplands Properties*, is paved, does not contain vegetation other than ornamental vegetation along the sidewalks, and no buildings are present. Port Parcel 028-007 is vacant and unpaved, and no buildings are present. The eastern half of Lot K is not currently in the PMP, but is designated as Tourist Commercial in the City of National City's Harbor District Specific Area Plan. Port Parcel 028-007 is designated Commercial Recreation in the PMP.

## Surrounding Community

The project site is in an area that comprises mainly industrial, marine related industrial, recreational and military activities. Land use designations within the PMP in Planning District 5 (National City Bayfront) include Marine Related Industrial, Marine Terminal industrial, Terminal Berthing, Specialized Berthing, Navy Ship Berthing, Recreational Boat Berthing, Commercial Recreation, Park/Plaza, Open Bay and Roads.

The project sites are primarily surrounded by marine related industrial uses. These industrial land uses include ProBuild/Dixieline Lumber, San Diego Cold Storage, National Distribution Center, Marine Group Boat Works, and several areas occupied by Pasha. Other industrial uses include a BNSF rail facility on NCMT, and BNSF-owned property immediately west of the National Distribution Center and northeast of the corner of Tidelands Avenue/Bay Marina Drive. Commercial land uses include the Best Western Plus Marina Gateway Hotel and Goodies Pours & Grill. Recreational areas nearby consist of Pier 32 Marina, Pepper Park (which is adjacent to Port Parcel 028-007), and the National City Aquatic Center (construction was completed in late 2015). Natural open space and important waterways include the Sweetwater Marsh National Wildlife Refuge and Sweetwater Channel, respectively. Residential land uses are scattered north of the West 22nd Street, along Cleveland Avenue, approximately 1,600-feet east of the nearest project site (Port Parcel 025-010-B). Figure 4.5-7 provides a vicinity map of the project sites and surrounding land uses.

## 4.5.3 Applicable Laws and Regulations

### 4.5.3.1 Federal

#### United States Coastal Act

Passed by Congress in 1972, the U.S. Coastal Act established a federal coastal zone management policy and created a federal coastal zone. The act promotes the effective management, beneficial use, protection, and development of the coastal zone in order to balance the country's natural, environmental, and aesthetic resource priorities with critical commercial and economic growth.

### 4.5.3.2 State

#### California Coastal Act

The CCA of 1976 (Public Resources Code Sections 30000–30900) established the Coastal Commission to oversee future development along California’s coastline. Chapter 8, Article 3 of the CCA establishes a framework for ports, including the District, to develop a PMP by which to conduct discretionary project reviews and issue individual coastal development permits within their jurisdictions. Individual port master plans require review and certification by the Coastal Commission, including any amendments to the certified port master plan. A list of applicable policies and an associated consistency review is provided below in Table 4.5-5.

#### California Public Trust Doctrine

The Public Trust Doctrine is a common law regulation that provides that public lands and waters are held by the state or its delegated trustee (i.e., the California State Lands Commission) for the benefit of all people. All tide and submerged lands, granted or ungranted, as well as navigable rivers, sloughs, etc., are impressed with the Public Trust. The Public Trust Doctrine, as overseen by the State Lands Commission, restricts the type of land uses allowed on public lands, including within the District’s jurisdiction. The Public Trust Doctrine limits the uses of sovereign lands to waterborne commerce, navigation, fisheries, open space, water-oriented recreation, ecological habitat protection, or other recognized Public Trust purposes. The entire project site is subject to the Public Trust Doctrine because all the area has either been granted to or acquired by the District.

#### Port Act

The Port Act (Appendix 1 of the California Harbor and Navigation Code) was codified in 1962. Through the Port Act, the State of California delegated its authority to manage and control certain tidelands and submerged waters to the District. Specifically, the District was established for the development, operation, maintenance, control, regulation and management of the tidelands and lands lying under the inland navigable waters of San Diego Bay. Under the Port Act, the District was granted broad police powers, and the Port Act requires the District to exercise its land management authority and powers over (1) the tidelands and submerged lands granted to the District and (2) any other lands conveyed to the District by any city or the County of San Diego or acquired by the District. The Port Act grants the District exclusive police power over property and development subject to its jurisdiction. A PMP is also required by the Port Act, which must specify the land and water uses within the District’s jurisdiction.

### 4.5.3.3 Local

#### San Diego Unified Port District Port Master Plan

The PMP is the governing land use document for physical development within areas granted in trust to the District, as well as later District-acquired properties. The PMP, as certified, provides the District permitting authority and the ability to issue coastal development permits.

The PMP is organized into four sections: (I) Introduction, (II) Planning Goals, (III) Master Plan Interpretation, and (IV) Precise Plans. Section II establishes planning goals and related policies that



**Figure 4.5-7**  
**Project Sites and Surrounding Land Uses**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**



pertain to development and operation of lands within the District's jurisdiction. Section III provides additional land use objectives and criteria that apply to specific land use types, including commercial, industrial, recreation, conservation, military, and public facility uses. Section IV identifies ten Planning Districts, each of which is guided by a Precise Plan that guides future development.

As shown in Figure 4.5-1, the proposed project sites are within the subareas of Planning District 5: National City Bayfront, identified as Northern Industrial (Subarea 51), 24th Street Corridor (Subarea 52), Lumber Yards (Subarea 55), and Launching Ramp (Subarea 58). The Precise Plan for the National City Bayfront discusses an established and developed marine industrial area with mainly industrial and military activities. The PMP assigns most of the land to Marine Related Industrial and Marine Terminal use, with Commercial Recreation, Park and Recreational Boat Berthing located north of the Sweetwater Channel. The National City Bayfront Precise Plan lists planned projects in the subarea. Table 4.5-5 lists the applicable policies and describes the proposed project's consistency with those policies.

## Harbor District Specific Area Plan

The Harbor District Specific Area Plan (Harbor District Plan) is part of the City of National City's LCP, which required the City to complete resource-based planning and development standards for the areas close to Paradise Marsh. The Harbor District Plan was approved by the City and the California Coastal Commission in 1998. The District-owned Uplands Properties, and one of the properties proposed to have the Marine Related Industrial Overlay (the eastern half of Lot K), that are planned for incorporation into the PMP as part of the proposed project were included in the Harbor District Plan as a Tourist Commercial land use pursuant to two MOUs with the District. The MOUs have expired, and pursuant to the California Coastal Commission's record on the LCP amendment that incorporated the properties into the LCP, the City agreed that the properties could be incorporated into the PMP after expiration of the MOUs (see Appendix D). Additionally, the latter MOU specified that the District would process a PMPA to incorporate all then- and later-acquired District lands into the PMP.

The Uplands Properties are part of Subarea B of the Harbor District Plan, which covers approximately 16.4 acres and includes a major utility corridor on filled historic wetlands of Paradise Marsh and San Diego Bay, east and south of the Uplands Properties. Within Subarea B, Tourist Commercial development such as a lodging facility, boating and marina-related support uses, or a restaurant are allowed. A combined 200-foot buffer and setback of buildings from the Wildlife Refuge boundary generally applies in Subarea B because of its flat topography. Permitted structures are required to present a maritime or traditional National City theme. In order to increase the aesthetic quality of Subarea B, the Harbor District Plan does not contemplate either a recreational vehicle park or campground. The Harbor District Plan currently has provisions to allow for maritime cargo storage to be conditionally permitted on the eastern half of Lot K.



## 4.5.4 Project Impact Analysis

### 4.5.4.1 Methodology

The following impact analysis evaluates the land use and planning impacts that would result should the proposed project be implemented. Based upon the existing regulations described under Section 4.5.3, the impact analysis provides a project consistency analysis with the existing applicable plans and regulations. Merely being inconsistent with an existing plan or regulation would not necessarily be considered a significant impact under CEQA; rather, the inconsistency must result in a substantial adverse effect on the environment.

### 4.5.4.2 Thresholds of Significance

The following significance criteria are based on Appendix G of the State CEQA Guidelines and provide the basis for determining significance of impacts associated with land use and planning resulting from the implementation of the proposed project. The determination of whether a land use and planning impact would be significant is based on the professional judgment of the District as Lead Agency supported by the recommendations of qualified personnel at ICF International and based wholly on the substantial evidence in the administrative record.

Impacts are considered significant if the proposed project would result in any of the following.

1. Physically divide an established community.
2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.
3. Conflict with any applicable habitat conservation plan or natural community conservation plan.

The analysis of whether the proposed project would have a significant impact on land use under Thresholds 1 and 3 is provided in Section X of the Revised Initial Study/Environmental Checklist (Appendix B-1 of this EIR), which determined that the project would not physically divide an established community or conflict with an applicable habitat conservation plan. The analysis and conclusions therein are incorporated by reference into this section of the EIR and are summarized in Chapter 6, *Additional Consequences of Project Implementation*. Therefore, only Threshold 2 is discussed in the impact analysis that follows.

### 4.5.4.3 Project Impacts and Mitigation Measures

***Threshold 2: Implementation of the proposed project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.***

#### Impact Discussion

The proposed project involves the following components.

- Paving the former NCMT tank farm.



- Closing and repaving portions of Quay Avenue, 28th Street, and 32nd Street.
- Potential renewal of the existing short-term use permits (i.e., Tideland Use and Occupancy Permits and Temporary Use Permits) for continued vehicle storage.
- A new real estate agreement (i.e., a Tideland Use and Occupancy Permit, a Temporary Use Permit, and a lease) at the former Weyerhaeuser site in the vicinity of the NCMT to allow for additional vehicle storage space.
- A PMPA to remove the street designations for portions of these streets from the PMP and redesignate them as Marine Related Industrial.
- Incorporating District-owned uplands properties into the PMP as Commercial Recreation in order to permit the District to exercise land use authority with these two sites consistent with the PMP, Port Act, and Public Trust Doctrine.
- Adding a Marine Related Industrial Overlay (Overlay) on two project sites (the eastern portion of Lot K and Port Parcel 028-007). The Overlay would be established for 7 years from the time the PMPA receives its final approval or development projects, consistent with the Commercial Recreation designation, are proposed and approved by the Board of Port Commissioners, whichever occurs first. The Overlay would better accommodate Pasha's current operation and is consistent with the existing uses on the sites. At the time the NOP was issued for scoping input, no commercial developments were proposed for the sites. Upon expiration of the Overlay, the sites would keep the Commercial Recreation land use designation intact and the both would be placed in a vacant, unused condition until an unknown future project, consistent with the Commercial Recreation land use designation, is proposed, approved, and constructed.

The following provides a discussion of each component and the consistency with the underlying land use designation or proposed designation.

**Former Tank Farm Component.** The former tank farm site would be graded and paved for vehicle storage, transforming a vacant and heavily disturbed lot into surface parking and storage area to support marine terminal operations. The proposed use would be consistent with the underlying land use designation of Marine Related Industrial and the surrounding land uses, which include a lumber yard and other vehicle storage areas.

**Street Closures Component.** The proposed project's implementation would close Quay Avenue between Bay Marina Drive and 28th Street, 28th Street between Quay Avenue and the NCMT, and 32nd Street west of Tidelands Avenue, followed by demolition, grading, and paving work in order to raise the grade to permit vehicle storage. The current designation of Street does not permit this land use; however, the project would also seek a PMPA to redesignate the street closures sites from Street to Marine Related Industrial. With the redesignation, the proposed use would be consistent with the new land use designation and with the surrounding land uses, which include other vehicle storage areas.

**Short-Term Use Permit Sites Component.** The project proponent is seeking renewal of four short-term use permits. These sites currently store vehicles and would continue to do so with the renewed permits. With the exception of Port Parcel 028-007, which is currently designated for Commercial Recreation land uses, and the portion of Port Parcel 025-010-D (Lot K) that is located east of the mean high tide line and is currently not in the PMP but is designated for Tourist Commercial uses in the City's LCP, the land use designation of Marine Related Industrial and the surrounding industrial

land uses are compatible with these renewals. The project includes a PMPA that proposes to add the temporary Overlay to Port Parcel 028-007 and the portion of Port Parcel 025-010-D (Lot K) located east of the mean high tide line, which would allow for renewal of the permits. The Overlay is discussed below.

**Former Weyerhaeuser Site Component.** The proposed project includes a potential new real estate agreement (i.e., a Tideland Use and Occupancy Permit, a Temporary Use Permit, or a lease) to allow for vehicle storage at this 6.14-acre site. Vehicle storage is compatible with the designation of Marine Related Industrial and with the surrounding land uses, which are also vehicle storage and other marine related industrial land uses.

**Port Master Plan Amendment Component and Incorporation of District-Owned Uplands into the Port Master Plan.** There are multiple actions related to the PMPA, which are discussed below.

A PMPA would be required to convert Quay Avenue between Bay Marina Drive to the north and 28th Street to the south, 28th Street west of Quay Avenue, and 32nd Street west of Tidelands Avenue from their current land use designation of Street to a land use designation of Marine Related Industrial. This is discussed under the *Street Closures Component* above.

A PMPA is also required to incorporate two District-owned uplands properties into the PMP, as shown in Figure 4.5-8. Both properties are located north of the marina, while one (the eastern portion of Port Parcel 025-010-D) is located west of Marina Way and the other, Port Parcel 027-047, is east of Marina Way. Both properties would be designated as Commercial Recreation. The incorporation of these two properties into the PMP would apply a PMP land use designations to District-owned properties that have not been added to the PMP since the early 1990s when they were acquired by the District, thus ensuring their consistency with the District's PMP, as well as the Public Trust Doctrine and Port Act, which requires the District to manage lands it acquires.

The proposed project also includes an Overlay for the eastern half of Lot K (part of Port Parcel 025-010-D) currently not in the PMP but designated for Tourist Commercial land use in the City's LCP and used for vehicle storage on site through a short-term use permit (discussed under *Short-Term Use Permit Sites Component* above), and Port Parcel 028-007 currently designated as Commercial Recreation. See Figure 4.5-8 for the locations of the proposed overlay. The Overlay would require a PMPA and would clarify that Pasha can continue to use the sites. The Overlay would establish an overlay on the sites for a maximum of 7 years from the time the final approval of the PMPA is granted.<sup>3</sup> However, if development projects, consistent with the Commercial Recreation designation, are proposed and approved by the Board of Port Commissioners<sup>4</sup> prior to the 7-year period, the Overlay would expire.

Table 4.5-3 summarizes the changes in the existing land use designations. Table 4.5-4 provides the proposed land use designation acreage changes within the project sites.

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<sup>3</sup> For this purpose, "finalized" means the California Coastal Commission's acceptance of the District's approval of the California Coastal Commission's certification of the PMPA pursuant to Section 13632 of the Coastal Commission's regulations. 14 Cal. Code of Reg. § 13632.

<sup>4</sup> For this purpose, "approved" means issuance of a CDP.



## Legend



Add to Port Master Plan and designate Commercial Recreation



Currently designated Commercial Recreation in Port Master Plan



Add Marine Related Industrial overlay



Mean High Tide Line



**Table 4.5-3. Existing and Proposed Land Use Designations**

<b>Parcel</b>	<b>Existing</b>	<b>Proposed Changes</b>
027-008 (former tank farm)	Marine Related Industrial	No Change
027-016	Marine Related Industrial	No Change
025-010	Marine Related Industrial on all areas, except the eastern half of Lot K (portion of Port Parcel 025-010-D located east of the mean high tide line), which is not in the PMP but designated Tourist Commercial in the Harbor District Specific Area Plan. Additionally, the LCP currently has provisions to allow for maritime cargo storage to be conditionally permitted on the eastern half of Lot K.	No change to all areas, except the eastern half of Lot K, which is proposed to be incorporated into the PMP with a Commercial Recreation land use designation; add a Marine Related Industrial Overlay to the eastern half of Lot K
027-042	Marine Related Industrial	No change
028-007	Commercial Recreation	Add Marine Related Industrial Overlay
027-029 (former Weyerhaeuser site)	Marine Related Industrial	No change
027-043	Marine Related Industrial	No change
Quay Avenue	Street	Marine Related Industrial
28th Street	Street	Marine Related Industrial
028-003 (West 32nd Street)	Street	Marine Related Industrial
027-047	Tourist Commercial in the Harbor District Specific Area Plan with maritime cargo storage conditionally permitted on the eastern half of Lot K.	Commercial Recreation

**Table 4.5-4. Proposed Land Use Designation Acre Changes within the Project Sites**

<b>Land Use Designation</b>	<b>Existing Acres</b>	<b>Acres Proposed for Redesignation</b>	<b>New Total Acres</b>
Marine Related Industrial	51.34	+5.09	56.43
Street	5.09	-5.09	0
Commercial Recreation	3.35	+11.46	14.81
Tourist Commercial in City's LCP, with maritime cargo storage conditionally permitted on the eastern half of Lot K	11.46	-11.46	0
<b>Total</b>	<b>71.24</b>	<b>N/A</b>	<b>71.24</b>

A project consistency analysis with all applicable plans, policies, and regulations is provided in Table 4.5-5.<sup>5</sup> Applicable documents include the CCA, Port Act, and PMP.<sup>6</sup> As shown in the table, the project would not result in any inconsistencies with applicable acts, plans, and programs that would result in a significant environmental impact.

In addition, the land use designation for the Uplands Properties is Tourist Commercial under the National City Harbor District Specific Area Plan. Aside from marina development (which has been completed), the Uplands Properties sites (known as Subarea B in the Harbor District Specific Area Plan) were assigned the highest priority for hotels, motels, restaurants, boat dry storage, and ancillary services. The proposed Commercial Recreation land use designation is wholly consistent with the Tourist Commercial designation. It includes pleasure craft marinas, hotels, restaurants, specialty shopping, and dry boat storage. Thus, land uses proposed under the Commercial Recreation land use designation would also be consistent with the Tourist Commercial land use designation of the Harbor District Specific Area Plan, and Commercial Recreation would be a continuation of the types of uses allowed under the Tourist Commercial land use designation. Further, the temporary Overlay on the eastern half of Lot K would also be consistent with the Harbor District Specific Area Plan, which allows for maritime cargo storage uses to “be a conditionally permitted use” on the eastern half of Lot K. Accordingly, the maritime cargo use has been historically operating for years.

Therefore, project impacts related to compatibility with surrounding land uses and consistency land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant.

### **Level of Significance prior to Mitigation**

Implementation of the proposed project would not conflict with an applicable acts, land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

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<sup>5</sup> The requirement to discuss inconsistencies with applicable plans is pursuant to State CEQA Guidelines Section 15125(d), which does not require discussion of consistency; see *City of Long Beach v. Los Angeles Unified School District* (2009) 176 Cal.App.4th 889, 918–919; *Banning Ranch Conservancy v. City of Newport Beach* (December 12, 2012) 211 Cal.App.4th 1209; *North Coast Rivers Alliance et al. v. Marin Municipal Water District Board of Directors* (1st Dist., Div. 4, 2013) 216 Cal.App.4th 614 (“The trial court’s ruling is tantamount to requiring the EIR to provide a detailed discussion of the Project’s consistency with the plan. CEQA includes no such requirement.”).

<sup>6</sup> Please note that Section 4.1, *Air Quality and Health Risk*, describes compliance with state and regional air quality plans. Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*, discusses consistency with applicable climate change laws and regulations. Section 4.3, *Hazards and Hazardous Materials*, describes the project’s compliance with applicable hazardous material regulations. Section 4.4, *Hydrology and Water Quality*, describes compliance with existing regulations relative to water quality, including San Diego water, urban runoff, and urban stormwater management plans. Section 4.6 *Noise and Vibration*, discusses consistency with applicable noise regulations and community noise standards. Section 4.7, *Transportation, Circulation, and Parking*, describes the project’s consistency with local and regional transportation plans.

### **Level of Significance after Mitigation**

Impacts would be less than significant.

**Table 4.5-5. Project Consistency with Relevant Goals, Objectives, and Policies**

Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<b>California Coastal Act</b>		
<b>Section 30232.</b> Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.	Construction activities associated with the proposed project could involve some use of hazardous materials (e.g., petroleum products). As discussed in Section 4.3, <i>Hazards and Hazardous Materials</i> , the RCRA, Hazardous and Solid Waste Act, and the California Hazardous Waste Control Law would govern proper containment, spill control, and disposal of hazardous waste generated during demolition and construction. Implementing inventory accountability, spill prevention controls, and waste disposal controls associated with these regulations would likely eliminate and limit both the frequency and severity of potential hazardous materials releases during construction. During operation, the project is not anticipated to use large amounts of crude oil, gas, petroleum products, or hazardous substances and the project does not propose to transport any of the same; however, the project would comply with the RCRA, Department of Transportation Hazardous Materials Regulations, Hazardous and Solid Waste Act, and the California Hazardous Waste Control Law, which would govern transport and help to ensure proper containment, spill control, and disposal of hazardous waste generated during operations. Compliance with these laws and regulations would protect against spillage of such substances.	Consistent
<b>Section 30234.5.</b> The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.	No developed commercial or recreational fishing facilities are located on site, and none would be affected by the proposed project. Moreover, the closest commercial and recreational uses—Pepper Park and Pier 32—would not be adversely affected by the project, either directly such as by reducing their area or indirectly by adding significant demand to the existing facilities.	Consistent



Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<b>Section 30235.</b> Revetments breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.	No changes to revetments breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes are proposed as part of the proposed project.	Consistent
<b>Section 30240.</b> (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.	As discussed in Section IV, <i>Biological Resources</i> , of the Revised Initial Study (Appendix B-1), incorporated herein by reference and summarized in Chapter 6, <i>Additional Consequences of Project Implementation</i> , there are no environmentally sensitive habitat areas within or adjacent to the project sites. Therefore, no environmentally sensitive habitat areas would be affected.	Consistent

Goal, Objective, or Policy	Discussion Proposed Project	Finding Proposed Project
<b>Section 30244.</b> Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.	As discussed in Section V, <i>Cultural Resources</i> , of the Revised Initial Study (Appendix B-1), incorporated herein by reference and summarized in Chapter 6, <i>Additional Consequences of Project Implementation</i> , the proposed project would not adversely impact archaeological or paleontological resources that would be identified by the State Historic Preservation Officer. No prehistoric or historic sites were identified within the tank farm and street closures site or immediately adjacent to the site. The project study area is on reclaimed land and consists of fill. For this reason, there does not appear to be any possibility that prehistoric archaeological or paleontological deposits exist anywhere near the surface of the project sites today.	Consistent
<b>Section 30250.</b> (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.	<p>The proposed project would result in additional space for marine terminal related operations adjacent to the NCMT. However, the majority of these areas are currently being used for marine related industrial uses by Pasha through short-term permits or have historically been used for marine related industrial uses by other tenants of the District (i.e., Pasha and Weyerhaeuser). Therefore, new commercial/marine related industrial development would be located contiguous with existing developed areas. Adequate public services exist in the project area as discussed in detail in the Revised Initial Study, Section XIV, <i>Public Services and Recreation</i> (Appendix B-1), incorporated herein by reference and summarized in Chapter 6, <i>Additional Consequences of Project Implementation</i>.</p> <p>The proposed project does not involve land divisions and would not create parcels smaller than the average size of surrounding parcels.</p>	Consistent

Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<p><b>Section 30253.</b> New development shall do all of the following:</p> <p>(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.</p>	<p>Risks to life and property due to geologic, flood, or fire hazard are not expected to occur as a result of the proposed project. Further discussion is provided in Section VIII, <i>Hazards and Hazardous Materials</i>, of the Revised Initial Study (Appendix B-1), incorporated herein by reference and summarized in Chapter 6, <i>Additional Consequences of Project Implementation</i>.</p>	Consistent
<p>(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.</p>	<p>The project site is not located near or on bluffs or cliffs, and no natural landforms would be altered by the proposed project.</p>	Consistent
<p>(c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.</p>	<p>As discussed in Section 4.1, <i>Air Quality and Health Risk</i>, the proposed project would be consistent with the SDAB's RAQS and SIP after mitigation.</p>	Consistent
<p>(d) Minimize energy consumption and vehicle miles traveled.</p>	<p>The proposed project would minimize energy consumption and vehicle miles traveled considering the characteristics of the project by providing additional space for existing operations at an existing site, versus developing a new facility for increased operations off-site. Moreover, with implementation of mitigation measures identified in Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>, energy consumption would be further reduced</p>	Consistent

Goal, Objective, or Policy	Discussion Proposed Project	Finding Proposed Project
<p><b>Section 30255.</b> Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.</p>	<p>The proposed project is a coastal-dependent maritime industrial development because cargo arrives via vessel through the NCMT, and hence, takes priority over other non-coastal-dependent uses. Additionally, it would not be sited on a wetland and would not result in any inconsistencies with Section 30255 of the California Coastal Act.</p>	Consistent
<p><b>Section 30260.</b> Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if</p> <ul style="list-style-type: none"> <li>(1) alternative locations are infeasible or more environmentally damaging;</li> <li>(2) to do otherwise would adversely affect the public welfare; and</li> <li>(3) adverse environmental effects are mitigated to the maximum extent feasible.</li> </ul>	<p>The proposed project would provide additional space for marine related industrial operations adjacent to the NCMT site and within the primarily marine related industrial area of Planning District 5 of the PMP. This marine related industrial project would expand these existing maritime related uses, which are coastal-dependent uses, within sites and areas that are currently or historically utilized for (e.g., short-term permits sites and the tank farm and former Weyerhaeuser sites) or support (streets) marine related industrial purposes.</p>	Consistent

Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<p><b>Section 30703.</b> The California commercial fishing industry is important to the State of California; therefore, ports shall not eliminate or reduce existing commercial fishing harbor space, unless the demand for commercial fishing facilities no longer exists or adequate alternative space has been provided. Proposed recreational boating facilities within port areas shall, to the extent it is feasible to do so, be designated and located in such a fashion as not to interfere with the needs of the commercial fishing industry.</p>	<p>No existing commercial fishing facilities are located on site, and the project does not propose a recreational boating facility that would interfere with the needs of the commercial fishing industry. Therefore, the proposed project would not eliminate, reduce, or interfere with commercial fishing facilities.</p>	Consistent
<p><b>Section 30705.</b> (a) Water areas may be diked, filled, or dredged when consistent with a certified port master plan only for the following: (1) Such construction, deepening, widening, lengthening, or maintenance of ship channel approaches, ship channels, turning basins, berthing areas, and facilities as are required for the safety and the accommodation of commerce and vessels to be served by port facilities. (2) New or expanded facilities or waterfront land for port-related facilities. (3) New or expanded commercial fishing facilities or recreational boating facilities. (4) Incidental public service purposes, including, but not limited to, burying cables or pipes or inspection of piers and maintenance of existing intake or outfall lines. (5) Mineral extraction, including sand for restoring beaches, except in biologically sensitive areas. (6) Restoration purposes or creation of new</p>	<p>The proposed project would not involve any in-water work, including diking, filling, or dredging water areas. All construction and operational activities associated with the proposed project would be contained within landside portions of District property.</p>	Consistent

Goal, Objective, or Policy	Discussion Proposed Project	Finding Proposed Project
<p>habitat areas. (7) Nature study, mariculture, or similar resource-dependent activities. (8) Minor fill for improving shoreline appearance or public access to the water. (b) The design and location of new or expanded facilities shall, to the extent practicable, take advantage of existing water depths, water circulation, siltation patterns, and means available to reduce controllable sedimentation so as to diminish the need for future dredging. (c) Dredging shall be planned, scheduled, and carried out to minimize disruption to fish and bird breeding and migrations, marine habitats, and water circulation. Bottom sediments or sediment elutriate shall be analyzed for toxicants prior to dredging or mining, and where water quality standards are met, dredge spoils may be deposited in open coastal water sites designated to minimize potential adverse impacts on marine organisms, or in confined coastal waters designated as fill sites by the master plan where such spoil can be isolated and contained, or in fill basins on upland sites. Dredge materials shall not be transported from coastal waters into estuarine or fresh water areas for disposal. (d) For water areas to be diked, filled, or dredged, the commission shall balance and consider socioeconomic and environmental factors.</p>		

Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<p><b>Section 30708.</b> All port-related developments shall be located, designed, and constructed so as to:</p> <p>(a) Minimize substantial adverse environmental impacts.</p>	<p>As documented throughout this EIR prepared pursuant to CEQA, the proposed project would incorporate design features and mitigation measures to attempt to minimize substantial adverse environmental impacts. However, greenhouse gas emissions would not be reduced to below a level of significance. Nevertheless, such impacts will be minimized to the extent feasible through implementation of mitigation measures (see Section 4.2, <i>Greenhouse Gas Emissions, Climate Change, and Energy Use</i>).</p>	Consistent
<p>(b) Minimize potential traffic conflicts between vessels.</p>	<p>Although the proposed project would result in an increase in cargo throughput, on average the vessels that called at NCMT in year 2013 were only partially full, averaging 1,578 autos per vessel call, based on the 2013 throughput of 361,372 cars and 229 auto-carrier calls at the terminal (361,372 / 229 = 1,578). Existing vessels range in size from 3,200 car capacity up to 6,700 car capacity and larger class roll-on/roll-off carriers are entering the market that can carry over 8,000 autos. Therefore, because existing vessels are only loaded at a fraction of their capacity, existing vessel calls would have sufficient capacity to handle the additional throughput associated with the project. Thus, the frequency of vessel calls associated with the existing plus project future condition is anticipated to be similar to the existing condition. To ensure vessel conflicts and safety issues do not arise, all ocean going vehicles are required to stay within designated channels and maintain safe travel speeds. Furthermore, any foreign vessels and vessels from a foreign port or bound thereto, and all vessels over 300 gross tons sailing under register between the port of San Diego and any other U.S. port, are subject to pilotage charges and, unless permission is granted from the U.S. Coast Guard Captain of the port, are required to be under the direction of a federally licensed pilot for the port of San Diego. Therefore, the proposed project would minimize potential vessel traffic conflicts.</p>	Consistent
<p>(c) Give highest priority to the use of existing land space within harbors for port purposes, including, but not limited to, navigational facilities, shipping industries, and necessary support and access facilities.</p>	<p>The proposed project would involve the conversion of underutilized land parcels into uses that would support a shipping industry, as well as continued use of parcels to support a shipping industry.</p>	Consistent

Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
(d) Provide for other beneficial uses consistent with the public trust, including, but not limited to, recreation and wildlife habitat uses, to the extent feasible.	The project would involve a PMPA to incorporate two District-owned parcels into the PMP and designate them, Commercial Recreation (consistent with their current designation in the City's LCP) with an Overlay (on one of the two parcels not in the PMP) that would expire at the end of 7 years or upon approval of a project consistent with the Commercial Recreation land use designation. The proposed project also would involve a short-term lease with Pasha to use one of the Overlay sites for vehicle storage until a commercial development project is approved by the Board, or until 7 years, at which time the site may be developed with a use that would increase public access and potential recreational opportunities in the area. However, at the time the Revised NOP was issued for scoping input, no commercial development proposals were proposed for the sites and none have been reviewed by the BPC.	Consistent
(e) Encourage rail service to port areas and multicompany use of facilities.	Existing operations within NCMT currently use rail service. In addition, the proposed project would increase rail service in order to accommodate the increase in cargo throughput.	Consistent
<b>San Diego Unified Port District Act</b>		
<b>Section 5.b.</b> In addition to the powers and authority described in subdivision 5(a), the District shall exercise its land management authority and powers over the following areas: (1) The tidelands and submerged lands granted to the District pursuant to this act or any other act of Legislature. (2) Any other lands conveyed to the District by any city or the County of San Diego or acquired by the district in furtherance of the District's powers and purposes as provided in Section 87.	As described under Section 4.5.2, above, two District-owned Uplands Properties (Port Parcel 025-010 –D [eastern half of Lot K] and Port Parcel 027-047) are designated Tourist Commercial by the City of National City in its LCP pursuant to expired MOUs. The proposed project includes a PMPA to incorporate the parcels into the PMP, allowing the District to issue Coastal Development Permits for these sites and further exercise its land management authority and powers over the parcels.	Consistent



Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<p><b>Section 19.</b> The board shall draft a master plan for harbor and port improvement and for the use of all of the tidelands and submerged lands which shall be conveyed to the district pursuant to the provisions of this act. A two-thirds vote of the board shall be required to adopt the plan. The board may from time to time modify the master plan by a two-thirds vote of the board. The provisions of the master plan shall not override or supersede any local existing zoning ordinance which was in effect on April 30, 1962; provided that if any local zoning ordinance is repealed, or expires, or becomes nonoperative for any reason, thereafter the provisions of the master plan adopted by the board shall control as to all lands and waters under the jurisdiction of the district.</p>	<p>The proposed project, which would involve a PMPA, would require consideration and potential approval from the Board of Port Commissioners.</p>	<p>Consistent.</p>
<p><b>Section 87.</b> (a) The tide and submerged lands conveyed to the District by any city included in the District shall be held by the District and its successors in trust and may be used for purposes of which there is a general statewide purpose, as follows: (1) For the establishment, improvement, and conduct of a harbor, and for the construction, reconstruction, repair, maintenance, and operations of wharves, docks, piers, slips, quays, and all other works, buildings, facilities, utilities, structures, and appliances incidental, necessary, or convenient, for the promotion and accommodation of commerce and navigation. (2) For all commercial and</p>	<p>The proposed project would support existing industrial uses, and the Marine Related Industrial Overlay on the eastern half of Lot K and Port Parcel 028-007 would allow the properties to be used for marine related industrial uses until a development proposal consistent with the Commercial Recreation designation is approved or the Overlay expires.</p>	<p>Consistent</p>

Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<p>industrial uses and purposes, and the construction, reconstruction, repair, maintenance of commercial and industrial buildings, plants, and facilities. (6) For the establishment, improvement, and conduct of small boat harbors, marinas, aquatic playgrounds, and similar recreational facilities, and operation of all works, buildings, facilities, utilities, structures, and appliances incidental, necessary, or convenient for the promotion and accommodation of any of those uses, including, but not limited to, snack bars, cafes, restaurants, motels, launching ramps, and hoists, storage sheds, boat repair facilities with cranes and marine ways, administration buildings, public restrooms, bait and tackle shops, chandleries, boat sales establishments, service stations and fuel docks, yacht club buildings, parking areas, roadways, pedestrian ways, and landscaped areas.</p>	<p>The proposed project would not involve granting of property to any individual, firm, or corporation. Furthermore, no element of the proposed project would interfere with commerce and navigation. The proposed project would support an existing maritime industrial operation.</p>	<p>Consistent</p>
<p>(b) The District or its successors shall not, at any time, grant, convey, give, or alienate those lands, or any part thereof, to any individual, firm, or corporation for any purposes whatever. However, the District, or its successors, may grant franchises thereon for limited periods, not exceeding 66 years, for wharves and other public uses and purposes, and may lease those lands, or any part thereof, for limited periods, not exceeding 66 years, for purposes consistent with the trusts upon which those lands are held by the State of California, and with the</p>		

Goal, Objective, or Policy	Discussion Proposed Project	Finding Proposed Project
requirements of commerce and navigation, and collect and retail rents and other revenues from those leases, franchises, and privileges. Those lease or leases, franchises, and privileges may be for any and all purposes that do not interfere with commerce and navigation.		
(c) Those lands shall be improved without expense to the state. However, nothing in this section shall preclude expenditures for the development of those lands for any public purpose not inconsistent with commerce, navigation, and fishery, by the state or any board, agency, or commission thereof, when authorized or approved by the district, or preclude expenditures by the district of any funds received for that purpose from the state or any board, agency, or commission thereof.	The proposed project would involve improvements that would support an existing maritime operation and would be in line with the commerce and navigation goals of the District.	Consistent
<b>Port Master Plan – Section II</b>		
<b>Goal II.</b> The Port District, as trustee for the people of the State of California, will administer the tidelands so as to provide the greatest economic, social, and aesthetic benefits to present and future generations.	The proposed project's materials, scale, and bulk would be similar to existing marine related industrial operations, but would allow the project proponent to increase throughput to meet the growing market demand. No new structures are proposed as part of the project. Additional construction and operational jobs would be created, which would induce economic growth and social benefits by creating long-term employment opportunities. As such, the proposed project would contribute to providing the greatest economic, social, and aesthetic benefit to present and future generations.	Consistent

Goal, Objective, or Policy	Discussion	Finding
Proposed Project	Proposed Project	
<p><b>Goal III.</b> The Port District will assume leadership and initiative in determining and regulating the use of the bay and tidelands.</p> <ul style="list-style-type: none"> <li>• Encourage industry and employment generating activities which will enhance the diversity and stability of the economic base.</li> <li>• Encourage private enterprise to operate those necessary activities with both high and low margins of economic return.</li> </ul>	<p>The proposed project would include activation of underutilized sites and provide additional space for existing marine related industrial operation activities adjacent to NCMT, which would increase throughput and the economic benefit to the region by creating jobs and providing more revenue to the District that can be used for further public benefit.</p>	Consistent
<p><b>Goal IV.</b> The Port District, in recognition of the possibility that its actions may inadvertently tend to subsidize or enhance certain other activities, will emphasize the general welfare of statewide considerations over more local ones and public benefits over private ones.</p> <ul style="list-style-type: none"> <li>• Develop the multiple purpose use of the tidelands for the benefit of all the people while giving due consideration to the facts and circumstances related to the development of tideland and port facilities.</li> <li>• Foster and encourage the development of commerce, navigation, fisheries, and recreation by the expenditure of public monies for the preservation of lands in their natural state, the reclamation of tidelands, the construction of facilities, and the promotion of its use.</li> <li>• Encourage non-exclusory uses on tidelands.</li> </ul>	<p>The proposed project would support increased use and capacity of the area for industrial uses and would result in economic benefits for the NCMT area and the greater San Diego region through a variety of additional jobs and tax revenue.</p>	Consistent

Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<b>Goal V.</b> The Port District will take particular interest in and exercise extra caution in those uses or modifications of the Bay and Tidelands, which constitute irreversible action of loss of control.	<p>The proposed project is located adjacent to or near the existing NCMT, and would pave the former tank farm and adjacent roadways to optimize marine related industrial operations and efficiencies. As such, the proposed project would not result in modification to the Bay or tidelands and would not constitute irreversible action of loss of control.</p>	Consistent
<b>Goal VI.</b> The Port District will integrate the tidelands into a functional regional transportation network. <ul style="list-style-type: none"> <li>Improved automobile linkages, parking programs and facilities, so as to minimize the use of waterfront for parking purposes.</li> <li>Providing pedestrian linkages.</li> <li>Encouraging development of non-automobile linkage systems to bridge the gap between pedestrian and major mass systems.</li> </ul>	<p>The proposed project would be located within a predominately industrial area where mass transit and pedestrian facilities are not abundant. However, there is a trolley and bus station (24th Street Metropolitan Transit System Station) approximately 1 mile from the project site, which workers commuting to the project site could use and then walk or bicycle to the NCMT. In addition, an interim alignment of the Bayshore Bikeway is proposed to be located along Tidelands Avenue and 32nd Street (east of Tidelands Avenue). The proposed project would not directly affect the Bayshore Bikeway.</p>	Consistent
<b>Goal VII.</b> The Port District will remain sensitive to needs, and cooperate with adjacent communities and other appropriate governmental agencies in Bay and Tideland development. <ul style="list-style-type: none"> <li>The Port District will attempt to avoid disproportionate impact on adjacent jurisdictions both in benefits and any possible liabilities, which might accrue through bay and tideland activities.</li> </ul>	<p>The District, as Lead Agency for the proposed project, has reached out to public agencies and community members to solicit input regarding the environmental impacts of the proposed project. The proposed project would mitigate significant NO<sub>x</sub> emissions in the area to below a level of significance. Thus, the project would not be contributing to a cumulative issue. As discussed in Section 4.1, <i>Air Quality and Health Risk</i>, the proposed project would not result in a significant health risk impact on the nearby community of National City or San Diego. Thus, the proposed project would not have a disproportionate impact on adjacent jurisdictions as discussed throughout Chapter 4, <i>Environmental Analysis</i>.</p>	Consistent

Goal, Objective, or Policy	Discussion Proposed Project	Finding Proposed Project
<p><b>Goal VIII.</b> The Port District will enhance and maintain the bay and tidelands as an attractive physical and biological entity.</p> <ul style="list-style-type: none"> <li>• Each activity, development, and construction should be designed to best facilitate its particular function, which function should be integrated with and related to the site and surroundings of that activity.</li> <li>• Views should be enhanced through view corridors, the preservation of panoramas, accentuation of vistas, and shielding of the incongruous and inconsistent.</li> <li>• Establish and foster an artworks program to promote, enhance, and enliven the waterfront experience through the public and private placement of works of art.</li> </ul>	<p>The construction of the tank farm and street closures components of the project would be designed to best facilitate its particular function and would be integrated and consistent with the site and surroundings as they would be located within an existing marine industrial area. Moreover, the project sites are not visible from scenic vistas or resources. The project sites would not block views or prevent the potential of including public art.</p>	<p>Consistent</p>
<p><b>Goal IX.</b> The Port District will insure physical access to the bay except as necessary to provide for the safety and security, or to avoid interference with waterfront activities.</p> <ul style="list-style-type: none"> <li>• Provide “windows to the water” at frequent and convenient locations around the entire periphery of the bay with public right-of-way, automobile parking and other appropriate facilities.</li> <li>• Provide access along the waterfront wherever possible with promenades and paths where appropriate, and elimination of unnecessary barricades which extend into the water.</li> </ul>	<p>The proposed project would be located at or adjacent to existing marine related industrial operations sites and would not modify physical access to the Bay or views of the waterfront that currently exist.</p>	<p>Consistent</p>

Goal, Objective, or Policy	Discussion	Finding
	Proposed Project	Proposed Project
<p><b>Goal XIII.</b> The Port District will maintain its master plan current, relevant, and workable, in tune with circumstances, technology, and interest of the people of California.</p> <ul style="list-style-type: none"> <li>• Provide a continual program of sequential and orderly growth while maintaining the natural resource values.</li> <li>• Provide for the multiple purpose use of land and water to promote the advantageous development of the Port District.</li> <li>• Curb the misuse of land so that it will not injuriously affect the people of the State of California through the prevention of substandard construction or unnecessarily and inappropriate developments.</li> <li>• Prevent the abuse of land by curtailing abortive development and unfounded pollution contributors.</li> <li>• Guide the reuse of land for more appropriate purposes by the clearance and redevelopment of the obsolete.</li> </ul>	<p>The proposed project would increase space to continue existing marine terminal operational uses, which is consistent with the District's goal to provide a continual program of sequential and orderly growth. All construction activities would be subject to permit review and approval, and existing state and local laws would prevent substandard construction. The paving of the vacant former tank farm and closure of the streets would also be consistent with the District's intent to reuse land for more appropriate purposes by the clearance and redevelopment of the obsolete due in part to providing a more efficient use of the existing marine terminal as these areas are contiguous to the terminal.</p>	Consistent

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## Section 4.6 Noise and Vibration

### 4.6.1 Overview

This section describes the existing conditions and applicable laws and regulations governing project-related noise and vibration. The section also discusses the proposed project's potential to increase noise and vibration in the project vicinity during construction and operation. Impacts related to noise and vibration were analyzed by ICF International (ICF) acoustical engineers and were considered significant if the proposed project would (1) expose persons to, or generate, noise levels in excess of established standards; (2) expose persons to, or generate, excessive groundborne vibration or groundborne noise levels; (3) result in a substantial permanent increase in ambient noise levels; or (4) result in a substantial temporary or periodic increase in ambient noise levels. All other noise and vibration issues, including impacts related to public and private airport/airstrips were analyzed in Section XII of the Revised Initial Study/Environmental Checklist (Appendix B-1), which is incorporated here by this reference, and were determined to be insignificant. The analysis and conclusions regarding these impacts are summarized in Section 6.4, *Effects Not Found to be Significant*, of Chapter 6.

Table 4.6-1 summarizes the significant impacts and mitigation measures discussed in Section 4.6.4.3, *Project Impacts and Mitigation*.

**Table 4.6-1. Summary of Significant Impacts and Mitigation Measures**

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
<b>Impact-NOI-1:</b> Heavy Truck Idling Near Sensitive Noise Receptors.	<b>MM-NOI-1:</b> Notify Trucks from NCMT and Related Operations that Idling on Residential Streets is Illegal.	Less than significant	There is currently a City ordinance that prohibits idling near schools and residences. While the project cannot enforce this City ordinance, the project would install signage in strategic locations to ensure the prohibition of such actions is known to drivers. Knowledge and routine enforcement of this City ordinance would minimize this impact to a less-than-significant level.

#### 4.6.1.1 Noise Fundamentals

*Noise* is often defined as sound that is disturbing or annoying. The objectionable nature of noise can be caused by its *pitch* or its *loudness*. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is the *amplitude* of sound waves combined with the reception characteristics of the ear. Amplitude may be compared with the height of an ocean wave. Technical acoustical terms commonly used in this section are defined in Table 4.6-2.

**Table 4.6-2. Definitions of Acoustical Terms**

<b>Term</b>	<b>Definition</b>
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals in air). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency (Hertz [Hz])	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 and 20,000 Hz. Infrasonic sounds are below 20 Hz, and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level ( $L_{eq}$ )	The average A-weighted noise level during the measurement period. The hourly $L_{eq}$ used for this report is denoted as dBA $L_{eq(h)}$ .
Community Noise Equivalent Level (CNEL)	The average A-weighted noise level during a 24-hour day, obtained after the addition of 5 dB to sound levels in the evening from 7 p.m. to 10 p.m. and after the addition of 10 dB to sound levels in the night between 10 p.m. and 7 a.m.
Day/Night Noise Level ( $L_{dn}$ )	The average A-weighted noise level during a 24-hour day, obtained after the addition of 10 dB to levels measured in the night between 10 p.m. and 7 a.m.
$L_1$ , $L_{10}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are exceeded 1, 10, 50, and 90% of the time during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, and tonal or informational content as well as the prevailing ambient noise level.

## Decibels and Frequency

Levels of sound are measured and expressed in decibels (dB). Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Methods used to measure or quantify sound levels depend on the source, the receiver, and the reason for measurement. The most common metric is the overall A-weighted sound level measurement, which measures sound in a manner similar to the way a person perceives or hears sound, thus achieving a strong correlation for evaluating acceptable and unacceptable sound levels. A-weighted measurement of decibels

(expressed as dBA) has been adopted by regulatory bodies worldwide. Table 4.6-3 shows typical A-weighted noise levels that occur in human environments.

**Table 4.6-3. Typical Noise Levels in the Environment**

Noise Level dBA	Extremes	Home Appliances	Speech at 3 Feet	Motor Vehicles at 50 Feet	General Type of Community Environment
120	Jet aircraft at 500 feet				
110					
100		Chainsaw			
90		Power lawnmower		Diesel truck (not muffled)	
80		Shop tools	Shout	Diesel truck (muffled)	
70		Blender	Loud voice	Automobile at 70 mph	Major metropolis
60		Dishwasher	Normal voice	Automobile at 40 mph	Urban (daytime)
50		Air conditioner	Normal voice (back to listener)	Automobile at 20 mph	Suburban (daytime)
40		Refrigerator			Rural (daytime)
30					
	Threshold of hearing				

Source: Harris Miller Miller & Hanson, Inc. 2003.  
mph = miles per hour

## Noise Descriptors

Ambient sound levels typically fluctuate over time. A-weighted sound levels are typically measured or presented as  $L_{eq}$ , which is defined as the average sound level for a stated period of time. The  $L_{eq}$  is commonly used to measure steady-state sound that is usually dominant.

Statistical methods are used to capture the dynamics of a changing acoustical environment. These measurements are typically denoted by  $L_{xx}$ , where  $xx$  represents the percentage of time a sound level is exceeded.  $L_{90}$  represents the sound level that is exceeded during 90% of the measurement period;  $L_{10}$  represents the sound level exceeded for 10% of the measurement period. Another sound level expression is  $L_{max}$ , which is the maximum sound pressure level over a defined period.

Another metric used to determine the effect of environmental noise is the difference in response that people have to daytime and nighttime noise levels. During the evening and at night, exterior background noises are generally lower than daytime levels. However, most household noise also decreases at night and exterior noise becomes more noticeable. Furthermore, most people sleep at

night and are more sensitive to intrusive noises at that time. To account for human sensitivity to evening and nighttime noise levels, the day/night noise level (abbreviated as  $L_{dn}$ ) and California's Community Noise Equivalent Level (CNEL) were developed.  $L_{dn}$  is a noise metric that accounts for the greater annoyance of noise during nighttime hours (10 p.m. to 7 a.m.). CNEL is a noise index that accounts for the greater annoyance of noise during the evening hours (7 p.m. to 10 p.m.) and nighttime hours.

$L_{dn}$  is calculated by averaging hourly  $L_{eq}$  sound levels for a 24-hour period and applying a weighting factor to the nighttime  $L_{eq}$  values. CNEL values are calculated similarly, except that a weighting factor is also added to evening  $L_{eq}$  values. The weighting factors, which reflect the increased sensitivity to noise during evening and nighttime hours, are added to each hourly  $L_{eq}$  sound level before the 24-hour  $L_{dn}$  or CNEL is calculated. For the purposes of assessing noise, the 24-hour day is divided into three time periods, with the following weightings.

- Daytime hours: 7 a.m. to 7 p.m. (12 hours)—weighting factor of 0 dBA.
- Evening hours (for CNEL only): 7 p.m. to 10 p.m. (3 hours)—weighting factor of 5 dBA.
- Nighttime hours (for both CNEL and  $L_{dn}$ ): 10 p.m. to 7 a.m. (9 hours)—weighting factor of 10 dBA.

The adjusted time-period noise levels are then averaged to compute the overall  $L_{dn}$  or CNEL value. For a continuous sound source, the  $L_{dn}$  value is easily computed by adding 6.4 dBA to the overall 24-hour sound level ( $L_{eq}$ ). For example, if the expected continuous sound level from a sound source is 60.0 dBA, the resulting  $L_{dn}$  from the source would be 66.4 dBA. Similarly, the CNEL for a continuous sound source is computed by adding 6.7 dBA to the overall 24-hour  $L_{eq}$ .

## Human Response to Noise

Noise-sensitive receptors (also called “receivers”) are locations where people reside or where the presence of unwanted sound may adversely affect the use of the land. Noise-sensitive receptors typically include residences, hospitals, schools, guest lodging, libraries, and certain types of passive recreational uses.

The effects of noise on people can be listed in three general categories.

- Subjective effects of annoyance, nuisance, dissatisfaction.
- Interference with activities such as speech, sleep, learning.
- Physiological effects such as startling and hearing loss.

In most cases, effects from sounds typically found in the natural environment (compared to an industrial or an occupational setting) would be limited to the first two categories: creating an annoyance or interfering with activities. No completely satisfactory method exists to measure the subjective effects of sound, or to measure the corresponding reactions of annoyance and dissatisfaction. This lack of a common standard arises primarily from the wide variation in individual thresholds of annoyance and habituation to sound. Therefore, an important way of determining a person's subjective reaction to a new sound is by comparing it to the existing or “ambient” environment to which that person has adapted. In general, the more the level or tonal (frequency) variations of a sound exceed the previously existing ambient sound level or tonal quality, the less acceptable the new sound will be, as judged by the exposed individual.

The general human response to changes in sound levels having similar frequency content (for example, comparing increases in continuous [L<sub>eq</sub>] traffic sound levels) is summarized as follows (FHWA 2013).

- A 3-dB change in sound level is considered a barely noticeable difference.
- A 5-dB change in sound level is considered discernible, or readily noticeable.
- A 10-dB change in sound level is considered to be a doubling in loudness.

Equipment and vehicle operation during nighttime hours can potentially result in noise events that disturb the sleep of people living in nearby residential areas. Interior noise levels between 50 and 55 dBA L<sub>max</sub> during nighttime hours (10 p.m. to 7 a.m.) were found to result in sleep disturbance and annoyance (Nelson 1987).

## Sound Propagation

When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends on the following important factors.

**Geometric spreading.** In the absence of obstructions, sound from a single source (i.e., a *point* source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. Highway noise is not a single, stationary point source of sound. The movement of vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., a *line* source) rather than from a point. This results in cylindrical spreading rather than the spherical spreading resulting from a point source. The change in sound level from a line source is 3 dBA per doubling of distance.

**Ground absorption.** Usually the noise path between the source and the observer is very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation because of geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is done for simplification only; for distances of less than 200 feet, prediction results based on this scheme are sufficiently accurate. For acoustically *hard* sites (i.e., sites with a reflective surface, such as a parking area or a smooth body of water, between the source and the receiver), no excess ground attenuation is assumed. For acoustically absorptive or *soft* sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dBA per doubling of distance for a line source and 7.5 dBA per doubling of distance for a point source.

**Atmospheric effects.** Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can experience lowered noise levels. Sound levels can be increased at large distances from the highway (e.g., more than 500 feet) because of atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence also can cause significant effects.

**Shielding by natural or human-made features.** A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural

terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction. A higher barrier may provide as much as 20 dB of noise reduction.

### **4.6.1.2 Environmental Vibration Fundamentals**

In contrast to airborne sound, groundborne vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually much lower than the threshold of human perception. Most perceptible indoor vibration is caused by sources within buildings, such as mechanical equipment while in operation, people moving, or doors slamming. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Dynamic construction equipment, such as pile drivers, can create vibrations that radiate along the surface and downward into the earth. These surface waves can be felt as groundborne vibration. Vibration can result in effects that range from annoyance to structural damage. Variations in geology and distance result in different vibration levels with different frequencies and displacements.

Groundborne vibration can be described in terms of peak particle velocity (PPV). PPV is defined as the maximum instantaneous positive or negative peak amplitude of the vibration velocity. The unit of measurement for PPV is inches per second (in/s).

## **4.6.2 Existing Conditions**

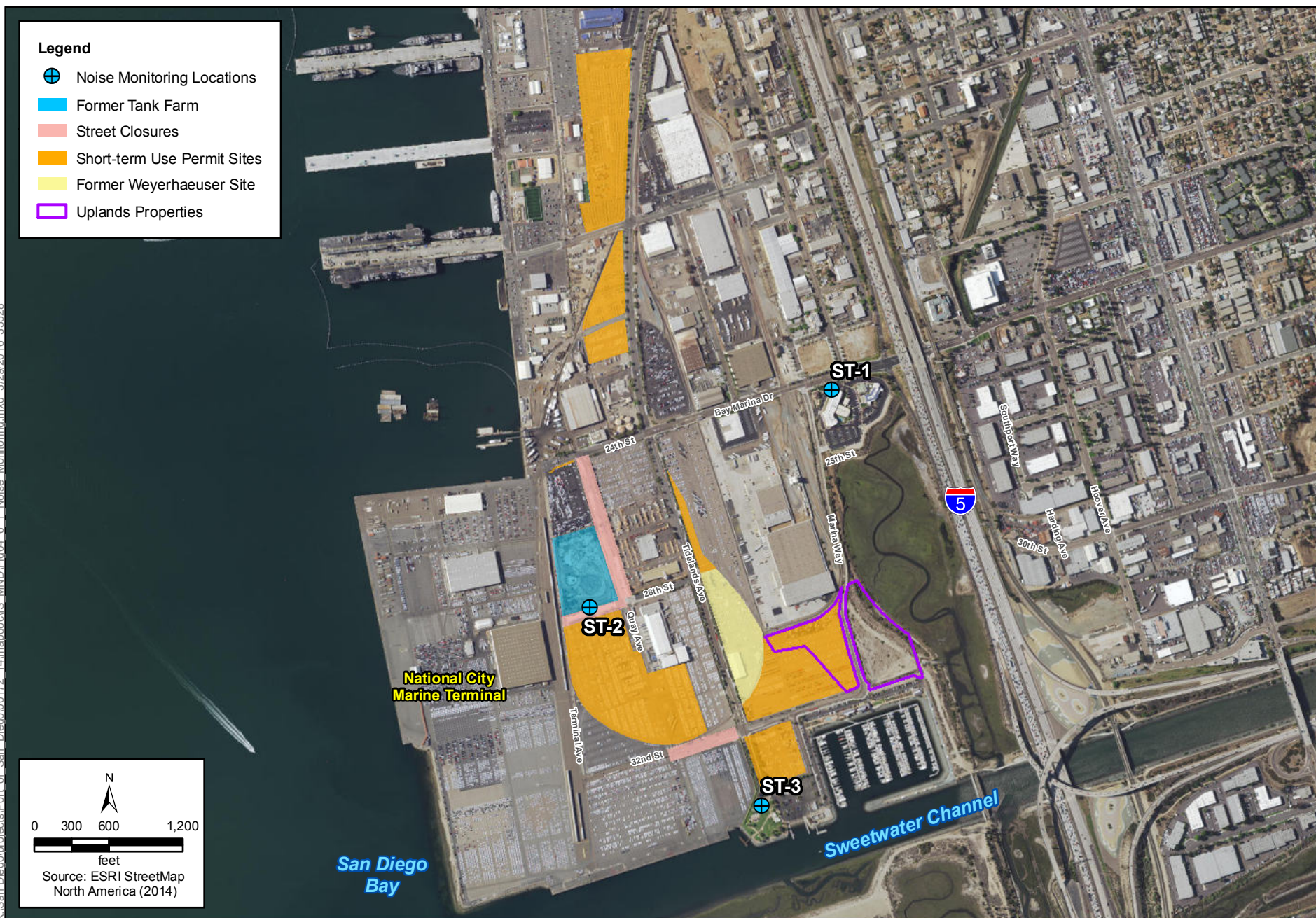
### **4.6.2.1 Existing Ambient Noise Conditions**

The primary existing noise sources in the project area are traffic on I-5 and local streets, and industrial activities. Secondary and intermittent noise sources include railroad activities (train movements and horns) and aircraft overflights.

#### **Noise Monitoring**

To document the existing noise environment, short-term (ST) measurements were obtained at three locations in the study area on June 3, 2014, which are shown on Figure 4.6-1. These locations were selected to document the existing noise environment in the immediate vicinity of the project site, at nearby noise-sensitive receptors, and adjacent to roadways that would be affected by project traffic. Additional details and a summary of the measurement results are provided in Table 4.6-4. Each measurement was conducted over a period of approximately 15 minutes.





**Figure 4.6-1**  
**Noise Monitoring Locations**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





**Table 4.6-4. Summary of Noise Measurements**

Location Number, Description (date, time)	Measured Noise Levels, dBA							
	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L <sub>2</sub>	L <sub>8</sub>	L <sub>25</sub>	L <sub>50</sub>	L <sub>90</sub>
ST-1: Best Western Marina Gateway Hotel at 800 Bay Marina Drive (6/3/2014, 11:54 p.m.–12:10 p.m.)	61.9	77.1	54.5	69.6	65.0	61.6	59.0	56.6
ST-2: Adjacent to south side of former NCMT tank farm site (6/3/2014, 9:48 a.m.–10:03 a.m.)	53.5	67.8	48.3	61.2	55.7	52.9	50.9	49.2
ST-3: Pepper Park, 3299 Tidelands Avenue. Picnic area at north end of park (6/3/2014, 10:30 p.m.–10:45 p.m.)	56.5	64.2	45.3	60.6	58.9	57.1	56.2	52.4
Notes: ST= short-term; dBA = A-weighted sound level (the sound pressure level in decibels as measured using the A weighting filter network, which de-emphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear); L <sub>eq</sub> = equivalent sound level (the average of the sound energy occurring over the measurement period); L <sub>max</sub> = maximum sound level; L <sub>min</sub> = minimum sound level; L <sub>xx</sub> = percentile-exceeded sound level (the sound level exceeded for a given percentage of a specified period [e.g., L <sub>2</sub> is the sound level exceeded 2% of the time, and L <sub>8</sub> is the sound level exceeded 8% of the time]).								

## Noise-Sensitive Receptors

The existing noise-sensitive receivers in the vicinity of the project sites include single-family homes along Cleveland Avenue, approximately 1,600 feet east of the closest short-term use permit site (Port Parcel 025-010C); outdoor recreational facilities (basketball and tennis courts and a sports field) at Naval Base San Diego, approximately 300 feet west of the closest project site (Port Parcel 025-010A); and Pepper Park (a 5.5-acre park with picnic areas, children's play equipment, a boat launching ramp, and a fishing pier), immediately south of the closest project site (Port Parcel 028-007). The Best Western Marina Gateway Hotel is approximately 1,300 feet east of the closest project site (Port Parcel 027-042). Based on their transient residential nature, the District considers hotels to be sensitive only to potential nighttime noise impacts. As a result, potential impacts at the hotel are considered for traffic noise (which is quantified in terms of the 24-hour CNEL) and nighttime project operations, but not for daytime noise from project construction or operation.

## 4.6.3 Applicable Laws and Regulations

### 4.6.3.1 State Regulations

California requires each local government entity to perform noise studies and implement a noise element as part of its general plan. State land use guidelines for evaluating the compatibility of various land uses as a function of community noise exposure are presented in Section 4.6.3.2, *Local*, below.

## California Code

Part 2, Title 24 of the California Code of Regulations, “California Noise Insulation Standards,” establishes minimum noise insulation standards to protect people in new hotels, motels, dormitories, long-term care facilities, apartment houses, and dwellings other than single-family residences. Under this regulation, interior noise levels attributable to exterior noise sources cannot exceed 45  $L_{dn}$  in any habitable room.

### 4.6.3.2 Local

#### Port of San Diego Port Master Plan

The proposed project is within the jurisdiction of the District. Key environmental policies in the PMP are described below.

##### Planning Goals

**Section II** of the PMP sets forth goals and related policies for development and operation of land within the District’s jurisdiction.

**Goal VIII.** The Port District will enhance and maintain the bay and tidelands as an attractive physical and biological entity.

- Establish guidelines and standards facilitating the retention and development of an aesthetically pleasing tideland environment free of noxious odors, excessive noise, and hazards to the health and welfare of the people of California.

#### National City Noise and Nuisance Element

Because the District has not adopted its own noise standards, it is the District’s practice to use the noise standards of the municipality in which a project is located. Accordingly, the City of National City’s noise standards are used for this analysis.

The Noise and Nuisance Element of the National City General Plan includes land use/noise compatibility guidelines for various land uses, including the noise-sensitive receptors considered in the impact analysis for the project. The guidelines are presented in a matrix as shown in Figure 4.6-2. The matrix indicates the following.

- Single-family homes, mobile homes, and senior housing are compatible with exterior noise exposures of up to 60 dB CNEL and conditionally compatible with exterior noise exposures of up to 70 dB CNEL.
- Multi-family and mixed-use developments are compatible up to 60 dB CNEL and conditionally compatible up to 70 dB CNEL.
- Visitor accommodations (hotels, motels, etc.) are compatible up to 65 dB CNEL and conditionally compatible up to 75 dB CNEL.
- Community and neighborhood parks are compatible up to 70 dB CNEL and conditionally compatible up to 75 dB CNEL.

These guidelines will provide thresholds of impact for transportation noise sources such as traffic, vessels, or railroads, which are not generally regulated by the City’s municipal code (see below).

**Figure 4.6-2. National City Land Use Noise Compatibility Guidelines**

Land Use Category	Exterior Noise Exposure (dBA CNEL)				
	<60	60-65	65-70	70-75	75+
<b>Residential Land Uses</b>					
Single-family, Mobile Homes, Senior Housing		45*	45*	45*	
Multi-family			45*	45*	
Minor Mixed-Use, Major Mixed-Use			45*	45*	45*
<b>Commercial</b>					
Automotive, Service Commercial					
Office					
Shopping Center					
Visitor Accommodations			45*	45*	45*
<b>Industrial</b>					
<b>Institutional</b>					
Infrastructure (water treatment facilities, electrical substations)					
Worship facilities, educational facilities, community centers, libraries, museums and cultural centers		45*	45*	45*	
<b>Open Space, Parks and Recreation</b>					
Community and Neighborhood Parks					
Golf Courses, Athletic Fields					

\* Interior noise level

	<b>Compatible</b>	<b>Indoor Uses</b>	Standard construction methods should attenuate exterior noise to an acceptable indoor noise level.
		<b>Outdoor Uses</b>	Activities associated with the land use may be carried out.
	<b>Conditionally Compatible</b>	<b>Indoor Uses</b>	Building structure must attenuate exterior noise to the indoor noise level. Conventional construction, but with closed windows and fresh air supply systems will normally suffice.
		<b>Outdoor Uses</b>	Best practices for reducing noise interference should be incorporated to make outdoor activities acceptable.
	<b>Normally Incompatible</b>	<b>Indoor Uses</b>	If new construction or development does proceed, a detailed acoustical analysis is needed to identify the noise reduction requirements and needed noise insulation features shall be included in the design.
		<b>Outdoor Uses</b>	Feasible noise mitigation techniques shall be analyzed and incorporated to make the outdoor activities acceptable.
	<b>Incompatible</b>	<b>Indoor Uses</b>	New construction should not be undertaken.
		<b>Outdoor Uses</b>	Severe noise interference makes outdoor activities unacceptable.

Source: Table NN-5, National City General Plan, Noise and Nuisance Element

## National City Municipal Code

As mentioned above, because the District has not adopted its own noise standards, it is the District's practice to use the noise standards of the municipality in which a project is located. Accordingly, the City of National City's noise standards are used for this analysis.

Title 12, Noise Control, of the City's municipal code is intended to address noise from non-transportation sources such as construction activity or activities on private property.

Table 4.6-5 summarizes the standards for non-construction noise sources, which would, therefore, apply to operational activities on the project sites after construction is complete. The "all residential" noise standards are used as a threshold for the single-family homes in the study area. Consistent with the City's land use category designation for "visitor accommodations", the commercial noise standards are used as the threshold for the hotel at night. The commercial standard are also used as the threshold for the park and the naval base recreational facilities.

**Table 4.6-5. Municipal Code Standards for Non-Construction Noise**

Receiving Land Use Category	Allowable Noise Level, 1-hour $L_{eq}$ , dBA	
	Nighttime (10 p.m. to 7 a.m.)	Daytime (7 a.m. to 10 p.m.)
All residential (less than 9 dwelling units)	45	55
Multi-unit residential (consisting of 9 dwelling units or more and Public Space)	50	60
Commercial	60	65
Light Industry (industry east of I-5)	70	70
Heavy Industry (industry west of I-5)	80	80

**Notes:**

In the event the alleged offensive noise contains a steady, audible sound such as a whine, screech or hum, or contains a repetitive impulsive noise such as hammering or riveting, or contains music or speech, the standard limits set forth above shall be reduced by five (5) dBA.

If the measured ambient level exceeds that permissible above, the allowable noise level standard shall be the ambient noise level. The ambient level shall be measured when the alleged noise violation source is not operating.

The noise standards for construction activities vary depending on when the construction occurs. Any construction that occurs before 7 a.m. or after 7 p.m. on a weekday, or at any time on weekends or holidays, must comply with the residential and commercial standards summarized in Table 4.6-5, above. As a standard condition of approval, the project will be required to keep all construction activities between 7 a.m. and 7 p.m. Table 4.6-6 summarizes the construction noise standards that apply at all other times (i.e., between 7 a.m. and 7 p.m. on weekdays)

**Table 4.6-6. Municipal Code Standards for Construction Noise**

Type (Duration) of Construction Activity	Allowable Maximum Noise Level, $L_{max}$ , dBA	
	Type I Areas Residential	Type II Areas Semi-Residential/ Commercial
<u>Mobile Equipment</u> Nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment	75	85
<u>Stationary Equipment</u> Repetitively scheduled and relatively long-term operation (periods of ten days or more) of stationary equipment	60	70

Because the proposed project construction would last more than 10 days and would not occur in a residential neighborhood, the appropriate construction category would be “Stationary Equipment” and the relevant land use designation would be “Semi-residential/Commercial.” Therefore, the resulting noise limit would be 70 dBA  $L_{max}$ . This standard would apply at or within the boundaries of any affected noise-sensitive properties.

The City’s municipal code also provides a regulatory threshold for groundborne vibration of 0.01 inch per second (over the range of 1 to 100 Hertz), which is considered to be the threshold of perception.

## 4.6.4 Project Impact Analysis

### 4.6.4.1 Methodology

#### Construction Noise and Vibration

Potential noise and vibration impacts associated with project construction activities were evaluated based on the project’s construction equipment schedule and phasing information.

Construction-related noise was analyzed using the Federal Highway Administration’s (FHWA’s) Roadway Construction Noise Model (RCNM) (FHWA 2008), which predicts maximum noise levels at nearby receptors by analyzing the type of equipment, the distance from source to receptor, usage factor, and the presence, or absence, of intervening shielding between source and receptor. The source-to-receptor distances used in the RCNM reflect the closest distance between each sensitive receptor and the tank farm, 32nd Street, and former Weyerhaeuser sites where construction would occur. To provide a conservative analysis, noise barrier effects that would be provided by intervening buildings were excluded from the analysis. Table 4.6-7 provides the noise levels of construction equipment expected to be used by the project. The noise modeling is provided in Appendix F.

**Table 4.6-7. Construction Equipment Noise Emission Levels**

<b>Equipment</b>	<b>Maximum Noise Level (<math>L_{max}</math>) at 50 feet, dBA<sup>a</sup></b>
Water Truck	77
Skip Loader	79
Large Wheel Loader	79
Truck/End-Dumps	77
Dozer	82
Excavator with Breaker	90
Small Scraper	84
Small Dozer	82
Large Wheel Loader	79
Haul Truck	77
Small Excavator	81
Motor Grader	85
Rubber Tired Compactor	83
Crew Truck	75
Mechanical Auger	84
Small Truck Mounted Crane	81
Small Loader with Forks	79
<sup>a</sup> Obtained or estimated from FHWA 2008 (RCNM)	
$L_{max}$ = maximum sound level; dBA = A-weighted sound level	

Construction-related vibration was analyzed using data and modeling methodologies provided by the Federal Transit Administration (FTA) publication *Transit Noise and Vibration Impact Assessment* (FTA 2006). The analysis herein provides typical vibration source levels for various types of construction equipment, as well as methods for estimating the propagation of groundborne vibration over distance.

## Operational Noise

### Traffic

Traffic noise in the study area was analyzed based on data from the *Transportation Impact Analysis* (TIA) for the project (Appendix G). The analysis was conducted using a proprietary traffic noise model, with calculations based on data from the FHWA Traffic Noise Model, Version 2.5, Look-Up Tables (FHWA 2004). The inputs used in the traffic noise modeling included average daily traffic (ADT) data provided by the TIA; traffic mix and daily distribution (the percentage of automobiles versus medium trucks and heavy trucks during each hour of the day), based on traffic counts within the study area (classification data from National Data & Surveying Services 2014 provided in Appendix F); and traffic speeds, based on the posted speed limits. To quantify the effects of the proposed project, traffic noise was analyzed using six different scenarios: (1) existing, (2) existing with Project, (3) 2016 (near-term, opening day) without Project, (4) 2016 with Project, (5) future without Project, and (6) future with Project. The first two scenarios were used to analyze the direct traffic noise impacts of the project; scenarios 3 through 6 were used to analyze the cumulative impacts. The noise modeling is provided in Appendix F.

## Vessel Calls

The analysis of noise associated with vessel calls was qualitative based on operational information provided in the project description (see Chapter 3) and data provided by the project proponent.

## Railroad Operations

The analysis of noise associated with railroad operations was conducted using the Create Rail Noise Model (HMMH 2006), which is a spreadsheet noise model based on the general noise assessment methodologies of the FTA's *Transit Noise and Vibration Impact Assessment* (FTA 2006). The analysis was based on operational information provided in the project description (see Chapter 3) and data provided by the project proponent.

## Onsite Activities

Noise-generating onsite activities at the proposed tank farm site (including the adjacent street closures of Quay Avenue and 28th Street), the short-term use permit sites, the former Weyerhaeuser site, and the 32nd Street site would primarily consist of motor vehicle movements. According to calculations provided in the TIA, there would be an average total of 578 automobiles per day moved to the various vehicle storage sites, with between 8 and 119 automobiles per site, depending on the relative size and capacity of each site. On an hourly basis, this would result in very low levels of activity that would generate correspondingly low average noise levels. However, based on historic operations, there would likely be periods of increased activity that could lead to higher noise levels. Therefore, in order to provide a quantitative analysis of such periods, a conservative (i.e., busier than what would typically be expected based on existing operations) 1-hour operational scenario was developed as follows.

- Five automobiles driving on site at all times (to represent a constant stream of new arriving and maneuvering vehicles). Assuming a speed of 25 miles per hour (mph), each automobile would produce a noise level of approximately 60 dBA at a distance of 50 feet (FHWA 1998).
- Five automobiles idling on site at all times (to represent vehicles waiting to be parked or loaded). Each automobile would produce a noise level of approximately 50 dBA at a distance of 50 feet (FHWA 1998).
- Two large trucks driving/maneuvering on site for 2 minutes and idling on site for 2 minutes each (to represent haul truck operations). Each truck would produce a noise level of approximately 75 dBA at a distance of 50 feet while idling and 77 dBA while maneuvering (assuming speeds of up to 25 mph) (FHWA 1998).

To analyze the impact at each noise-sensitive receptor, this operational noise level was assigned to the closest vehicle storage site, and the resulting noise level was calculated based on the acoustical average distance from the site to the receptor. The acoustical average distance is used to represent noise sources that are distributed over an area (such as vehicles moving around a storage site); it is calculated by multiplying the shortest distance between the receiver and the noise source area by the farthest distance and then taking the square root of the product.

## Considerations Related to the Marine Related Industrial Overlay

The noise and vibration analyses provided in this section includes the Marine Related Industrial Overlay, which represents the worst case noise and vibration conditions for the project. Upon

expiration of the Overlay, the two Overlay sites would be placed in a vacant, unused state and potential noise and vibration impacts would be eliminated. Alternatively, an unknown future Commercial Recreation–related project could be proposed, approved, and implemented prior to the 7-year term of the Overlay. At the time of the Revised NOP, no commercial development was proposed and at the time of the drafting of this document, the BPC had not advanced a Commercial Recreational development forward. Critically, because the type of Commercial Recreational project that may be proposed could vary widely (e.g., hotel, restaurants, park, visitor-serving retail, etc.)<sup>1</sup> and because the timing of such projects cannot be known,<sup>2</sup> a development proposal is needed in order to provide a project-specific environmental review to satisfy the requirements of CEQA. Note that such a Commercial Recreational project would need to undergo its own environmental analysis. Therefore, this analysis does not attempt to analyze the environmental effects of a future unknown Commercial Recreational development given the wide range of potential developments that could occur, but does consider the effects from the Overlay, which, due to the industrial nature of the use, would constitute a worst case scenario.

#### 4.6.4.2 Thresholds of Significance

The following significance criteria are based on Appendix G of the State CEQA Guidelines and provide the basis for determining significance of impacts associated with noise and vibration resulting from the proposed project. The determination of whether a noise impact would be significant is based on the applicable noise thresholds and the professional judgment of the District as Lead Agency supported by the recommendations of qualified personnel at ICF and based wholly on the substantial evidence in the administrative record.

Impacts are considered significant if the project would result in any of the following.

1. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance, or applicable standards of other agencies.
2. Expose persons to or generate excessive groundborne vibration or groundborne noise levels.
3. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
4. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
5. Expose people residing or working in the project area within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, to excessive noise levels.
6. Expose people residing or working in the project area within the vicinity of a private airstrip to excessive noise levels.

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<sup>1</sup> Note that the designation of the two Uplands Properties parcels is Tourist Commercial under the National City Harbor District Specific Area Plan, which allows uses similar to the proposed Commercial Recreation designation of the PMP.

<sup>2</sup> Note, that when a development might occur significantly influences the potential environmental effects of a project. This is because CEQA requires a project to analyze its change to the existing condition at the time the development is proposed (CEQA Guidelines 15125).



The analysis of whether the proposed project would have a significant impact associated with noise and vibration under Thresholds 5 and 6 is provided in Section XII of the Revised Initial Study/Environmental Checklist (Appendix B-1), which determined that the project would not result in significant impacts related to aircraft noise. The analysis and conclusions therein are incorporated by reference in this section of the EIR and are summarized in Chapter 6, *Additional Consequences of Project Implementation*. Therefore, only Thresholds 1 through 4 are discussed in the impact analysis that follows.

## Supplemental Thresholds

The District does not have published noise standards. Generally, the District will choose to use the noise regulations of the city in which a project is proposed or to which it is closest. The proposed project is located closest to National City. Consequently, as discussed in Section 4.6.3, *Applicable Laws and Regulations*, the determination as to whether an impact would exceed a noise threshold is generally based on guidance provided by the National City Noise and Nuisance Element and the National City Municipal Code.

### 4.6.4.3 Project Impacts and Mitigation Measures

***Threshold 1: Implementation of the proposed project would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.***

#### Impact Discussion

Noise generated by project construction activities would be significantly attenuated over the relatively large distances between the construction sites (i.e., the tank farm and adjacent street closures, 32nd Street closure, and former Weyerhaeuser sites) and the closest noise-sensitive receptors, resulting in noise levels that are well below the City's noise standard of 70 dBA  $L_{max}$ . Furthermore, new noise sources due to project operation would comply with the applicable noise standards of the City's municipal code at each of the nearest noise-sensitive receptors.

Moreover, no construction is proposed at the two sites that are proposed to include a Marine Related Industrial Overlay. With the project, which includes the Overlay, activities would continue as they currently exist, though an increase in throughput is anticipated and is captured in the analysis under the *Operation* subheading below. Upon expiration of the Overlay, the two project sites would sit unused until an as yet unknown future Commercial Recreational development is proposed and undergoes environmental review pursuant to the requirements of CEQA.

As a result, noise related to the proposed project would be less than significant. A detailed analysis follows.

#### Construction

Two types of short-term noise impacts could occur during project construction. First, construction workers who would commute to the site and trucks that would transport equipment and materials would incrementally increase noise levels on access roads. Although there would be a relatively high single-event noise level, which could cause an intermittent noise nuisance (e.g., passing trucks at 50 feet would generate up to 77 dBA), the effect on longer term ambient noise levels (e.g., the daily

average noise levels considered in the City's general plan guidelines) would be small. Therefore, short-term construction-related impacts associated with commuting workers and transporting equipment to the project site would be less than significant.

The second type of short-term noise impact would be related to noise generated during grading and paving of the tank farm and adjacent street closures and 32nd Street closure sites, and the potential building demolition on the former Weyerhaeuser site. The proposed project would create additional surface storage area for motor vehicles and would not include the construction of any new buildings. Construction would take place between 7 a.m. and 7 p.m. Monday through Friday and is anticipated to start in 2016 and be completed within 7 weeks.

Project construction would be broken down into overlapping phases. Construction phases, anticipated construction equipment, and associated reference noise levels are summarized in Table 4.6-8.

**Table 4.6-8. Construction Phasing, Equipment, and Noise Levels**

Construction Phase	Equipment (Number of Pieces)	Maximum Noise Level ( $L_{max}$ ) at 50 feet, dBA <sup>a</sup>
Site Demolition	Water Truck (1)	77
	Skip Loader (1)	79
	Large Wheel Loader (1)	79
	Truck/End-Dumps (2)	77
	Dozer (1)	82
	Excavator with Breaker (1)	90
Site Grading	Small Scraper (2)	84
	Small Dozer (1)	82
	Large Wheel Loader (1)	79
	Water Truck (1)	77
	Haul Truck (12)	77
Utilities (including storm drains and bioswales)	Small Excavator (1)	81
	Loader (1)	79
	Water Truck (1)	77
Site Paving	Motor Grader (1)	85
	Water Truck (1)	77
	Skip Loader (1)	79
	Rubber Tired Compactor (1)	83
Finishing (striping, fencing, lighting)	Crew Truck (1)	75
	Mechanical Auger (1)	84
	Small Truck Mounted Crane (1)	81
	Small Loader with Forks (1)	79

<sup>a</sup> Obtained or estimated from FHWA 2008 (RCNM)

$L_{max}$  = maximum sound level; dBA = A-weighted sound level

Table 4.6-9 shows the predicted noise levels by phase for construction of the tank farm site and the two adjacent street closures (i.e. Quay Avenue and 28th Street) at the closest noise-sensitive receptors. Table 4.6-10 shows the predicted noise level for construction at the 32nd Street closure site. Table 4.6-11 shows the predicted noise level for construction at the former Weyerhaeuser site. Figure 4.6-3 shows the locations of the noise-sensitive receptors in relation to the project sites. Because hotels are not considered sensitive to daytime construction activities, the nearby Best Western Marina Gateway



**Figure 4.6-3**  
**Noise-Sensitive Receptor Locations**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**



Hotel (Receptor 3 in Figure 4.6-3) is not included as a receptor in the construction analysis. However, it is indicated on the figure because it is used in the analysis of operational noise.

**Table 4.6-9. Tank Farm Site, Quay Avenue, and 28th Street Construction Noise Levels by Phase at Sensitive Receptors**

<b>Construction Phase</b>	<b>Receptor 1: Naval Recreational Facilities (1,900 feet to the north), dBA L<sub>max</sub></b>	<b>Receptor 2: Nearest Homes (2,400 feet to the northeast), dBA L<sub>max</sub></b>	<b>Receptor 4: Pepper Park (1,800 feet to the southeast), dBA L<sub>max</sub></b>
Site demolition	59	57	59
Site grading	52	50	53
Utilities	49	47	50
Site paving	53	51	54
Finishing	53	51	53
L <sub>max</sub> = maximum sound level; dBA = A-weighted sound level			

**Table 4.6-10. 32nd Street Closure Site Construction Noise Levels by Phase at Sensitive Receptors**

<b>Construction Phase</b>	<b>Receptor 1: Naval Recreational Facilities (4,300 feet to the north), dBA L<sub>max</sub></b>	<b>Receptor 2: Nearest Homes (3,600 feet to the north), dBA L<sub>max</sub></b>	<b>Receptor 4: Pepper Park (500 feet to the south), dBA L<sub>max</sub></b>
Site demolition	52	53	70
Site grading	45	46	64
Utilities	42	44	61
Site paving	46	48	65
Finishing	46	47	64
L <sub>max</sub> = maximum sound level; dBA = A-weighted sound level			

**Table 4.6-11. Weyerhaeuser Site Construction Noise Levels by Phase at Sensitive Receptors**

<b>Construction Phase</b>	<b>Receptor 1: Naval Recreational Facilities (2,250 feet to the north), dBA L<sub>max</sub></b>	<b>Receptor 2: Nearest Homes (1,950 feet to the northeast), dBA L<sub>max</sub></b>	<b>Receptor 4: Pepper Park (600 feet to the south), dBA L<sub>max</sub></b>
Site demolition	57	59	69
Site grading	51	52	62
Utilities	48	49	59
Site paving	52	53	63
Finishing	51	53	63
L <sub>max</sub> = maximum sound level; dBA = A-weighted sound level			

As noted previously, the applicable threshold of significance, based on the City's construction noise standards, is 70 dBA L<sub>max</sub> at the nearby noise-sensitive receptors (i.e., any construction noise level greater than 70 dBA would exceed the threshold). Referring to Tables 4.6-9, 4.6-10, and 4.6-11, the estimated maximum construction noise levels from the tank farm site range from 47 to 59 dBA L<sub>max</sub>,



the maximum construction noise levels from the 32nd Street closure site range from 42 to 70 dBA  $L_{max}$ , and the maximum construction noise levels from the Weyerhaeuser site range from 48 to 69 dBA  $L_{max}$ . Therefore, all project construction activity is predicted to comply with the City's noise standard and the impact would be less than significant.

### Operation

Project operational noise sources would include additional traffic on the surrounding streets, larger vessels calling into the marine terminal, trains on the railroad serving the NCMT and the surrounding industrial land uses, and activities on the proposed project sites.

### Traffic

The TIA for the project (Appendix G) analyzed the ADT along ten roadway segments in the project vicinity that would serve vehicular traffic associated with the project. Analysis was conducted for these roadways using a typical receiver setback of 50 feet from the centerline of the roadway. In addition, noise levels were estimated at a setback of 110 feet from the centerline of Bay Marina Drive between Cleveland Avenue and Harrison Avenue in order to represent the nearest façade of the Best Western Marina Gateway hotel, which is the only noise-sensitive receptor adjacent to any of the studied roadway segments. (As noted previously, the hotel is considered sensitive to traffic noise because it occurs during the nighttime as well as during the day.) The results of the traffic noise analysis are summarized in Table 4.6-12. The table shows that noise levels under the Existing and Existing with Project scenarios range from approximately 49 to 72 dB CNEL at 50 feet from the centerline of the studied roadways.

At the Best Western Marina Gateway hotel, traffic noise levels are approximately 66 dB CNEL with or without the project, which is *conditionally compatible* under the City's compatibility guidelines for visitor accommodations. *Conditionally compatible* indicates that for outdoor uses "best practices for reducing noise interference should be incorporated to make outdoor activities acceptable," and for indoor uses the "building structure must attenuate exterior noise to the indoor noise level [45 dB CNEL]. Conventional construction, but with closed windows and fresh air supply systems will normally suffice." There are no outdoor use areas adjacent to the street (the hotel pool is over 250 feet from the street and shielded by the hotel building). Typical commercial construction provides approximately 25 dB of exterior-to-interior noise reduction with windows closed (the hotel is air conditioned, which allows the windows to remain closed); therefore, the interior noise levels at the hotel would comply with the City's standard of 45 dB CNEL ( $66 - 25 = 41$  dB CNEL). There are no other noise-sensitive receptors adjacent to the affected roadways. Therefore, the impact would be less than significant.

In addition to the traffic driving on nearby streets, it was noted during the project scoping process that trucks from the NCMT sometimes park and idle along residential streets in the project vicinity. This activity causes noise and may violate provisions of Chapter 11.34 of the City's municipal code, *Truck Idling and Parking Maneuvers near a School or Residence*. Therefore, the impact is considered significant (**Impact-NOI-1**). Mitigation Measure **MM-NOI-1** is provided to reduce the impact to less than significant by providing signage to all potential idling trucks that idling on residential streets and near schools is illegal and subject to penalties.

**Table 4.6-12. Estimated Traffic Noise Levels**

<b>Estimated Unmitigated Traffic Noise Levels at 50 feet<sup>a</sup> from Roadway Centerline (dB CNEL)</b>					
<b>Roadway/Segment</b>	<b>Existing</b>	<b>Existing with Project</b>	<b>Increase over Existing</b>	<b>Nearby Sensitive Receptor?</b>	<b>Significant?</b>
<b>Bay Marina Drive</b>					
Tidelands Ave – Quay Ave	64.8	65.6	0.8	No	No
W 32nd St – Tidelands Ave	67.1	67.8	0.7	No	No
Cleveland Ave – Harrison Ave (50-foot setback)	69.3	69.8	0.5	No	No
Cleveland Ave – Harrison Ave (110-foot setback)	65.9	66.4	0.5	<b>Yes—Best Western Marina Gateway hotel</b>	No
I-5 SB Off-Ramp – Cleveland Ave	71.3	71.6	0.3	No	No
<b>Quay Avenue</b>					
Bay Marina Dr – 28th St	57.1	0.0 <sup>b</sup>	-57.1	No	No
<b>Tidelands Avenue</b>					
19th St – Bay Marina Dr	63.1	63.6	0.5	No	No
Bay Marina Dr – 28th St	64.1	65.2	1.1	No	No
28th St – 32nd St	62.4	63.0	0.6	No	No
<b>28th Street</b>					
Terminal – Quay Ave	49.3	0.0 <sup>b</sup>	-49.3	No	No
Quay Ave – Tidelands Ave	58.8	57.4	-1.4	No	No

CNEL = community noise equivalent level, the average A-weighted noise level during a 24-hour day, which is obtained by adding 5 dB to sound levels in the evening (7 p.m. to 10 p.m.) and 10 dB to sound levels in the nighttime (10 p.m. and 7 a.m.).

<sup>a</sup> A typical setback of 50 feet is used for all roadway segments except where specified for Bay Marina Drive between Cleveland Avenue and Harrison Avenue.

<sup>b</sup> Street segment closed as a result of the project.

**Vessel Calls**

Vessel calls at the NCMT are an existing condition, and the quantity of vessel calls is not expected to change as a result of the project. The size of vessels calling at the terminal has increased over the years such that more vehicles can be transported with fewer ships. The average capacity of vessels that currently call on NCMT is 5,282 cars. On average the vessels that called on NCMT in year 2013 were only partially full, averaging 1,578 autos per vessel call, based on the 2013 throughput of 361,372 cars and 229 auto-carrier calls at the terminal ( $361,372 / 229 = 1,578$ ). Existing vessels range in size from 3,200 car capacity up to 6,700 car capacity, and larger class roll-on/roll-off carriers are entering the market that can carry over 8,000 autos. Therefore, because existing vessels are only loaded at a fraction of their capacity, existing vessel calls would have sufficient capacity to handle the additional throughput associated with the project. Thus, the frequency of vessel calls

associated with the existing plus project future condition is anticipated to be similar to the existing condition, while loading and unloading would require a longer hotelling period—increasing from approximately 15.1 hours per vessel call to 21.6 hours with the project. Noise from loading and unloading consists mainly of vehicles being driven and auxiliary engines running on vessels for electronics and boilers, and would be expected to comply with the applicable thresholds at each of the closest noise-sensitive land uses.<sup>3</sup> Although the longer hotelling period would increase the duration of the noise, the nature of the noise would remain the same and is reflected in the baseline noise data. Therefore, the average noise level is not expected to increase at sensitive receptors in the project vicinity. Furthermore, the potential impact of extending unloading activity into the nighttime hours is expected to be minimal because the nearest receptors that would be sensitive to nighttime noise (residences and the Best Western Gateway Hotel) are located 3,000 to 6,000 feet from the vessel berths. This impact would be less than significant.

### ***Railroad Operations***

One freight train per day (typically Monday through Saturday) accesses the NCMT. The train is a vehicle train that transports motor vehicles, resulting in a total of two daily train trips (one round trip) per day. The additional throughput associated with the project may require up to one additional train per week. This is anticipated to be a Sunday train to and from the NCMT as needed. (San Diego Freight Rail Consulting 2015.)

Before an additional Sunday train is run, however, some additional vehicles associated with the project would be accommodated on the extra capacity available on the existing scheduled train (Monday through Saturday). Based on data provided by BNSF (Hower pers. comm.) and San Diego Freight Rail Consulting (2015), the total future train length could be up to 8,000 feet with up to 4 locomotives, and train speeds would be restricted to a maximum of 10 mph in the vicinity of the NCMT (this speed restriction is currently in place for existing trains). Depending on which track is used to access the NCMT, the train may pass within 230 feet of the Best Western Marina Gateway hotel or within 580 feet of naval recreational facilities. Potential train noise levels at these locations were estimated assuming the train would arrive and depart during nighttime hours. The modeling indicates a noise level for each train trip of up to 54 dB CNEL at the hotel and up to 48 dB CNEL at the Navy facilities. This equates to 57 dB CNEL at the hotel and 51 dB CNEL at the Navy facilities for a round trip. Referring to the City's noise compatibility guidelines (Figure 4.6-2) these noise levels are all well within the compatibility guidelines for the respective land uses (65 dB CNEL for visitor accommodations and 70 dB CNEL for athletic fields). Therefore, the project would not generate any new impacts at noise-sensitive receptors due to railroad operations, and the impact would be less than significant.

### ***Onsite Activities***

Noise-generating onsite activities would consist primarily of motor vehicle movements. This would include both automobiles being maneuvered and parked on the site for storage, and haul trucks

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<sup>3</sup> Noise measurement data obtained as part of a previous noise study for the nearby Tenth Avenue Marine Terminal indicated a noise level of 84.9 dBA  $L_{eq}$  at a distance of 50 feet for offloading operations. This included noise from gantry cranes and clanging from containers during the process of latching and releasing to/from the crane and would be considered a conservative estimate compared to noise levels for roll-on/roll-off operations. Assuming the same source level for a vessel at NCMT results in estimated noise levels of up to 52 dBA at Receptor 1 (Naval Recreational Facilities), 39 dBA at Receptors 2 and 3 (the nearest homes and the Best Western Gateway Hotel), and 59 dBA at Receptor 4 (Pepper Park).



picking up automobiles for delivery. Note that these activities already occur at the short-term permit sites considered as part of the project (with the exception of Port Parcel 027-043, which is currently, and would continue to be, a strip of landscape). However, the regularity and intensity of use at the short-term permit sites would potentially increase as a result of the project.

Adding together all the noise sources described in detail under Section 4.6.4.1, *Methodology*, and adjusting for the stated durations, results in a 1-hour average noise level of 70 dBA at a distance of 50 feet. Using this noise level, along with the acoustical average distance to each noise-sensitive receptor, Table 4.6-13 summarizes the results of the analysis. In order to provide a conservative analysis, it was assumed that activities could occur any time, 24 hours per day, such that they would be subject to the daytime and/or nighttime standards of the City's municipal code, depending on when each receptor is in use. The applicable standards are noted in the table.

**Table 4.6-13. Noise Levels at Sensitive Receptors Due to Onsite Operations**

	<b>Receptor 1: Naval Recreational Facilities</b>	<b>Receptor 2: Nearest Homes</b>	<b>Receptor 3: Best Western Gateway Hotel</b>	<b>Receptor 4: Pepper Park</b>
Closest vehicle storage site (parcel number)	025-010-A	025-010-B	028-042	028-007
Acoustical average distance (feet)	660	1,750	1,600	280
Resulting noise level (1-hour $L_{eq}$ )	48 dBA	40 dBA	40 dBA	55 dBA
Applicable noise standard <sup>a</sup> (1-hour $L_{eq}$ )	65 dBA (daytime)	45 dBA (nighttime)	60 dBA (nighttime)	65 dBA (daytime)
Noise level complies or exceeds?	Complies	Complies	Complies	Complies

<sup>a</sup> Nighttime noise standards are applied at the homes and hotel because they are occupied 24 hours per day. Only daytime noise standards are applied at the naval recreational facilities and Pepper Park because these are typically only used during the daytime hours.

Referring to the table, the estimated operational noise levels would comply with the applicable noise standards at each of the closest noise-sensitive receptors, and, therefore, the impacts would be less than significant.

#### ***Combined Operational Activities***

Operational noise sources that would be subject to the same thresholds of impact have the potential to cause greater impacts when their noise contributions are combined than when they are considered individually.

Traffic and rail noise would both contribute to the long-term (24-hour) CNEL that is used in assessing potential impacts from transportation-related noise sources. The only noise-sensitive receptor in the study area that is impacted by project-related changes in both traffic and rail noise is the Best Western Marina Gateway hotel. Referring to Table 4.6-12, the hotel is expected to be exposed to traffic noise levels of up to 66.4 dB CNEL. Referring to the railroad operations analysis, above, the hotel is expected to be exposed to railroad noise levels of up to 57 dB CNEL. Adding these

two contributions together yields an overall noise level of 66.9 dB CNEL, which is *conditionally compatible* under the City’s compatibility guidelines for visitor accommodations. *Conditionally compatible* indicates that for outdoor uses “best practices for reducing noise interference should be incorporated to make outdoor activities acceptable,” and for indoor uses the “building structure must attenuate exterior noise to the indoor noise level [45 dB CNEL]. Conventional construction, but with closed windows and fresh air supply systems will normally suffice.” There are no outdoor uses areas facing the street or railroad (the hotel pool is shielded by the hotel building). Typical commercial construction provides approximately 25 dB of exterior-to-interior noise reduction with windows closed (the hotel is air conditioned, which allows the windows to remain closed); therefore, the interior noise levels at the hotel would comply with the City’s standard of 45 dB CNEL ( $67 - 25 = 42$  dB CNEL), and the combined impact would be less than significant.

Vessel calls and onsite activity noise would both be considered stationary noise sources and could affect nearby sensitive receptors simultaneously. Table 4.6-14 estimates the combined noise levels at each of the closest receptors. Referring to the table, the estimated combined onsite operational noise levels would comply with the applicable noise standards at each of the closest noise-sensitive receptors, and, therefore, the impacts would be less than significant.

**Table 4.6-14. Combined Noise Levels at Sensitive Receptors Due to Onsite Operations**

	<b>Receptor 1: Naval Recreational Facilities</b>	<b>Receptor 2: Nearest Homes</b>	<b>Receptor 3: Best Western Gateway Hotel</b>	<b>Receptor 4: Pepper Park</b>
Noise level from vessel call activity (1-hour $L_{eq}$ )	52 dBA	39 dBA	39 dBA	59 dBA
Noise level from onsite vehicle storage activity (1-hour $L_{eq}$ )	48 dBA	40 dBA	40 dBA	55 dBA
Combined noise level (1-hour $L_{eq}$ )	54 dBA	43 dBA	43 dBA	61 dBA
Applicable noise standard <sup>a</sup> (1-hour $L_{eq}$ )	65 dBA (daytime)	45 dBA (nighttime)	60 dBA (nighttime)	65 dBA (daytime)
Noise level complies or exceeds?	Complies	Complies	Complies	Complies

<sup>a</sup> Nighttime noise standards are applied at the homes and hotel because they are occupied 24 hours per day. Only daytime noise standards are applied at the naval recreational facilities and Pepper Park because these are typically only used during the daytime hours.

### Level of Significance prior to Mitigation

Implementation of the proposed project would expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Potentially significant impact(s) include:

**Impact-NOI-1: Heavy Truck Idling Near Sensitive Noise Receptors.** Trucks from the NCMT and its related operations sometimes park and idle along residential streets in the project

vicinity, causing a noise nuisance and potentially violating provisions of Chapter 11.34 of the City's municipal code, *Truck Idling and Parking Maneuvers near a School or Residence*.

## Mitigation Measures

**MM-NOI-1: Notify Trucks from NCMT and Related Operations that Idling on Residential Streets is Illegal.** Signs shall be prominently posted, at all truck entrances and exits serving the various project sites (or otherwise placed strategically for maximum awareness), stating that truck parking and/or idling is prohibited on any residential street or within 100 feet of any school in the City of National City. Such prohibition shall also be included as part of any future agreements (e.g., short-term use permit) or Coastal Development Permits related to the proposed project.

## Level of Significance after Mitigation

**MM-NOI-1** would inform all drivers of idling trucks that they are performing an illegal activity, subject to enforcement by the National City Police Department under authorization from Chapter 11.34 of the City's municipal code, *Truck Idling and Parking Maneuvers near a School or Residence*. After implementation of **MM-NOI-1**, **Impact-NOI-1** would be less than significant.

***Threshold 2: Implementation of the proposed Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.***

## Impact Discussion

Groundborne vibration generated by construction activities would be imperceptible at the closest sensitive receptors; additional analysis is provided below. Proposed operation of the project does not include any new activities or equipment that would generate perceptible groundborne vibration levels; therefore, no impacts would occur as a result of project operations, and this impact has not been analyzed quantitatively. A detailed discussion is provided below.

### Construction

Heavy construction equipment has the potential to produce groundborne vibration levels that are perceptible to people in the surrounding area. Based on the City's municipal code, the threshold of impact for groundborne vibration is a PPV of 0.01 in/s at any sensitive receptor.

Referring to the equipment schedule provided in Table 4.6-8, various pieces of heavy equipment such as graders and excavators would be used at the tank farm, street closures, and potentially the former Weyerhaeuser sites. Based on data published by the FTA (2006), this type of equipment typically produces PPV vibration levels of 0.089 in/s at a distance of 25 feet.

Vibration levels from construction equipment attenuate as they radiate from the source. The equation to determine vibration levels at a specific distance states that

$$PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}$$

where  $PPV_{\text{ref}}$  is the PPV at a reference distance of 25 feet, and  $D$  is the distance from the equipment to the sensitive receptor (FTA 2006).

Using this equation, it was calculated that heavy construction equipment (graders, excavators, etc.) would generate groundborne vibration levels of 0.01 in/s or greater at distances of up to 111 feet. As noted previously, the closest sensitive receptors are farther than 111 feet from where construction would occur, at distances of 1,800 to 2,400 feet from the tank farm site, 500 to 4,300 feet from the 32nd Street site, and 600 to 2,250 feet from the former Weyerhaeuser site. At these distances construction-related vibration would be imperceptible, and there would be no impact.

### **Level of Significance prior to Mitigation**

Construction and operation of the proposed project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels, and there would be no impact.

### **Mitigation Measures**

No mitigation is required.

### **Level of Significance after Mitigation**

No impact would occur.

***Threshold 3: Implementation of the proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.***

### **Impact Discussion**

Construction noise would be temporary and, as such, would not cause any permanent increases in ambient noise level. The proposed project would not substantially increase permanent ambient noise levels once operational, resulting in less-than-significant impacts. Additional discussion and analysis is provided below.

#### **Operations**

##### ***Traffic Noise***

As noted previously, traffic scenarios were analyzed as summarized in Table 4.6-12 (under Threshold 1, above). The table shows that project-generated traffic is expected to increase noise levels from streets within the study area by 1.1 dB or less at all locations, and by approximately 0.5 dB adjacent to a sensitive receptor (hotel). Because noise increases of this magnitude are generally imperceptible to the human ear, the project's impact from traffic noise would be less than significant.

##### ***Vessel Calls***

As noted under Threshold 1, above, vessel calls at the marine terminal are an existing noise source and are not expected to change significantly as a result of the project. Due to an increased number of vehicles per vessel, loading and unloading would require a longer hoteling period—increasing from approximately 15.5 hours per vessel call to 21.2 hours with the project. Although the longer hoteling period would increase the duration of the noise, the nature of the noise would remain the same and the average noise level is not expected to increase at sensitive receptors in the

project vicinity. Therefore, noise associated with vessel calls would not create any substantial permanent increase in ambient noise levels, and the impact would be less than significant.

#### ***Railroad Operations***

As noted under Threshold 1, above, the additional throughput associated with the project would cause incremental increases in trains scheduled to and from the NCMT. There are currently 2 train trips per day (one round trip train) to NCMT and approximately 12 train trips per week. The project would increase the length of the trains used in about half of those trips and would increase the total number of weekly trips to approximately 14 due to the addition of a Sunday train. The resulting noise increases from the railroad would be small, and the railroad noise levels are estimated to remain well within the City's compatibility guidelines at the nearest noise-sensitive land uses. Therefore, noise associated with railroad operations would not create any substantial permanent increase in ambient noise levels, and the impact would be less than significant.

#### ***Onsite Activities***

As noted under Threshold 1, above, operational noise levels from onsite activities are estimated to range from 40 to 55 dBA (1-hour  $L_{eq}$ ) at the closest noise-sensitive receptors to the tank farm and short-term use permit sites. Although noise may occur more often as a result of increased throughput at the NCMT, the overall noise levels would be similar to those from existing operations. Furthermore, the lowest daytime ambient  $L_{eq}$  measured in the study area was 54 dBA (see Table 4.6-4), which is within 1 dBA of the highest estimated operational noise level of 55 dBA,

Therefore, noise associated with onsite activities would not create any substantial permanent increase in ambient noise levels, and the impact would be less than significant.

### **Level of Significance prior to Mitigation**

Implementation of the proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, and the impact would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Level of Significance after Mitigation**

Impacts would be less than significant.

***Threshold 4: Implementation of the proposed project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.***

### **Impact Discussion**

Temporary noise generated by construction would not generate substantial increases in ambient noise levels; additional discussion and analysis is provided below. The operation of the proposed

project would not add any temporary or periodic noise sources. Therefore, impacts would be less than significant.

**Construction**

As noted under Threshold 1, above, noise levels from project construction are estimated to range from 44 to 70 dBA  $L_{max}$  at the closest noise-sensitive receptors to the project construction sites (see Tables 4.6-9 through 4.6-11). The daytime ambient  $L_{max}$  measured in the study area ranged from 64 to 77 dBA (see Table 4.6-4). Because the estimated construction noise levels are all within the range of measured ambient noise levels, project construction would not create any substantial temporary increase in ambient noise levels, and the impact would be less than significant.

**Level of Significance prior to Mitigation**

Implementation of the proposed project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, and the impact would be less than significant.

**Mitigation Measures**

No mitigation measures are required.

**Level of Significance after Mitigation**

Impacts would be less than significant.

## Section 4.7

# Transportation, Circulation, and Parking

### 4.7.1 Overview

This section describes the existing conditions and applicable laws and regulations for transportation, circulation, and parking, followed by an analysis of the proposed project's potential to (1) conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system; (2) conflict with a county congestion management plan by exceeding a level-of-service (LOS) standard; (3) increase hazards due to a design feature or incompatible use; (4) result in inadequate emergency access; (5) conflict with adopted alternative transportation policies, plans, or programs; or (6) result in an insufficient supply of parking to meet the project demand. All other transportation, traffic and parking issues, including impacts on air traffic patterns, were analyzed in Section XVI of the Revised Initial Study/Environmental Checklist (Appendix B-1), which is incorporated here by this reference, and were determined to be insignificant. The analysis and conclusions regarding these impacts are summarized in Section 6.4, *Effects Not Found to be Significant*, of Chapter 6.

The information provided in this section is summarized from the *National City Marine Terminal (NCMT) Tank Farm Paving and Street Closures Project & Port Master Plan Amendment Transportation Impact Analysis (TIA)* prepared by Chen Ryan Associates, Inc. in December 2015 (Appendix G).

Table 4.7-1 summarizes the significant impacts and mitigation measures discussed in Section 4.7.4.3, *Project Impacts and Mitigation*.

**Table 4.7-1. Summary of Significant Impacts and Mitigation Measures**

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
<b>Impact-TRA-1:</b> Insufficient On-Terminal Employee Parking.	<b>MM-TRA-1.</b> Reconfigure I-Lot to Accommodate 455 Striped Parking Spaces.	Less than significant	The provision of 455 parking spaces would cover the project's parking needs and any additional parking needs that result from removing on-street parking along Quay Avenue once it is closed by the project.

### 4.7.2 Existing Conditions

#### 4.7.2.1 Study Area

Transportation and circulation related to the proposed project would potentially affect streets and intersections surrounding the project site. These streets and intersections are within the jurisdiction of the City of National City (City) and the District. As such, the study area was defined according to

the SANTEC/ITE *Guidelines for Traffic Impact Studies within the San Diego Region* (March 2000) requirements. The SANTEC/ITE *Traffic Impact Study Manual* requires that a study area include all roadway segments, intersections, and freeway segments where the project would contribute 50 or more peak hour trips in either direction. Figure 4.7-1 shows the project study area roadway segments and intersections.

## Roadway Corridors

There are four roadway corridors where the proposed project has the potential to add 50 or more peak hour trips along their segments. Each of these corridors is described below. The descriptions herein provide a general understanding of the local roadway corridors and identify the basic existing setting for the roadway segment analysis presented further in this section.

### North-South Facilities

#### Quay Avenue

Within the project area, Quay Avenue is a paved, 37-foot-wide, two-lane roadway, with a 35 mile per hour (mph) posted speed limit. Quay Avenue does not have bike facilities, sidewalks, and transit facilities.

#### Tidelands Avenue

Within the project area, Tidelands Avenue is a 62-foot-wide, four-lane undivided roadway with a posted speed limit of 35 mph, and parallel parking and sidewalks on both sides. Tidelands Avenue is a signed Class III bike facility.<sup>1</sup> No transit facilities exist along the portion of Tidelands Avenue within the project study area.

### East-West Facilities

#### Bay Marina Drive

Within the project study area, Bay Marina Drive is a four-lane roadway with the following median types: an undivided roadway between the NCMT gate and Tidelands Avenue, a continuous two-way left-turn lane between Tidelands Avenue and Cleveland Avenue, and a raised median between Cleveland Avenue and I-5.

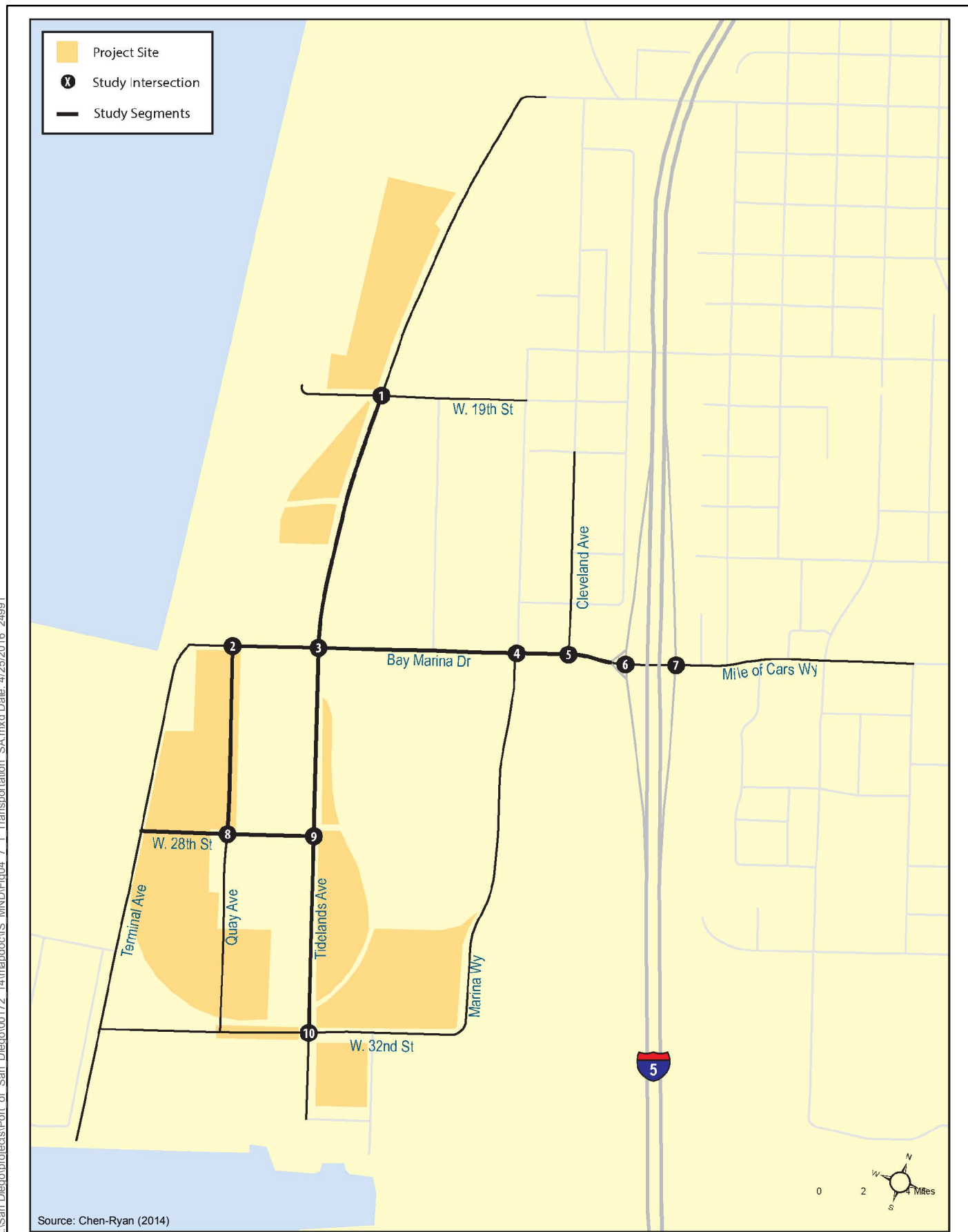
Bay Marina Drive is 62 feet wide with a posted speed limit of 30 mph. Parking is allowed on both sides of the roadway west of Haffley Avenue, but not on either side of the roadway between Haffley Avenue and I-5. Sidewalks are provided along both sides of Bay Marina Drive, but there are no bicycle or transit facilities.

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<sup>1</sup> There are two independent proposals currently submitted to the District that may affect the portion of Tidelands Avenue within the District. The first is an interim bicycle facility on Tidelands Avenue from Civic Center Drive on the north to 32nd Street on the south. The second is a proposal to close Tidelands Avenue from approximately Bay Marina Drive on the north to 32nd Street on the south. This closure is proposed to be phased. Both of these proposals have independent utility from the proposed project, and neither have been approved by the Board of Port Commissioners. Both are included in the cumulative project list in Chapter 5, *Cumulative Impacts*.



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**Figure 4.7-1**  
**Transportation Study Area**  
**NCMT Tank Farm Paving and Streets Closures Project & PMPA**



**28th Street**

Within the project study area, 28th Street is a paved 45-foot-wide, undivided two-lane roadway, with a posted speed limit of 35 mph and parking permitted on both sides. Sidewalk facilities exist west of Quay Avenue, but not between Quay Avenue and Tidelands Avenue. There are no bicycle or transit facilities along the portion of 28th Street that is within the project study area.

**Roadway Segments**

Roadway segments to which the proposed project would contribute more than 50 peak hour trips in either direction include the following.

1. Tidelands Avenue between:
  - a. 19th Street and Bay Marina Drive
  - b. Bay Marina Drive and 28th Street
  - c. 28th Street and West 32nd Street
2. Bay Marina Drive between:
  - a. Quay Avenue and Tidelands Avenue
  - b. Tidelands Avenue and Marina Way
  - c. Marina Way and Cleveland Avenue
  - d. Cleveland Avenue and I-5 Northbound Ramps

Figure 4.7-2 shows the location of each of these segments.

**Intersections**

Intersections to which the proposed project would contribute more than 50 peak hour trips in either direction include the following.

1. 19th Street/Tidelands Avenue
2. Bay Marina Drive/Quay Avenue
3. Bay Marina Drive/Tidelands Avenue
4. Bay Marina Drive/Marina Way
5. Bay Marina Drive/Cleveland Avenue
6. Bay Marina Drive/I-5 Southbound Ramps
7. Bay Marina Drive/I-5 Northbound Ramps
8. 28th Street/Quay Avenue
9. 28th Street/Tidelands Avenue
10. 32nd Street/Tidelands Avenue

Figure 4.7-2 shows the location of each of these intersections.

## Freeway Ramps

Freeway ramps in the study area include I-5 Southbound Ramps/Bay Marina Drive and I-5 Northbound Ramps/Bay Marina Drive. Both locations are signalized intersections. There are no ramp meters within the project study area.

## Freeway Segments

The proposed project would contribute more than 50 peak hour trips to I-5. Therefore, freeway impact analyses were conducted in accordance with the criteria specified in the SANTEC/ITE Guidelines, along the following freeway mainline segments.

1. I-5 between:
  - a. 8th Street and Civic Center Drive
  - b. Civic Center Drive and Bay Marina Drive
  - c. Bay Marina Drive and the State Route (SR) 54 Junction
  - d. SR-54 Junction and E Street

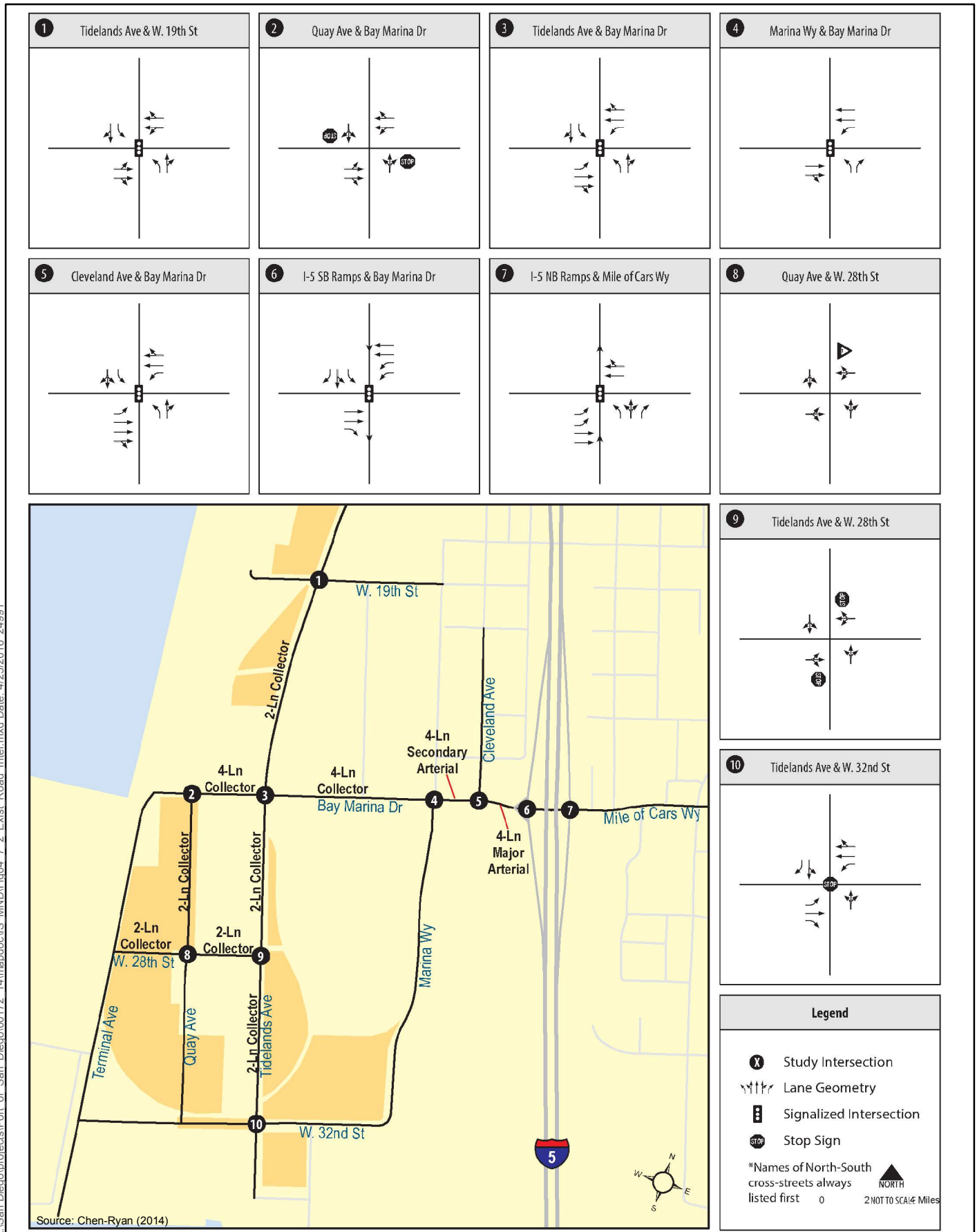
### 4.7.2.2 Existing Transportation Conditions

#### Roadway Segments

To determine if a roadway segment is operating effectively, an LOS grade is applied. LOS is an index used to quantitatively evaluate the operational quality of the roadway segments in the study area. LOS on roadway segments is determined by the ratio of the roadway's volume divided by its design capacity, a metric known as volume-to-capacity (V/C). LOS takes into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety; and expresses these conditions using a letter-graded scale, with "A" representing free flow and "F" representing considerable congestion and delay. Table 4.7-2 provides a more detailed explanation of varying LOS.

**Table 4.7-2. Level of Service Definitions**

LOS Category	Definition of Operation
A	This LOS represents a completely free-flow condition, where the operation of vehicles is virtually unaffected by the presence of other vehicles and is only constrained by the geometric features of the highway and by driver preferences.
B	This LOS represents a relatively free-flow condition, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.
C	At this LOS the influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles.
D	At this LOS, the ability to maneuver is notably restricted due to traffic congestion, and only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.



**Figure 4.7-2**  
Existing Roadway and Intersections  
NCMT Tank Farm Paving and Streets Closures Project & PMPA



<b>LOS</b>	
<b>Category</b>	<b>Definition of Operation</b>
E	This LOS represents operations at or near capacity. LOS E is an unstable level, with vehicles operating with minimum spacing for maintaining uniform flow. At LOS E, disruptions cannot be dissipated readily thus causing deterioration down to LOS F.
F	At this LOS, forced or breakdown of traffic flow occurs; although operations appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.
Source: Transportation Research Board 2010; Appendix G.	
LOS = level of service	

Roadway segment capacity within the project study area is based on the National City Roadway Classifications and LOS Standards, provided as Table 4.7-3. The City considers LOS D an acceptable LOS for roadway and intersection operations.

**Table 4.7-3. Roadway Classifications and LOS Standards**

<b>Roadway Classification</b>	<b>LOS A</b>	<b>LOS B</b>	<b>LOS C</b>	<b>LOS D</b>	<b>LOS E</b>
Major Arterial (6-lane, divided)	<20,000	<28,000	<40,000	<45,000	<b>&lt;50,000</b>
Major Arterial (4-lane, divided)	<15,000	<21,000	<30,000	<35,000	<b>&lt;40,000</b>
Secondary Arterial / Collector (4-lane w/ center lane)	<10,000	<14,000	<20,000	<25,000	<b>&lt;30,000</b>
Collector (4-lane w/o center lane)	<7,000	<10,000	<13,000	<15,000	<b>&lt;20,000</b>
Collector (2-lane w/ continuous left-turn lane)	<5,000	<7,000	<10,000	<13,000	<b>&lt;15,000</b>
Collector (2-lane)	<4,000	<5,500	<7,500	<9,000	<b>&lt;10,000</b>
Source: Appendix G.					
<b>Bold</b> indicates unacceptable levels.					

Existing roadway conditions were determined for four roadways split over 10 segments. Traffic counts for these roadways were conducted in January and August 2014. Figure 4.7-3 shows the existing traffic volumes at these 10 segments. As summarized in Table 4.7-4, all study area segments currently operate at LOS A.

**Table 4.7-4. Existing Conditions at Study Area Roadway Segments**

Roadway	Segment	Cross-Section	Threshold (LOS E)	ADT	V/C	LOS
Bay Marina Drive	Between Quay Avenue and Tidelands Avenue	4-Lane Collector	20,000	2,557	0.128	A
	Between Tidelands Avenue and Marina Way	4-Lane Collector	20,000	4,340	0.217	A
	Between Marina Way and Cleveland Avenue	4-Lane Secondary Arterial	30,000	7,341	0.245	A
	Between Cleveland Avenue and I-5 SB	4-Lane Major Arterial	40,000	11,570	0.289	A
Quay Avenue	Between Bay Marina Dr and 28th St	2-Lane Collector	10,000	342	0.034	A
Tidelands Ave	Between 19th St and Bay Marina Dr	2-Lane Collector	10,000	1,431	0.143	A
	Between Bay Marina Dr and 28th Street	2-Lane Collector	10,000	1,794	0.179	A
	Between 28th St and 32nd St	2-Lane Collector	10,000	1,215	0.122	A
28 <sup>th</sup> Street	Between Terminal and Quay	2-Lane Collector	10,000	38	0.004	A
	Between Quay Ave and Tidelands Ave	2-Lane Collector	10,000	518	0.052	A

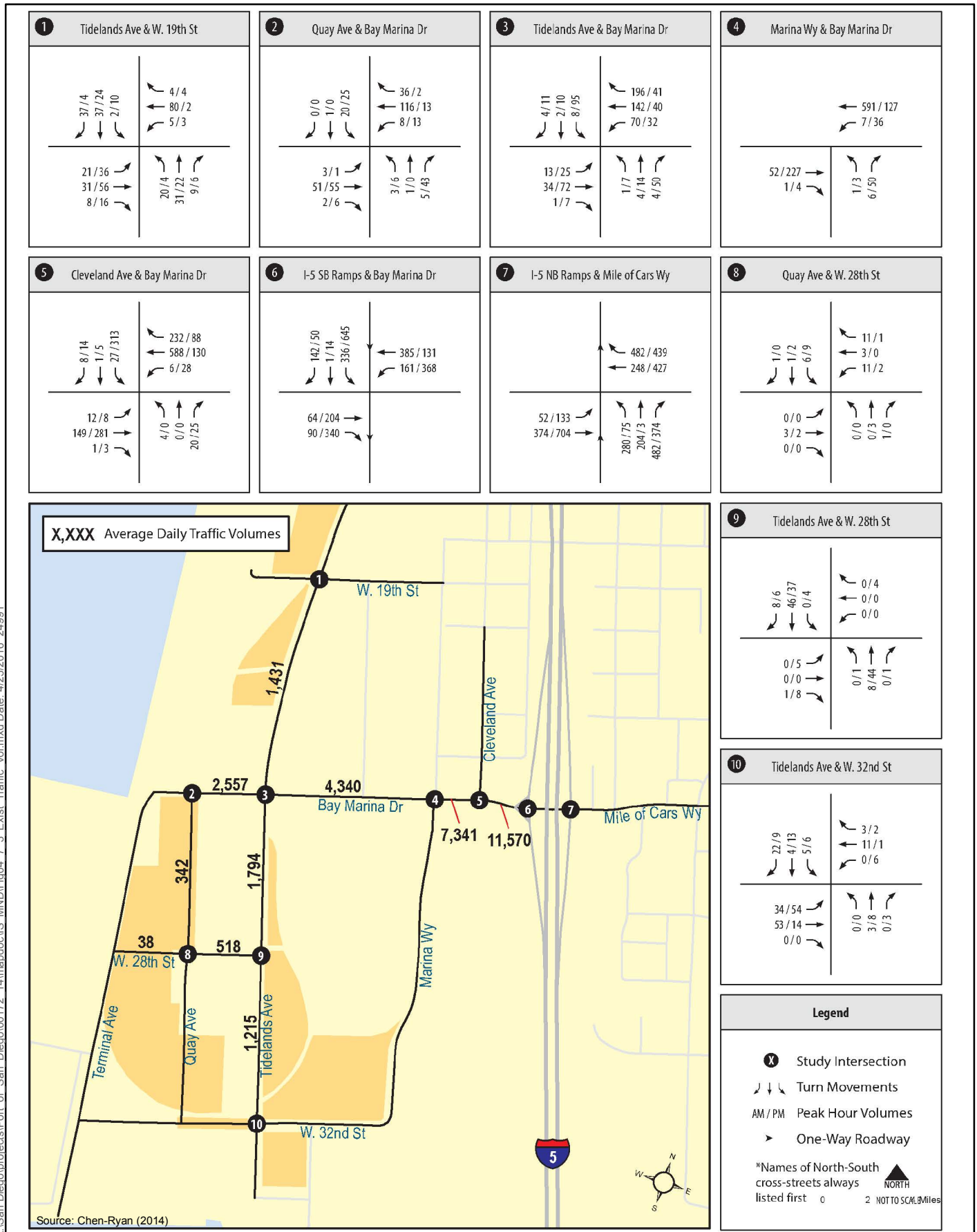
Source: Appendix G.

ADT = average daily traffic; LOS = level of service; SB = southbound; V/C = volume to capacity ratio.

## Intersections

The *Highway Capacity Manual (HCM) 2000* defines LOS in terms of delay, or more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption, and lost travel time. This technique uses 1,900 vehicles per hour per lane as the maximum saturation volume of an intersection. This saturation volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage of trucks) and shared lane movements (i.e., through and right-turn movements originating from the same lane). The LOS criteria used for signalized intersections is described in Table 4.7-5. The LOS criteria for unsignalized intersections is provided in Table 4.7-6. The City considers LOS D or better during the AM and PM peak hours to be acceptable for intersection LOS.





**Figure 4.7-3**  
**Existing Traffic Volumes**  
**NCMT Tank Farm Paving and Streets Closures Project & PMPA**



**Table 4.7-5. Signalized Intersection LOS Criteria**

<b>Average Stopped Delay Per Vehicle (seconds)</b>	<b>Level of Service (LOS) Characteristics</b>
<10.0	<i>LOS A</i> describes operations with very low delay. This occurs when progression is extremely favorable, and most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
10.1–20.0	<i>LOS B</i> describes operations with generally good progression and/or short cycle lengths. More vehicles stop than for <i>LOS A</i> , causing higher levels of average delay.
20.1–35.0	<i>LOS C</i> describes operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
35.1–55.0	<i>LOS D</i> describes operations with high delay, resulting from some combination of unfavorable progression, long cycle lengths, or high volumes. The influence of congestion becomes more noticeable, and individual cycle failures are noticeable.
55.1–80.0	<i>LOS E</i> is considered the limit of acceptable delay. Individual cycle failures are frequent occurrences.
>80.0	<i>LOS F</i> describes a condition of excessively high delay, considered unacceptable to most drivers. This condition often occurs when arrival flow rates exceed the <i>LOS D</i> capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay.

Source: *Highway Capacity Manual 2000*.

**Table 4.7-6. Unsignalized Intersection LOS Criteria**

<b>Average Control Delay (sec/veh)</b>	<b>Level of Service (LOS)</b>
≤10	A
>10 and ≤15	B
>15 and ≤25	C
>25 and ≤35	D
>35 and ≤50	E
>50	F

Source: *Highway Capacity Manual 2000*.

Existing peak hour intersection conditions were determined for a total of 10 intersections within the study area. Traffic counts for intersections were conducted in January and August 2014. LOS analysis focused on peak hour intersection operations, which is the time of day when traffic is at its heaviest. As shown in Table 4.7-7, all study area intersections currently operate at LOS D or better, except for I-5 Northbound Ramps/Bay Marina Drive during the AM peak hour.

**Table 4.7-7. Existing Intersection Operations**

#	Intersection	AM		PM	
		Delay (seconds)	LOS	Delay (seconds)	LOS
1	19th Street/Tidelands Avenue	12.7	B	12.2	B
2	Bay Marina Drive/Quay Avenue <sup>a</sup>	11.3	B	10.5	B
3	Bay Marina Drive/Tidelands Avenue	8.7	A	13.5	B
4	Bay Marina Drive/Marina Way	9.3	A	18.5	B
5	Bay Marina Drive/Cleveland Avenue	15.7	B	23.1	C
6	I-5 SB Ramps/Bay Marina Drive	22.6	C	52.1	D
7	I-5 NB Ramps/Bay Marina Drive	71.2	E	17.8	B
8	28th Street/Quay Avenue	9.5	A	9.2	A
9	28th Street/Tidelands Avenue	9.4	A	9.6	A
10	32nd Street/Tidelands Avenue <sup>b</sup>	7.8	A	8.1	A

Source: Appendix G.

LOS = level of service; SB = southbound; NB = northbound.

<sup>a</sup> Indicates one- or two-way stop controlled intersection; the delay shown is the worst delay experienced by any of the approaches.

<sup>b</sup> Indicates all-way stop controlled intersection.

## Freeway Ramps

Consistent with California Department of Transportation (Caltrans) requirements, the signalized ramp intersection conditions of I-5 Southbound Ramps/Bay Marina Drive and I-5 Northbound Ramps/Bay Marina Drive were determined using Intersection Lane Volume (ILV) procedures as described in Topic 406 of the Caltrans *Highway Design Manual* (Caltrans 2014), which are summarized in Table 4.7-8. As shown in Table 4.7-9, the ramp intersections do not currently exceed their capacity. Neither Caltrans nor the City uses ILV results in determining significance of project impacts, but the analyses are included for informational purposes. No metered on-ramps are in the project study area.

**Table 4.7-8. Traffic Flow Conditions at Ramp Intersections at Various Levels of Operation**

<b>ILV per hour</b>	<b>Description</b>
<i>&lt;1,200 (Under Capacity)</i>	Stable flow with slight, but acceptable delay. Occasional signal loading may develop. Free midblock operations.
<i>1,200–1,500 (At Capacity)</i>	Unstable flow with considerable delays possible. Some vehicles occasionally wait two or more cycles to pass through the intersection. Continuous backup occurs on some approaches.
<i>&gt;1,500 (Over Capacity)<sup>a</sup></i>	Stop-and-go operation with severe delay and heavy congestion. <sup>1</sup> Traffic volume is limited by maximum discharge rates of each phase. Continuous backup in varying degrees occurs on all approaches. Where downstream capacity is restrictive, mainline congestion can impede orderly discharge through the intersection.

Source: Caltrans 2014; Appendix G.

<sup>a</sup> The amount of congestion depends on how much the ILV per hour value exceeds 1,500. Observed flow rates will normally not exceed 1,500 ILV per hour, and the excess will be delayed in a queue.

ILV = Intersection Lane Volume.

**Table 4.7-9. Existing Ramp Intersection Capacity Analysis**

<b>#</b>	<b>Intersection</b>	<b>Peak Hour</b>	<b>ILV/Hour</b>	<b>Description</b>
6	I-5 SB/Bay Marina Drive	AM	529	Under Capacity
		PM	931	Under Capacity
7	I-5 SB/Bay Marina Drive	AM	851	Under Capacity
		PM	695	Under Capacity

Source: Appendix G.

ILV = Intersection Lane Volume; SB = southbound.

Existing off-ramp queuing was measured at the key study ramp intersections to determine if vehicles queuing spill back into freeway mainline operations. As shown in Table 4.7-10, off-ramp queue lengths for the current study do not exceed their ramp storage lengths.

**Table 4.7-10. Existing Off-Ramp Queueing Analysis**

<b>#</b>	<b>Intersection</b>	<b>Peak Hour</b>	<b>Queue Length (feet)</b>	<b>Ramp Length (feet)</b>
6	I-5 SB/Bay Marina Drive	AM	270	850
		PM	666	850
7	I-5 SB/Bay Marina Drive	AM	786	1,060
		PM	175	1,060

Source: Appendix G.

SB = southbound.

## Freeway Segments

Freeway level of service analysis is based on Caltrans procedures, which estimate a peak hour V/C ratio. Peak hour volumes are estimated from applying design hour, directional, and truck factors to Average Daily Traffic (ADT) volumes. Base capacities for I-5 were assumed to be 2,350 passenger-car per hour per main lane and 1,410 for the auxiliary lane, which is 60% of the main line capacity.

The resulting V/C ratio is compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification (see Table 4.7-11). The level of service is an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during peak hour. LOS D or better is considered an acceptable threshold for freeway operations.

**Table 4.7-11. Freeway Segment LOS Definitions**

LOS	V/C	Congestion/Delay	Traffic Description
<i>Used for freeways, expressways, and conventional highways</i>			
"A"	<0.30	None	Free flow.
"B"	0.30–0.50	None	Free to stable flow, light to moderate volumes.
"C"	0.50–0.71	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.71–0.89	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.89–1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.

Source: *Caltrans Guide for the Preparation of Traffic Impact Studies; December 2002.*  
LOS = level of service; V/C = volume to capacity.

Existing conditions for the study freeway segments were obtained from Caltrans' 2014 *Traffic Volumes on California State Highways* and are displayed in Table 4.7-12. As shown, all key study freeway segments currently operate at acceptable LOS D or better, with the exception of 8th Street and Civic Center Drive, which operates at LOS E in the northbound direction.

**Table 4.7-12. Existing Freeway (I-5) Segment LOS Conditions**

Segment	ADT <sup>a</sup>	Dir	# of Lanes	Capacity <sup>b</sup>	D <sup>c</sup>	K <sup>d</sup>	HV <sup>e</sup>	Peak Hour Volume	V/C	LOS
8th Street and Civic Center Drive	173,000	NB	4M	9,400	76.0%	6.3%	13.0%	8,700	0.93	E
		SB	4M+1A	10,810	62.3%	8.1%	13.0%	9,300	0.86	D
Civic Center Drive and Bay Marina Drive	182,000	NB	5M+1A	13,160	76.0%	6.3%	13.0%	9,100	0.69	C
		SB	5M	11,750	62.3%	8.1%	13.0%	9,700	0.83	D
Bay Marina	183,000	NB	5M+1A	13,160	76.0%	6.3%	13.0%	9,200	0.70	C

Segment	ADT <sup>a</sup>	Dir	# of Lanes	Capacity <sup>b</sup>	D <sup>c</sup>	K <sup>d</sup>	HV <sup>e</sup>	Peak Hour Volume	V/C	LOS
SR-54 Junction and E Street	127,000	SB	5M+1A	13,160	62.3%	8.1%	13.0%	9,800	0.74	D
		NB	5M	11,750	76.0%	6.3%	13.0%	6,400	0.54	C
		SB	4M+1A	10,810	62.3%	8.1%	13.0%	6,800	0.63	C

Source: Appendix G.

**Bold** letter indicates unacceptable LOS E or F.

A = Auxiliary Lane; LOS = level of service; M = Mainline; NB = northbound; SB = southbound; V/C = volume to capacity.

<sup>a</sup> Traffic volumes provided by Caltrans (2014); ADT = average daily traffic.

<sup>b</sup> The capacity is calculated as 2,350 ADT per main lane and 1,410 ADT (60% of the main lane capacity) per auxiliary lane.

<sup>c</sup> D = Directional split.

<sup>d</sup> K = Peak hour %.

<sup>e</sup> HV = Heavy vehicle %, provided by Caltrans.

## Public Transportation Services

There are currently no transit facilities within the project study area. The nearest public transit stop is the 24th Street Metropolitan Transit System (MTS) Trolley/Bus Station located 0.85 mile to the east of the NCMT entrance on Wilson Avenue and 22nd Street. Additionally, there is the MTS 961 bus stop located east of I-5 on the corner of Hoover Avenue and Mile of Cars Way, approximately 0.75 mile from the entrance to the NCMT. Regionally, public transportation serving the south San Diego area includes the San Diego Trolley and local bus lines. Planned public transportation services are based on the San Diego Association of Governments' (SANDAG's) adopted Regional Transportation Plan (RTP), which identifies planned transit improvements that improve access in the surrounding areas through 2050.

## Local/Express Bus

There are several bus routes that currently make stops within the general vicinity of the project study area: MTS Bus Routes 13, 961, 967, and 968. All of the routes begin or end at the 24th Street Blue Line Trolley Station. The MTS Bus Route 13 travels to Kaiser Permanente in Grantville, MTS Bus Route 961 travels to the Encanto/62nd Street Orange Line Trolley Station, MTS Bus Route 967 travels to Division Street and Mariposa Place in National City, and MTS Bus Route 968 travels to Munda Road via 4th Street, 8th Street, and Paradise Valley Road in National City.

## San Diego Trolley

The San Diego Trolley serves over 32 million annual passengers, with an average weekday ridership of 97,401 (MTS 2013). Each trolley consists of between one and four cars depending on need. Each car can hold between 96 and 104 passengers during commute times and up to 200 passengers during special events (referred to as *crush load*). This equates to between 384 and as high as 800 passengers per trolley during special events. As an average, it is assumed each trolley typically has three cars and operates at trolley car commute capacity, or approximately 300 passengers per rush hour trolley.

### **Blue Line**

The MTS Blue Line was the first light-rail line constructed in San Diego and was the start of the MTS Trolley System. In operation since 1981, the Blue Line began with service between downtown San Diego and the San Ysidro Port-of-Entry. Blue Line service has been expanded four times since its inception and now provides service between the San Ysidro Port-of-Entry to the south and the Old Town Transit Center to the north. In all, it services 15.4 miles and includes 18 stations.

The Blue Line currently runs at 7–8 minute headways during peak periods and 15-minute headways in off-peak periods. Existing ridership along the Blue Line is estimated at 145 and 151 passengers per trolley during the AM and PM peak hours, respectively, or about half of the current capacity of 300 passengers per trolley. The Blue Line stops at the 24th Street Blue Line Trolley Station (located approximately 0.85 mile to the east of the NCMT entrance on Wilson Avenue and 22nd Street), which links travelers to MTS Bus Routes 13, 961, 967, and 968.

## **Pedestrian and Bicycle Facilities**

### **Tidelands Avenue, Bay Marina Drive, 28th Street**

Pedestrian facilities within the project study area are along Tidelands Avenue and Bay Marina Drive. Sidewalk facilities are present on both sides of the Tidelands Avenue and Bay Marina Drive roadways. There are also sidewalk facilities on 28th Street, west of Quay Avenue, but they may be removed under the proposed project. Sidewalk facilities do not exist on either side of 28th Street, between Quay Avenue and Tidelands Avenue, as well as Quay Avenue, between Bay Marina Drive and 28th Street. Bike facilities are limited in the project area and only include Tidelands Avenue, which is signed as a Class III bike facility.

### **Bayshore Bikeway**

The Bayshore Bikeway path is a 24-mile bicycle facility that runs along the San Diego Bay. In the project study area, an interim Class II Bayshore Bikeway alignment is proposed by SANDAG on Tidelands Avenue and an interim Class III Bayshore Bikeway alignment is proposed by SANDAG on West 32nd Street.

## **Parking Conditions**

Parking for workers and visitors to NCMT is available to the north of the terminal grounds in the I-Lot, which includes approximately 345 parking spaces, but the area can accommodate up to 455 parking spaces.<sup>2</sup>

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<sup>2</sup> Restriping may be required to accommodate all 455 spaces.



## 4.7.3 Applicable Laws and Regulations

### 4.7.3.1 State

#### California Department of Transportation

Caltrans has jurisdiction over the state highway system and is divided into 12 districts. Caltrans establishes acceptable freeway and on- and off-ramp operations based on the Transportation Research Board's *Highway Capacity Manual 2010* (Transportation Research Board 2010).

Signalized intersections at freeway ramps are required to be analyzed using ILV procedures as described in Topic 406 of the *Highway Design Manual* (Caltrans 2014). This methodology is based on an assessment of each intersection as an isolated unit, without consideration of the effects from adjacent intersections. For this reason, the ILV analysis is used to provide additional validation of signalized ramp intersection operations derived from the *Highway Capacity Manual 2010* methodology.

### 4.7.3.2 Regional

#### San Diego Association of Governments' 2050 Regional Transportation Plan

The SANDAG 2050 RTP was adopted on October 28, 2011, to establish a framework and vision for the region's transportation needs until 2050. The 2050 RTP identifies a plan for implementing local, state, and federal transportation funds and includes a Sustainable Communities Strategy pursuant to Senate Bill 375, which identifies how the region will address greenhouse gas emissions to meet State-mandated levels, and focuses on land use planning and transportation issues in an attempt to develop sustainable growth patterns on a regional level.

#### San Diego Association of Governments' Congestion Management Program

SANDAG's Congestion Management Program (CMP) was first adopted on November 22, 1991, and is intended to help monitor the regional transportation system's LOS performance. Local agencies are required by State statute to conform to the CMP. Current CMP analysis requirements for the San Diego region are delineated in SANDAG's *2008 Congestion Management Program Update*. This document's guidelines require that a project study area be established as follows.

- All local roadway segments (including all State surface routes), intersections, and mainline freeway locations where the proposed project will add 50 or more peak-hour trips in either direction to the existing roadway traffic.
- All freeway entrance and exit ramps where the proposed project will add a significant number of peak-hour trips to cause traffic queues to exceed ramp storage capacities, resulting in excessive delays.

#### Riding to 2050, the San Diego Regional Bike Plan

The San Diego Regional Bike Plan (SANDAG 2010) was developed to support the Regional Comprehensive Plan and the RTP in implementing the regional strategy for utilizing the bicycle as a valid form of everyday travel. The bike plan, as a part of the Sustainable Communities Strategy

mandated by Senate Bill 375, provides for a detailed Regional Bike Network, as well as the programs that are necessary to support it. Implementation of the Regional Bike Plan would help the region meet goals for reducing greenhouse gas emissions and improve mobility.

## 4.7.4 Project Impact Analysis

### 4.7.4.1 Methodology

Potential transportation and circulation impacts associated with the proposed project are summarized below based on information in Appendix G. Methods used to determine project-related impacts are taken from the *SANTEC/ITE Guidelines for Traffic Impact Studies within the San Diego Region* (2000). For more details related to the methods used, please see Chapter 2.0 of Appendix G.

As described in Chapter 3, *Project Description*, the project includes a Marine Related Industrial Overlay for two sites. With the Overlay, the project would have the potential to result in higher cargo throughput compared to leaving the site unused with a Commercial Recreation land use designation only. It is acknowledged that upon expiration (7 years from approval) of the Overlay or when a Commercial Recreation project is proposed and approved, one or more future Commercial Recreation developments could be developed. Critically, the type of Commercial Recreational project that may be proposed could vary widely (e.g., hotel, restaurants, park, visitor-serving retail, etc.)<sup>3</sup> At the time of the Revised NOP, however, no proposals had been submitted to the District, and it is unclear what type of commercial development may occur on the sites,<sup>4</sup> which could be a number of different Commercial Recreation related land uses, many of which would differ substantially from one another. Additionally, the BPC have not advanced any Commercial Recreational development forward as of the time of this analysis. Once a development proposal that requires discretionary review is submitted to the District, the separate and independent future project would undergo environmental review and would be required to comply with CEQA prior to its implementation.

### Roadway Segments, Intersections, and Freeway Segments

The *SANTEC/ITE Guidelines for Traffic Impact Studies within the San Diego Region* defines project impact thresholds by facility type. These thresholds are generally based on an acceptable increase in the V/C ratio for roadway and freeway segments, and on increases in vehicle delays for intersections and ramps. Table 4.7-13 provides the quantitative thresholds.

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<sup>3</sup> Note that the designation of the two Upland Properties parcels is Tourist Commercial under the National City Harbor District Specific Area Plan, which allows uses similar to the proposed Commercial Recreation designation of the PMP.

<sup>4</sup> Note that when a development might occur significantly influences the potential environmental effects of a project. This is because CEQA requires a project to analyze its change to the existing condition at the time the development is proposed or an NOP is issued (State CEQA Guidelines Section 15125).

**Table 4.7-13. Measure of Significant Project Traffic Impacts**

Level of Service with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E & F (or ramp meter delays above 15 minutes)	0.01	1	0.02	1	2	2

Source: SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region.

V/C = volume to capacity; mph = miles per hour; sec = seconds; min = minutes.

LOS standards that were applied to the evaluation of roadway segment capacity for the proposed project are based on the National City Roadway Classifications and LOS Standards table (Table 4.7-3). The City considers LOS D acceptable for roadway and intersection operations. A project is considered to have a significant impact if it degrades the operations of a roadway or intersection from an acceptable LOS (D or better) to an unacceptable LOS (E or F), or if it adds additional delay to a facility already operating at an unacceptable level.

## Freeway Ramp

### Intersections

Freeway ramp intersections were based on ILV per Topic 406 of the Caltrans *Highway Design Manual*. The ILV assesses each intersection as an isolated unit, apart from the effects of the adjacent intersections. The ILV analysis serves as an additional validation of signalized ramp intersection operations from the *Highway Capacity Manual 2010* methodology.

### Off-Ramp Queuing

To ensure that intersection queuing at the key study ramp intersections does not spill back into freeway mainline operations, an off-ramp queueing analysis was conducted using the current 95th percentile queue lengths on all key study freeway off-ramps. Analysis worksheets are provided in Appendix G.

### Metered

There are no metered ramps in the project study area.

## Public Transit

The project's traffic impact study assumed all worker commute trips would be via personal vehicles. In addition, there are no public transit facilities in the project study area. Therefore, a capacity analysis of existing public transit is not warranted.

## Pedestrian and Bicycle Facilities

Impacts on the pedestrian, bicycle, and transit circulation system were considered through a review of the project site plan. Impacts relating to pedestrian, bicycle, and transit circulation would occur if the proposed project would substantially increase hazards due to a design feature, or would conflict the adopted policies, plans, or programs that support these alternative modes of transportation.

## Parking

A significant parking impact would occur if insufficient parking was provided, and NCMT workers were required to park outside the terminal on surrounding roadways and in offsite parking areas where adequate parking was not available. If a deficit is identified, then an evaluation of the potential physical impacts associated with insufficient parking would be conducted and a determination as to the level of significance would be made.

## Project Construction Traffic

Construction of the proposed project is expected to begin in 2016 and occur over a 7-week period. Construction of the proposed project would include grading and paving of the former tank farm site and street closure sites, and the potential demolition of sheds on the former Weyerhaeuser site, and would not include construction of buildings. At most, construction is expected to generate 35 construction trucks arriving over an 8-hour period, and 15 construction workers on site, during the AM and PM peak hours. The 15 construction workers are expected to drive individual vehicles to the project site. As shown in Table 4.7-14, the proposed project construction is anticipated to generate approximately 30 construction trips and 218 delivery truck trips during both the AM and PM peak hours, for a total of 248 daily trips, including 69 trips during both the AM and PM peak hours. No construction is associated with the Marine Related Industrial Overlay.

**Table 4.7-14. Project Construction Trip Generation**

Use	Units	Vehicle Conversion Rate	Daily Vehicle Trips	AM Peak Hour		PM Peak Hour	
				In	Out	In	Out
Construction Worker Traffic	15	1	30	15	0	0	15
Delivery Truck/ Van Traffic	36	3	218	27	27	27	27
<b>Total</b>			<b>248</b>	<b>42</b>	<b>27</b>	<b>27</b>	<b>42</b>

Source: Appendix G.

## Project Operational Traffic

Operational trip generation for the proposed project is composed of vehicle off-loading, storage, and transporting the vehicles to their final destination. Based on past import levels and proposed capacity of the facility, as well as the anticipated vehicle dwell time, the average number of vehicles stored at the project sites could increase up to 307,604, or 5,157 vehicles per acre. As discussed in Chapter 3, *Project Description*, there would be a potential net increase of 210,818 vehicles.

Project trip generation at the project sites would occur as a result of freight movement (trucks), employee commutes, and the movement of imported vehicles from the NCMT offsite storage lots.

New trucks that would be required to access the project site as a result of the proposed project would serve the additional number of cars imported. The analysis assumes operations would occur 365 days per year and, consistent with existing operations, that 55% of the imported cars would be shipped via truck and the remaining 45% would be shipped via rail.

Employee trip generation for the proposed project would occur as a result of the 212 additional employees spread through three shifts on a daily basis. Pasha's operations require approximately one employee for every 1,000 vehicles of throughput.

Vehicle movement would occur as follows: (1) outbound haul trucks picking up cars at the project sites and transporting them to their final destination and (2) inbound vehicles driven to the project sites to be stored until being picked up by outbound haul trucks. Outbound haul trucks would average 40 daily trips, while vehicle storage distribution is expected to average 578 daily trips (475 cars for vehicle storage movement south of Bay Marina Drive, plus 103 cars for vehicle storage movement north of Bay Marina Drive). Employees would add another 636 ADTs related to commuting to the NCMT and commuting back home, and additional trips were added as a conservative measure to account for some workers deciding to leave the NCMT for lunch or errands but returning for work in the same day. Table 4.7-15 provides a breakdown of the project trip generation.

**Table 4.7-15. Project Trip Generation**

Type	Units	Rate	PCE	ADT	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Trucks	40 Trucks	2/Truck	3	240	45	36	9	45	36	9
Employees <sup>a</sup>	212 Employees	3/Employee	1	636	142	71	71	142	71	71
Vehicle Storage Movement – South of Bay Marina Drive	475 Cars	1/Car	1	475	48	0	48	48	0	48
Vehicle Storage Movement – North of Bay Marina Drive	103 Cars	1/Car	1	103	10	0	10	10	0	10
<b>Total (Project)</b>				<b>1,454</b>	<b>245</b>	<b>107</b>	<b>138</b>	<b>245</b>	<b>107</b>	<b>138</b>

Source: Appendix G.

PCE = Passenger Car Equivalent, based on industry standards; ADT = average daily trips.

<sup>a</sup> 212 employees divided into 3 equal shifts = 71 employees per shift. Assuming shift changes occur during the peak hours there would be 71 employees entering the project site and 71 employees exiting the project site during both the AM and PM peak hours.

As shown in Table 4.7-15, the proposed project is expected to generate 1,454 new PCE trips, including 245 trips during the AM peak hour and 245 trips during the PM peak hour.

## Trip Distribution and Assignment

The analysis provides a specific trip distribution for both employees and trucks. Project trip distribution was based on existing travel patterns. Project trip assignment was based on daily and AM/PM peak hour project trips that were assigned to the adjacent roadway network. Figure 4.7-4 shows the project trip distribution.

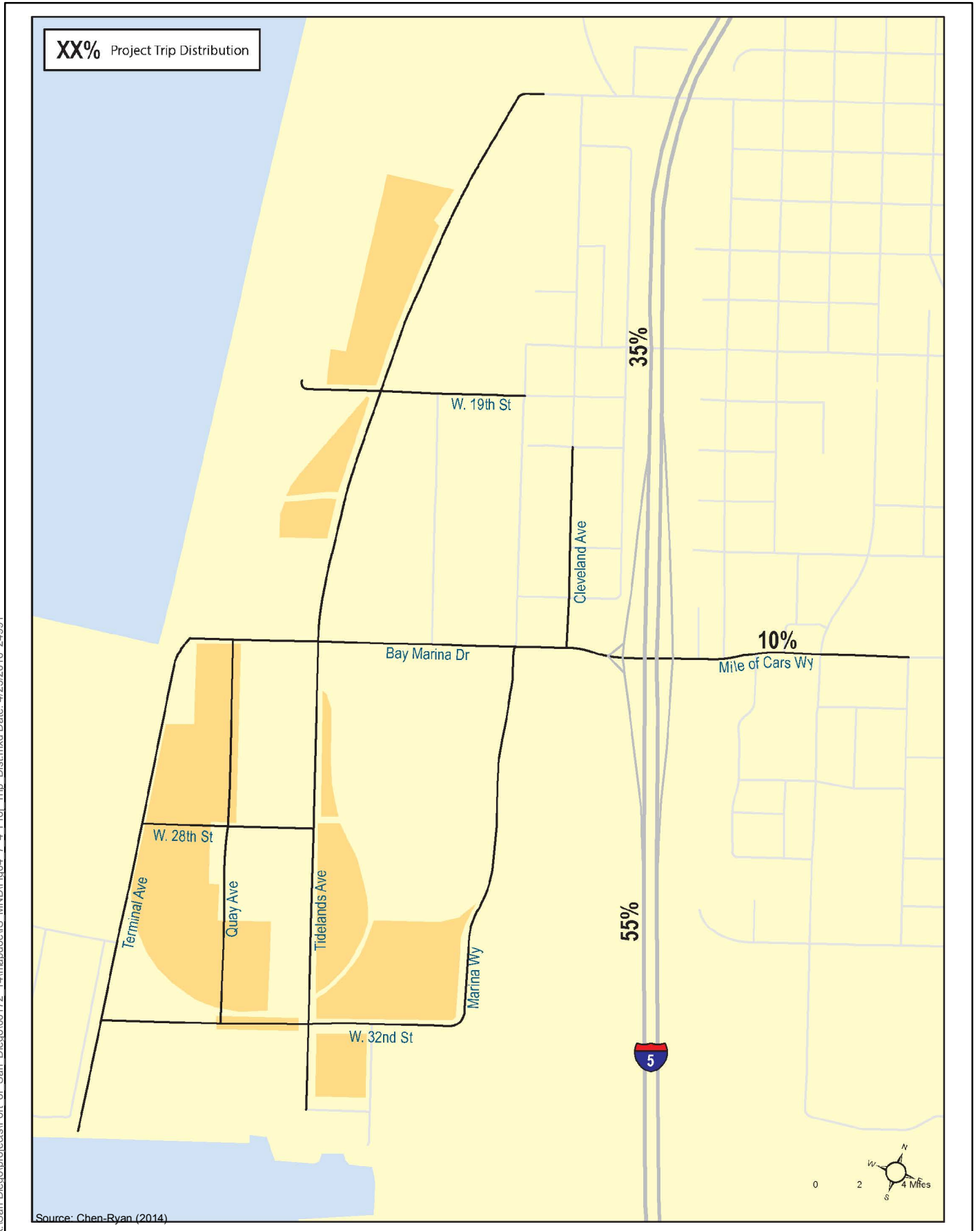
As noted previously, vehicle movement trips are only between the NCMT and the respective project sites. Employees would access the site from the northern gate located at the western terminus point of Bay Marina Drive.

### 4.7.4.2 Thresholds of Significance

The following significance criteria are based on Appendix G of the State CEQA Guidelines and provide the basis for determining the significance of impacts on existing transportation, circulation, and parking conditions as a result of the proposed project's implementation. Impacts are considered significant if the project would result in any of the following.

1. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
5. Result in inadequate emergency access.
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.
7. Result in an insufficient supply of parking to meet the project demand.

The analysis of whether the proposed project would have a significant impact associated with transportation, circulation and parking under Threshold 3 is provided in Section XVI of the Revised Initial Study/Environmental Checklist (Appendix B-1), which determined that the project would not result in impacts related to air traffic patterns. The analysis and conclusions in Section XVI of the Initial Study/Environmental Checklist are incorporated here by reference in this section of the EIR and are summarized in Chapter 6, *Additional Consequences of Project Implementation*. Furthermore, Threshold 2 is no longer in effect within SANDAG's transportation management area. California State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a CMP. The requirements within the state CMP were developed to monitor the performance of the transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG provided







regular updates for the state CMP from 1991 through 2008. In October 2009, the San Diego region elected to be exempt from the state CMP, and, since this decision, SANDAG has been abiding by FHWA 23 CFR 450.320 to ensure the region's continued compliance with the federal congestion management process. The 2050 RTP meets the requirements of 23 CFR 450.320 by incorporating the following federal congestion management process: performance monitoring and measurement of the regional transportation system, multimodal alternatives and non-single occupant vehicle analysis, land use impact analysis, the provision of congestion management tools, and integration with the regional transportation improvement program process. Therefore, consistency with the 2050 RTP is sufficient and no CMP is warranted. Consequently, CMP analysis is not provided in the analysis that follows.

### 4.7.4.3 Project Impacts and Mitigation Measures

***Threshold 1: Implementation of the proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.***

#### Impact Discussion

##### Construction

The proposed project is expected to generate a total of 248 daily vehicle trips during construction. This is composed of approximately 36 delivery trucks that would generate the passenger car equivalent (PCE) of 218 daily vehicle trips, and 15 construction worker trips that would generate approximately 30 daily vehicle trips. Peak hour trips would include up to 42 trips in the morning peak hour arriving at the NCMT and up to 42 trips leaving the NCMT in the afternoon peak hour, which is approximately 65 fewer trips during the AM peak hour and 48 fewer trips during the PM peak hour from project operations. Given project operations would not result in significant impacts (see Tables 4.7-16 through 4.7-20 below), project traffic from construction activities would not result in significant impacts. Similarly, the project's construction would not create any significant impacts on the existing transit, pedestrian, and bicycle facilities in the project study area, as there would be no interruption in service or permanent changes to the transit, pedestrian, and bicycle systems currently in place. Finally, no construction is proposed at the two sites that are proposed to include the Marine Related Industrial Overlay over their Commercial Recreation land use designations.<sup>5</sup> Furthermore, any future Commercial Recreation development proposal, which was unknown at the time of the Revised NOP and has not been considered by the BPC, or upon the Overlay's expiration, would be required to comply with CEQA as a separate and independent action from the proposed project. Therefore, no conflicts with applicable plans, ordinances, or policies

<sup>5</sup> Port Parcel 028-007 is already in the PMP as Commercial Recreation. Lot K is not currently included in the PMP, and this project would include it and designate it as Commercial Recreation. The Marine Related Industrial Overlay would be in addition to the Commercial Recreation land use designation.

related to the performance of the circulation system would occur from project construction, and impacts would be less than significant.

### Operation

Potential traffic impacts related to project operations would involve an increase in freight movement (trucks), an increase in the number of employee commute trips, and an increase in onsite vehicle movement. The anticipated increase in site operations involving the three movement types between the project site and the storage areas is expected to generate a total of 1,454 project-related ADTs (with the Marine Related Industrial Overlay in place, which represents a worst case scenario). Table 4.7-15, above, shows the total project trip generation by trucks, employees, and vehicle movement.

Additional details of the proposed project's operational impacts are discussed below.

### Existing Condition Plus Project Operations

#### Roadway Segments

Table 4.7-16 shows that existing LOS conditions for the roadways in the project study area operate at LOS A or better. The table also shows that the proposed project's operation would not cause any levels of service to worsen from its current service level, and would not cause any change or further deterioration in roadway segment levels. Therefore, all surrounding roadways would continue to operate at their current LOS with the project, and the project's traffic impacts on study area roadway segments would be less than significant, and no mitigation is required.

**Table 4.7-16. Peak Hour Roadway Segment LOS Results – Existing Plus Project**

Roadway Segment		Functional Classification	Threshold (LOS E)	Existing + Project			Existing	$\Delta$	S?
				ADT	V/C	LOS	ADT/ V/C /LOS		
Bay Marina Drive	Between Quay Avenue and Tidelands Avenue	4-Lane Collector	20,000	3,069	0.153	A	2,560/.128/A	0.026	N
	Between Tidelands Avenue and Marina Way	4-Lane Collector	20,000	5,216	0.261	A	4,490/.225/A	0.044	N
	Between Marina Way and Cleveland Avenue	4-Lane Secondary Arterial	30,000	8,217	0.274	A	7,570/.252/A	0.029	N
	Between Cleveland Avenue and I-5 SB Ramps	4-Lane Major Arterial	40,000	12,446	0.311	A	11,800/.295/A	0.022	N
Quay Avenue	Between Bay Marina Dr and 28th St	Roadway Segment Removed by Proposed Project							
Tidelands Avenue	Between 19th St and Bay Marina Dr	2-Lane Collector	10,000	1,582	0.158	A	1,430/.220/A	0.015	N
	Between Bay Marina Dr and 28th St	2-Lane Collector	10,000	2,326	0.233	A	1,950/.300/A	0.053	N
	Between 28th St and 32nd St	2-Lane Collector	10,000	1,395	0.140	A	1,370/.211/A	0.018	N

Roadway Segment		Functional Classification	Threshold (LOS E)	Existing + Project			Existing	Δ	S?
				ADT	V/C	LOS	ADT/ V/C /LOS		
28th Street	Between Terminal and Quay Ave		Roadway Segment Removed by Proposed Project						
	Between Quay Ave and Tidelands Ave	2-Lane Collector	10,000	370	0.037	A	520/.080/A	-0.015	N

Source: Appendix G.

LOS = level of service; ADT = average daily trip; V/C = volume to capacity; Δ = ?; S = significant

*Intersections*

Existing LOS for the intersections in the project study area operate at level LOS D or better except for I-5 Northbound Ramps/Bay Marina Drive in the AM peak hour, which operates at LOS E. As shown in Table 4.7-17, the proposed project's operation would not cause any LOS to worsen from its current service level, and would not cause a delay of 2.0 seconds or greater at intersections with an existing LOS of E or worse (i.e., I-5 Northbound Ramps/Bay Marina Drive). Therefore, all surrounding intersections would continue to operate at their current LOS with the project's traffic. Impacts on study area intersections would be less than significant, and no mitigation is required.

**Table 4.7-17. Peak Hour Intersection LOS Results – Existing Plus Project**

#	Intersection	AM Peak Hour		PM Peak Hour		Delay w/o Project (sec) AM/PM	LOS w/o Project AM/PM	Change in Delay (sec)	Significant Impact?
		Avg Delay (sec)	LOS	Avg Delay (sec)	LOS				
1	19th Street/Tidelands Avenue	12.7	B	12.3	B	12.7/12.2	B/B	0.0/0.1	N
2	Bay Marina Drive/Quay Avenue <sup>a</sup>	12.0	B	10.2	B	11.3/10.5	B/B	0.7/-0.3 <sup>c</sup>	N
3	Bay Marina Drive/Tidelands Avenue	9.3	A	14.1	B	8.7/13.5	A/B	0.6/0.6	N
4	Bay Marina Drive/Marina Way	9.5	A	19.3	B	9.3/18.5	A/B	0.2/0.8	N
5	Bay Marina Drive/Cleveland Avenue	15.7	B	23.9	C	15.7/23.1	B/C	0.0/0.8	N
6	I-5 SB Ramps/Bay Marina Drive	23.0	C	58.2	D	22.6/52.1	C/D	0.4/6.1	N
7	I-5 NB Ramps/Bay Marina Drive	72.1	E	19.3	B	71.2/17.8	E/B	0.9/1.5	N
8	28th Street/Quay Avenue <sup>a</sup>	Intersection Removed With Proposed Project							
9	28th Street/Tidelands Avenue <sup>a</sup>	9.6	A	9.6	A	9.4/9.6	A/A	0.2/0.0	N
10	32nd Street/Tidelands Avenue <sup>b</sup>	8.0	A	8.1	A	7.8/8.1	A/A	0.2/0.0	N

Source: Appendix G.

avg = average; LOS = level of service; NB = northbound; sec = seconds.

<sup>a</sup> Indicates one- or two-way stop controlled intersection; the delay shown is the worst delay experienced by any of the approaches.<sup>b</sup> Indicates all-way stop controlled intersection<sup>c</sup> The Bay Marina Drive/Quay Avenue intersection will be converted from a four to a three legged intersection under the “with project” conditions. The removal of the south leg (Quay Avenue) of this intersection will decrease the number of vehicular conflicts and may result in better operations, even with the addition of project traffic.

*Ramp Intersection Capacity*

As discussed, the signalized ramp intersections of I-5 Southbound/Bay Marina Drive and I-5 Northbound/Bay Marina Drive were analyzed under ILV procedures. Both signalized ramp intersections at the I-5 and Bay Marina Drive interchange would continue to operate “Under Capacity” with implementation of the proposed project (Table 4.7-18). Therefore, impacts on signalized ramp intersections at the I-5 and Bay Marina Drive interchange would be less than significant, and no mitigation is required.

**Table 4.7-18. Peak Hour Intersection LOS Results – Existing Plus Project**

#	Intersection	Peak Hour	ILV/Hour	Description
6	I-5 SB/Bay Marina Drive	AM	564	Under Capacity
		PM	949	Under Capacity
7	I-5 SB/Bay Marina Drive	AM	949	Under Capacity
		PM	709	Under Capacity

Source: Appendix G.

SB = southbound; ILV = Intersection Lane Volume

*Off-Ramp Queueing Analysis*

An off-ramp queueing analysis was conducted for I-5 Southbound/Bay Marina Drive and I-5 Northbound/Bay Marina Drive in order to determine whether the ramp intersections would spill back into freeway mainline operations. Table 4.7-19 shows queue lengths were projected in the 95th percentile on all key study freeway off-ramps. Therefore, impacts on queueing would be less than significant, and no mitigation is required.

**Table 4.7-19. Ramp Intersection Capacity Analysis – Existing Plus Project**

#	Intersection	Peak Hour	Queue Length (feet)	Ramp Length (feet)
6	I-5 SB/Bay Marina Drive	AM	286	850
		PM	666	850
7	I-5 SB/Bay Marina Drive	AM	804	1,060
		PM	242	1,060

Source: Appendix G.

Note: Analysis worksheets for Existing Plus Project conditions are provided in Appendix F of Appendix G.

SB = southbound.

*Freeway Segments*

Under LOS analysis, four key study freeway segments (Table 4.7-20) were analyzed and are projected to operate at an acceptable LOS D or better with the project, with the exception of 8th Street and Civic Center Drive, which would maintain the pre-project level of LOS E in the northbound direction; also, the project would not change its V/C. Therefore, impacts on freeway segments would be less than significant, and no mitigation is required.

**Table 4.7-20. Freeway Segment LOS – Existing Plus Project**

Freeway	Segment	ADT <sup>a</sup>	Dir	# of Lanes	Capacity <sup>b</sup>	D <sup>c</sup>	K <sup>d</sup>	HV <sup>e</sup>	Peak Hour Volume	V/C	Change in V/C	LOS	SI?
I-5	8th Street and Civic Center Drive	173,000	NB	4M	9,400	76.0%	6.3%	13.0%	8,728	0.93	0.00	<b>E</b>	No
			SB	4M+1A	10,810	62.3%	8.1%	13.0%	9,337	0.86	0.00	D	No
	Civic Center Drive and Bay Marina Drive	182,000	NB	5M+1A	13,160	76.0%	6.3%	13.0%	9,128	0.69	0.00	C	No
			SB	5M	11,750	62.3%	8.1%	13.0%	9,737	0.83	0.00	D	No
	Bay Marina Drive and SR-54 Junction	183,000	NB	5M+1A	13,160	76.0%	6.3%	13.0%	9,263	0.70	0.00	C	No
			SB	5M+1A	13,160	62.3%	8.1%	13.0%	9,845	0.75	0.01	D	No
	SR-54 Junction and E Street	127,000	NB	5M	11,750	76.0%	6.3%	13.0%	6,463	0.55	0.01	C	No
			SB	4M+1A	10,810	62.3%	8.1%	13.0%	6,845	0.63	0.00	C	No

Source: Appendix G.

Notes:

**Bold** letter indicates unacceptable LOS E or F.

M = Mainline. A = Auxiliary Lane.

<sup>a</sup> Average Daily Traffic volumes.<sup>b</sup> The capacity is calculated as 2,350 ADT per main lane and 1,410 ADT (60% of the main lane capacity) per auxiliary lane.<sup>c</sup> D = Directional split.<sup>d</sup> K = Peak hour %.<sup>e</sup> HV = Heavy vehicle %, assumed to be the same as existing.

In sum, all potential impacts on roadway segments, intersections, ramp intersections, off-ramp queueing analysis, and freeway segments would be less than significant with the project. Moreover, the project would not modify existing transit, pedestrian, or bicycle facilities; require their redesign; or result in demand that would create insufficient capacity. Consequently, no conflicts with applicable plans, ordinances, or policies related to the performance of the circulation system would occur from project construction or operation; impacts would be less than significant, and no mitigation is required.

### Level of Significance prior to Mitigation

Implementation of the proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Level of Significance after Mitigation

Impacts would be less than significant.

***Threshold 4: Implementation of the proposed project would not substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).***

### Impact Discussion

The project does not propose physical changes to roadways that could result in an increase in design hazards. The project would grade and pave the former tank farm site and street closure sites, demolish the buildings at the former Weyerhaeuser site, and renew existing short-term use permits for vehicle storage with Pasha. The tank farm site and the adjacent portions of Quay Avenue and 28th Street, and the portion of 32nd Street that is proposed to be closed, would be secured with fencing.

Moreover, no physical changes are proposed at the two sites that are proposed to have a Marine Related Industrial Overlay over their Commercial Recreation land use designations.<sup>6</sup> On these two sites, vehicle storage would continue for up to 7 years or until a Commercial Recreation development is proposed, approved, and initiates construction.

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<sup>6</sup> Port Parcel 028-007 is already in the PMP as Commercial Recreation. The area of Lot K east of the mean high tide line is not currently included in the PMP, and this project would include it and designate it as Commercial Recreation. The Marine Related Industrial Overlay would be in addition to the Commercial Recreation land use designation and would allow for marine related industrial uses to occur on those two Overlay sites for a period of up to 7 years or until a Commercial Recreation development is proposed, approved, and initiates construction.

Therefore, the proposed project, including the street closures and Overlay would not increase hazards because of a design feature (i.e., no unsafe geometries are proposed) or from incompatible uses (i.e., all uses in the area are Marine Related Industrial with some Commercial Recreation to the southeast that have been developed to coexist with the Marine Related Industrial), and access to the surrounding area would still be provided. Impacts would be less than significant.

### **Level of Significance prior to Mitigation**

Implementation of the proposed project would not substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### **Level of Significance after Mitigation**

Impacts would be less than significant.

***Threshold 5: Implementation of the proposed project would not result in inadequate emergency access.***

### **Impact Discussion**

The proposed project does not include physical changes to roadways that could result in inadequate emergency access. The project would grade and pave the former tank farm site, along with the adjacent public roadways of Quay Avenue between Bay Marina Drive and 28th Street, 28th Street west of Quay Avenue, and 32nd Street west of Tidelands Avenue, which would be closed. However, access (including emergency access) to the NCMT and surrounding businesses would still be provided with the proposed project.

Currently, access to the NCMT is controlled by two gates, the northern gate at the western terminus point of Bay Marina Drive and the southern gate at the western terminus point of 32nd Street. The proposed project would move the southern gate to the western leg of the Tidelands Avenue/32nd Street intersection, which is projected to continue to operate at LOS A. All existing through traffic is associated with the current NCMT traffic. As such, roadway operations would continue to operate at LOS A, and implementation of the proposed project would not result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

### **Level of Significance prior to Mitigation**

Implementation of the proposed project would not result inadequate emergency access. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation is required.

### Level of Significance after Mitigation

Impacts would be less than significant.

***Threshold 6: Implementation of the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities.***

### Impact Discussion

Impacts on the pedestrian, bicycle, and transit facilities were considered by evaluating the project site plan. The proposed project is a Marine Related Industrial project that would increase the number of union jobs at the NCMT, which would in turn increase the number of commuters to the site, but would otherwise have little effect on public transit ridership, bicycle use, and walking as it is anticipated that the vast majority would use personal vehicles for commuting purposes.

Furthermore, there are no pedestrian, bicycle, or transit facilities within the project site or surrounding area. Therefore, the project would not conflict with SANDAG's plan for interim Class II bike lanes on Tidelands Avenue and the interim Class III bike route on West 32nd Street as the project does not propose any changes to these portions of Tidelands Avenue or 32nd Street. Similarly, it would not conflict with SANDAG's RTP and would be consistent because it would further promote goods movement within an existing marine terminal and marine related industrial area.

Upon expiration of the Overlay, future Commercial Recreation developments may be proposed. If developments consistent with the Commercial Recreation designation are proposed and approved prior to the Overlay expiring, the Overlay would be removed. No proposals have been submitted to the District as of the Revised NOP, and it is unclear what type of commercial development may occur on the sites. However, the Marine Related Industrial Overlay would not alter pedestrian, bicycle, or transit facilities because with the proposed project, vehicles would continue to be stored at these two sites. Separate environmental review would be required for any future Commercial Recreation development proposals, and compliance with CEQA would be mandatory prior to any Commercial Recreation development being implemented.

As such, impacts on pedestrian, bicycle, and transit would be less than significant, and no mitigation is required.

### Level of Significance prior to Mitigation

Implementation of the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities. Impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Level of Significance after Mitigation

Impacts would be less than significant.



***Threshold 7: Implementation of the proposed project would not result in an insufficient supply of parking to meet the project demand.***

## Impact Discussion

### Employee Parking

The NCMT currently supports parking for the 362 existing employees; the proposed project may lead to an additional 212 employees, for a total of 574 employees. Employees would split into three separate shifts, amounting to approximately 192 employees per shift.

Parking is currently provided at the I-Lot on the NCMT; however, the current configuration would not provide sufficient parking for all employees (**Impact-TRA-1**). To accommodate the additional employees, Mitigation Measure **MM-TRA-1** requires that the proposed project re-stripe the I-Lot to provide 455 employee parking spaces, which is the maximum amount of spaces that I-Lot can accommodate. This amount of parking would be sufficient for two overlapping shifts and still have additional open spaces if needed. **Impact-TRA-1** would be less than significant with incorporation of **MM-TRA-1**.

### Removal of On-Street Parking

Closure of Quay Avenue, 28th Street, and 32nd Street would result in the loss of approximately 182 public parking spaces (110 on Quay Avenue, 40 on 28th Street, and 32 on 32nd Street) where there is currently a demand for 134 spaces. These closures would cause the existing parking demand to be shifted to adjacent or parallel roadways, such as Bay Marina Drive, Tideland Avenue and 28th Street (east of Quay Avenue). Based on observations, it appears that a majority of these parking spaces are occupied by NCMT employees between the peak AM and PM hours. Although a sufficient number of available parking spaces (approximately 183 as shown in Table 4.7-21) would accommodate the demand for 134 spaces displaced by the roadway closures, the parking spaces along 32nd Street may also serve the public uses located at the southern end of the terminal (Pepper Park and Pier 32 Marina). An occupancy study conducted during peak recreational use (i.e., over the weekend), displayed in Table 4.7-21, revealed that patrons of Pier 32 Marina did not need to rely on on-street parking, while Pepper Park was observed to reach capacity on the weekend and some patrons could have the need to rely on on-street parking along 32nd Street for access to the park. As shown in Table 4.7-22, there is sufficient excess parking available on 32nd Street to serve the existing park users and those potentially displaced from the road closures. Therefore, street closures along Quay Avenue, 28th Street and 32nd Street would not create a parking deficiency associated with the NCMT and would not result in the need for additional street parking. Consequently, impacts on on-street parking supply would be less than significant, and no mitigation is required.

**Table 4.7-22. NCMT Existing On-Street Parking Demand**

Roadway	Segment	Supply (Spaces)	Existing Demand (Occupied Spaces)	Excess Capacity
Bay Marina Drive	Quay Avenue to Tidelands Avenue	21	19	2
	Tidelands Avenue to Marina Way	49	30	19
Tidelands Avenue	Bay Marina Drive to 28th Street	98	42	56
	28th Street to 32nd Street	118	38	80
28 <sup>th</sup> Street	Quay Avenue to Tidelands Avenue	33	7	26
<b>Total</b>		<b>319</b>	<b>136</b>	<b>183</b>

Source: Appendix G.

**Table 4.7-22. Pepper Park and Pier 32 Existing Parking Demand**

Location	Supply (Spaces)	Existing Demand (Occupied Spaces)	Excess Capacity
Pier 32	218	137	81
Pepper Park	93	93	0
32nd Street (east of Tidelands)	58	22	36
<b>Total</b>	<b>396</b>	<b>252</b>	<b>117</b>

Source: Appendix G.

### Level of Significance prior to Mitigation

Implementation of the proposed project would result in an insufficient supply of parking to meet the project demand. Potentially significant impact(s) include:

**Impact-TRA-1: Insufficient On-Terminal Employee Parking.** Parking is currently provided at the I-Lot on the NCMT; however, the current configuration would not provide sufficient parking for all employees across three shifts.

### Mitigation Measures

**MM-TRA-1. Reconfigure I-Lot to Accommodate 455 Striped Parking Spaces.** Prior to implementation of any project component (i.e., renewal of an existing short-term use permit, approval of the CDP for the tank farm, or issuance of a new real estate agreement for the former Weyerhaeuser site), the project proponent shall restripe I-Lot to accommodate 455 standard vehicle parking spaces. Once completed, evidence indicating the completion of the striping shall be provided by the contractor or Project Applicant to the District, and the District shall be

permitted to confirm the parking area is being used as designed and consistent with this mitigation measure. Should the I-Lot be used for anything other than employee parking, such as vehicle/cargo storage, the project proponent shall present a parking study, created by a qualified transportation planner or engineer, to the District showing that such uses are not resulting in a shortage of employee parking within the National City Marine Terminal boundaries and no employees are parking outside the terminal as a consequence.

### **Level of Significance after Mitigation**

After the implementation of MM-TRA-1, Impact-TRA-1 would be reduced to less than significant because no parking storage would be present. Impacts would be less than significant with mitigation incorporated.

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## 5.1 Introduction

This chapter considers the cumulative effects of past, present, and reasonably foreseeable future projects and the proposed project's contribution to these effects. Past projects are defined as those that were recently completed and are now operational. Present projects are defined as those that are under construction but not yet operational. Reasonably foreseeable future projects are defined as those for which a development application has been submitted or credible information is available to suggest that project development is a probable outcome at the time the Revised NOP was issued.

With incorporation of mitigation measures, the proposed project would result in less than cumulatively considerable contributions to impacts from past, present, and reasonably foreseeable future projects for the following resources.

- Greenhouse Gas Emissions (up to 2020)
- Air Quality (operational NO<sub>x</sub>)

However, even with mitigation incorporated, implementation of the proposed project would result in cumulatively considerable and unavoidable contributions to impacts for the following resources.

- Greenhouse Gas Emissions (post-2020)

The proposed project's contribution to all other cumulative impacts would not be cumulatively considerable.

Table 5-1 summarizes the significant cumulative impacts and mitigation measures discussed in Section 5.3, *Cumulative Impact Analysis*, below.

**Table 5-1. Summary of Significant Cumulative Impacts and Mitigation Measures**

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Air Quality and Health Risk			
<b>Impact-C-AQ-1:</b> New Land Use Designations Not Accounted for in the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP).	<b>MM-AQ-1:</b> Update the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP) with New Growth Projections.	Less than Cumulatively Considerable	The temporary inconsistency with the current RAQS and SIP associated with the proposed land use designation changes would be rectified and the project would no longer be inconsistent.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
<b>Impact-C-AQ-2:</b> Emissions in Excess of Cumulative NO <sub>x</sub> Thresholds During Operations.	<b>MM-AQ-2:</b> Implement Diesel-Reduction Measures During Construction and Operations. <b>MM-AQ-3:</b> Comply with San Diego Unified Port District Climate Action Plan Measures. <b>MM-AQ-4:</b> Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance. <b>MM-AQ-5:</b> Replace Gasoline/Diesel Passenger Van with Electric Passenger Van.	Less than Cumulatively Considerable	Mitigation would reduce the project's contribution to cumulative operational NO <sub>x</sub> emissions, primarily associated with vessel transit, to a level below thresholds, which are designed to ensure that the region as a whole would not result in cumulative air quality impacts.
Greenhouse Gas Emissions, Climate Change, and Energy			
<b>Impact-C-GHG-1:</b> Project GHG Emissions up to 2020	<b>MM-GHG-1:</b> Implement Diesel-Reduction Measures During Construction and Operations. <b>MM-GHG-2:</b> Comply with San Diego Unified Port District Climate Action Plan Measures. <b>MM-GHG-3:</b> Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance. <b>MM-GHG-4:</b> Replace Gasoline/Diesel Passenger Van with Electric Passenger Van. <b>MM-GHG-5:</b> Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry.	Less than Cumulatively Considerable	Project GHG emissions achieve the CAP's reduction target for maritime projects (33%) and the project would comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs.
<b>Impact-C-GHG-2:</b> Project GHG Emissions Beyond 2020.	<b>MM-GHG-6:</b> Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry.	Significant and Unavoidable	Based on available science and the current regulatory scheme, reduction targets that would enable the project to reduce its fair share of post-2020 GHG emission are unknown at this time. In addition, there is no state-

<b>Summary of Potentially Significant Impact(s)</b>	<b>Summary of Mitigation Measure(s)</b>	<b>Level of Significance After Mitigation</b>	<b>Rationale for Finding After Mitigation</b>
			wide guidance document to indicate how to achieve the deep reductions set by EO S-03-05 and EO B-30-15.

## 5.2 Cumulative Methodology

According to Section 15130(b) of the State CEQA Guidelines, cumulative impact analysis may be conducted using one of two methods: the List Method, which includes “a list of past, present, and probable activities producing related or cumulative impacts”; or the Plan Method, which uses “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.” The cumulative analysis that follows for the majority of issue areas uses the List Method. However, because the project’s Transportation Impact Analysis bases the 2035 future year conditions on what is forecasted in the SANDAG Series 12 traffic model, the cumulative analyses for long-term transportation impacts as well as long-term traffic-related impacts associated with air quality, GHG emissions, and noise and vibration use the Plan Method.

### 5.2.1 Cumulative Projects List

Based on information provided by the District and the City of National City, 11 specific cumulative projects were considered in this analysis. The projects listed in the proposed project’s study area have had applications submitted or have been approved, are under construction, or have recently been completed. The cumulative projects identified in the study area are listed in Table 5-2 below (project numbering corresponds to numbers shown on Figure 5-1). Generally speaking, the geographic scope of the area affected by cumulative effects varies according to the issue area. The study area for each issue area is described further under the respective resource headings that follow.

**Table 5-2. Cumulative Projects List**

<b>Project #</b>	<b>Name</b>	<b>Location</b>	<b>Description</b>	<b>Status</b>
1	National City Aquatic Center	Southeastern corner of Pepper Park	This project consists of a 4,600-square-foot aquatic center in the southeastern corner of Pepper Park, north of the Sweetwater Channel, east of the Pepper Park boat launch ramp, and west of the Pier 32 National City Marina. The aquatic center, which is being constructed by the City of National City, includes a multi-purpose classroom, offices, a police storefront, lockers, showers, restrooms, boat and equipment storage, public art, landscape improvements, and promenades and walkways. Construction commenced in 2013 and is anticipated to be complete in 2016. Additional information on the environmental effects of this project is available at the District's Office of the District Clerk.	In construction from 2013–2016
2	Segment 5 of the Bayshore Bikeway	Tidelands Avenue between Civic Center Drive on the north and 32nd Street on the south, and on 32nd Street between Tidelands Avenue on the west and Marina Way on the east	SANDAG is proposing to construct Segment 5 of the Bayshore Bikeway on Tidelands Avenue between Civic Center Drive on the north and 32nd Street on the south, and on 32nd Street between Tidelands Avenue on the west and Marina Way on the east. This project was originally proposed as a Class I bike path; however, this project was not constructed. Additional information on the environmental effects of this project is available at the District's Office of the District Clerk. On December 9, 2014, the Board of Port Commissioners directed District staff to begin work on a Port Master Plan Amendment to identify an interim Bayshore Bikeway Class I bike path on the west side of Tidelands Avenue between Bay Marina Drive and 32nd Street. In October 2015, the District withdrew the Port Master Plan Amendment from consideration by the Coastal Commission as SANDAG indicated that they would instead pursue an interim Class II bike lane project along this route. SANDAG is now proposing an interim Class II alignment along Tidelands Avenue and an interim Class III alignment along 32nd Street.	Construction in mid-2016



<b>Project #</b>	<b>Name</b>	<b>Location</b>	<b>Description</b>	<b>Status</b>
3	Pavement Repair at 32nd Street	32nd Street west of Tidelands Avenue	Port District repairs to 32nd Street west of Tidelands Avenue. This project includes the grinding and overlaying of 2 inches of asphalt for a total of approximately 51,000 square feet, as well as replacing a concrete driveway and installing striping and pavement markings. Additional information on the environmental effects of this project is available at the District's Office of the District Clerk.	Completed in 2015
4	Wayfinding Signage Program	On and off of District tidelands	This project includes a Memorandum of Understanding (MOU) between the District and City of National City to fund the City's wayfinding signage program with funds from the District's Maritime Terminal Impact Fund. The MOU specifies the terms and conditions of payment to the City for the City's installation of various wayfinding signage to direct National City visitors and residents to key attractions, amenities, and features located on, or adjacent to, District tidelands. The signage would also help to enhance urban design; reinforce community identity; reduce confusion for drivers, pedestrians, and bicyclists; improve access for District tenants; improve land use compatibility with roadway network; and improve traffic flow and enhance safety. By creating wayfinding signage that is informative to traffic and pedestrians, National City intends to improve on-tidelands operations by providing a more efficient access to the NCMT, while directing trucks and industrial parking from the local streets and neighborhoods located off-tidelands. The placement and information provided on the wayfinding signage will attempt to identify routes for commercial, recreational, residential, visitor, and pedestrian uses promoting routes that are more agreeable to each user group, thus increasing efficiencies. The signs would be located on and off of District tidelands and are anticipated to be installed by the end of 2015. Additional information on the environmental effects of this project is available at the District's Office of the District Clerk.	To be completed by the end of 2015

<b>Project #</b>	<b>Name</b>	<b>Location</b>	<b>Description</b>	<b>Status</b>
5	NCMT Guardshack Roof Repair	Western end of Bay Marina Drive	This project consists of repairs to the roof of an existing guardshack at NCMT located at the western end of Bay Marina Drive. Construction commenced in December 2014 and was completed in February 2015. Additional information on the environmental effects of this project is available at the District's Office of the District Clerk.	Completed
6	ADA Accessibility Improvements	Pepper Park	This project consists of three wheelchair curb ramp modifications—one in Pepper Park and two near the entrance to Pepper Park. Construction began in early 2015 and was completed within 1 month. Additional information on the environmental effects of this project is available at the District's Office of the District Clerk.	Completed
7	NCMT Fire Alarm System Replacement	National City Marine Terminal (NCMT)	This project is replacing the existing fire alarm system at the NCMT. The project will include upgrading alarms, sensors, alarm pull handles, and wiring. The project was completed in December 2014. Additional information on the environmental effects of this project is available at the District's Office of the District Clerk.	Completed
8	Westside Infill Transit Oriented Development (WI-TOD)	South of 19th Street, west of Hoover Avenue, north of 22nd Street, and east of Harding Avenue	This project, also known as the Paradise Creek Affordable Housing Project, is a proposed 201-unit affordable housing and park development on the east side of Paradise Creek, and the expansion of Paradise Creek Educational Park on the west side of the creek. This project is incorporated into the Westside Specific Plan, which is a 100-acre plan to improve the health of the Westside community by promoting sustainable development and amortizing non-compatible land uses. The plan was adopted by the City of National City in 2010. The project site is approximately 13 acres of the 100-acre area and is generally located south of 19th Street, west of Hoover Avenue, north of 22nd Street, and east of Harding Avenue. The site consists of four parcels owned by the City and includes the National City Public Works Yard, the former Sun Diego Bus Charters maintenance facility, Paradise Creek, and Paradise Creek Educational Park. The site also includes portions of adjacent public rights-of-way that are generally undeveloped. This project was evaluated in the EIR for the Westside Specific Plan as 360 residential units, 450,000 square feet of office space, and 65,000 square feet of	In construction from 2015–2016

Project #	Name	Location	Description	Status
			retail space. The EIR identified significant environmental impacts associated with air quality, GHG emissions, noise, cultural resources, biological resources, and hazards and hazardous materials. Mitigation measures were required, and impacts on biological resources, cultural resources, and hazards and hazardous materials were reduced to less-than-significant levels with mitigation incorporated. However, even after mitigation, the plan's impacts on air quality and noise were determined to be significant and unavoidable, while the plan's cumulative contribution to significant cumulative impacts related to air quality, climate change (i.e., GHG emissions), noise, and traffic would be cumulatively considerable (City of National City 2010).	
9	NCMT Berth 24-10 Structural & Mooring Repair	National City Marine Terminal (NCMT)	This project is a Port District project that would maintain and repair Berth 24-10 at the NCMT. Construction is not budgeted or approved yet, but it is currently planned to be an option proposed for approval for Fiscal Year 2015/2016. If approved, construction is planned to span two fiscal years and be complete by the end of Fiscal Year 2016/2017.	If approved, in construction from Fiscal Years 2015–2017
10	Closure of Tidelands Avenue between Bay Marina Drive and 32nd Street	National City Marine Terminal (NCMT)	This project is a tenant project that would consist of the closure of Tidelands Avenue between Bay Marina Drive and 32nd Street for marine terminal activities. Closure of this roadway would require a Port Master Plan Amendment. Those activities are proposed to be primarily associated with the import/export, handling and storage of vehicles. The project is currently under review by the District and may commence CEQA review to commence in 2016. If approved, construction could occur by mid-2018.	If approved, to start construction by mid-2018
11	City of National City's Balanced Plan with Mitigation and Enhancements for National City	National City Bayfront, from approximately San Diego Bay on the west to the National Wildlife Refuge on the east, and 19th Street on the north to Sweetwater Channel on the south	City of National City's conceptual long-term land use plan for the National City Bayfront. Intent is to balance an increase of industrial uses with commercial and public uses.	Conceptual approval from National City Council in September 2015.

## 5.3 Cumulative Impact Analysis

The discussion below evaluates the potential for the proposed project to contribute to a cumulative adverse impact on the environment. For each resource area, an introductory statement is made regarding what would amount to a significant cumulative impact in a particular resource area.

The analysis that follows considers two separate impacts: the significance of the cumulative effect from past, present, and reasonably foreseeable projects; and, in the event a cumulative effect is identified, the proposed project's incremental contribution to the identified cumulative effect. If it is determined that the proposed project's contribution to the cumulative effect is considerable, a cumulatively significant impact is identified, and mitigation is imposed.

A cumulative analysis was provided in the initial study/environmental checklist (Appendix B-1), which determined that the proposed project's contribution to cumulative impacts for several resource topics would not be cumulatively considerable. The checklist determined that the project's contribution to cumulative aesthetics, biological resources, cultural resources, geology/soils, population/housing, public services, recreation, and utilities/service systems would not be cumulatively considerable. Correspondingly, no additional cumulative analysis is warranted for these 8 resource topics. Furthermore, given that the project would have no impact on agriculture and forest resources or mineral resources, it was determined that the proposed project would have no potential to result in cumulative impacts related to these resource areas. Thus, the cumulative analysis below addresses the project's incremental contribution to cumulative impacts associated with air quality and health risk; greenhouse gas emissions, climate change, and energy use; hazards and hazardous materials; hydrology and water quality; land use and planning; noise and vibration; and transportation, circulation, and parking. In relation to the Overlay, this analysis assumes the worst-case scenario because of the maritime industrial nature of the operation as any potential future commercial recreation development project is unknown. While a project-level review would be conducted prior to approval of or even a pre-approval commitment to any commercial recreation-related development to ensure compliance with CEQA, this analysis addresses what is reasonably foreseeable to occur at these two Overlay sites under the proposed project—continued maritime operations for 7 years. Furthermore, no reasonably foreseeable construction activities would occur as a result of this project.

### 5.3.1 Air Quality and Health Risk

Potential cumulative air quality impacts would result when cumulative projects' emissions would combine to degrade air quality conditions below attainment levels for the SDAB, delay attainment of air quality standards, impact sensitive receptors, or subject surrounding areas to objectionable odors. Neither the District nor SDAPCD have established quantitative thresholds to determine whether a project's incremental contribution to emissions would be cumulatively considerable. Therefore, the County of San Diego screening level thresholds for cumulative air quality impacts, based on the SDAPCD Rule 20.1 for non-major stationary sources, are used for the analysis of impacts related to emissions for proposed project construction and operations evaluated within the context of past, present, and reasonably foreseeable future projects. The substantial evidence for using the County and SDAPCD's threshold levels for this project is contained within Section 4.1.4.2 of this Draft EIR.



**Figure 5-1**  
**Cumulative Project Locations**  
**NCMT Tank Farm Paving and Streets Closures Project & PMPA Project**





### 5.3.1.1 Geographic Scope

The SDAB, which covers 4,260 square miles of southern California and is contiguous with San Diego County, represents the cumulative geographic scope for air quality impacts related to consistency with air quality plans and air quality threshold levels because plans and thresholds are established at the air basin-wide level to attain air quality standards that are assigned for the entire air basin, which in this case is the entire County. Cumulative impacts on sensitive receptors and odors are considered at a more localized level due to the more limited area of dispersion, and include the surrounding neighborhoods and areas close to the source of the emissions and odors, respectively.

### 5.3.1.2 Cumulative Effects

Past projects within the SDAB have involved the emissions of ozone precursors (ROG and NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub>, resulting in nonattainment status for 8-hour ozone under NAAQS and nonattainment status for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> under CAAQS. Therefore, the emissions of concern within the SDAB are ozone precursors (ROG and NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub>. The nonattainment status is a consequence of past and present projects and is subject to continued nonattainment status by the cumulative contribution of reasonably foreseeable future projects, such as those listed in Table 5-2. The reasonably foreseeable future projects that could contribute cumulative impacts to localized air quality conditions generally include construction related to the following nearby projects: National City Aquatic Center (Cumulative Project #1), Segment 5 of the Bayshore Bikeway (Cumulative Project #2), WI-TOD (Cumulative Project #8), NCMT Berth 24-10 Structural & Mooring Repair (Cumulative Project #9), Closure of Tidelands Avenue between Bay Marina Drive and 32<sup>nd</sup> Street (Cumulative Project #10), and City of National City's Balanced Plan with Mitigation and Enhancements for National City (Cumulative Project #11). Of these, only the construction phases of Cumulative Projects #8 and #9 would potentially overlap with construction of the proposed project. However, because past and present projects have resulted in the current nonattainment status for ozone (ROG and NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub>, and reasonably foreseeable future projects would continue to contribute to the nonattainment status and potentially impact sensitive receptors, impacts related to the cumulative contribution of nonattainment pollutants (ozone precursors, PM<sub>10</sub>, and PM<sub>2.5</sub>) and the exposure of sensitive receptors to substantial pollutant concentrations would be considered cumulatively significant.

### 5.3.1.3 Project Contribution

As discussed under Threshold 2 of Section 4.1, *Air Quality and Health Risk* and shown in Table 4.1-8, the proposed project would contribute emissions to the cumulative condition. Equipment and vehicles used during construction (on-road motor vehicles and construction equipment) and operations (ocean going vessels, auto carrier trucks, and locomotives) would result in a net increase in criteria pollutant emissions over existing conditions. During construction activities, criteria pollutant emissions would be below County of San Diego screening levels and SDAPCD trigger levels for all pollutants. Although the effects from past, present, and reasonably foreseeable future projects are considered cumulatively significant, the proposed project's incremental contribution from construction emissions would not result in a net increase in nonattainment pollutants as it would not exceed the SDAB's cumulative impact thresholds during project construction. Consequently, the proposed project's incremental contribution to this cumulative air quality impact would not be cumulatively considerable.

Additionally, as discussed under Threshold 2 of Section 4.1 and shown in Table 4.2-9, operations-related emissions would be above threshold levels for NO<sub>x</sub> before mitigation (**Impact-C-AQ-2**). As shown in Table 4.2-10, with Mitigation Measures **MM-AQ-2** through **MM-AQ-5**, operations-related emissions would be below threshold levels for NO<sub>x</sub>. As with the construction phase, the effects from past, present, and reasonably foreseeable future projects are considered cumulatively significant, and the proposed project's incremental contribution from operational emissions would not result in a net increase in nonattainment pollutants as NO<sub>x</sub> would not exceed the SDAB's cumulative impact thresholds after mitigation. Consequently, the proposed project's incremental contribution to cumulative air quality impacts during its operational stage would not be cumulatively considerable after mitigation is incorporated.

As discussed under Threshold 1 of Section 4.1, the proposed project would propose land uses (i.e., convert Streets to Marine Related Industrial and add temporary Marine Related Industrial Overlay to Commercial Recreation land use designation) that are not currently reflected in the most recent RAQS or SIP. This would result in an inconsistency with these applicable air quality plans, which are designed to bring the SDAB into attainment status for state and federal ozone standards (**Impact-C-AQ-1**). Consequently, Mitigation Measure **MM-AQ-1** would bring the project into consistency with the applicable air plans, eliminate the inconsistency, and result in a less than significant impact. Therefore, with the project being consistent after mitigation, its cumulative contribution to the cumulative impact on the applicable air quality plan would be less than cumulatively considerable.

#### 5.3.1.4 Level of Significance Prior to Mitigation

The proposed project's incremental contribution to cumulative impacts related to air quality and health risk would be cumulatively considerable prior to mitigation. Potentially cumulatively considerable impact(s) include the following.

**Impact-C-AQ-1: New Land Use Designations Not Accounted for in the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP).** The proposed project would re-designate Streets to Marine Related Industrial and would add a temporary Marine Related Industrial Overlay onto two parcels that are not currently designated as Marine Related Industrial. As these two land use changes were not known at the time the RAQS and SIP were last updated, this would result in a conflict with the applicable state and regional air quality plan.

**Impact-C-AQ-2: Emissions in Excess of Cumulative NO<sub>x</sub> Thresholds During Operations.** Emissions during operations would exceed the cumulative San Diego County SLTs for NO<sub>x</sub> at maximum capacity primarily due to vessel, train, and truck activity.

#### 5.3.1.5 Mitigation Measures

For Impact-C-AQ-1:

Implement **MM-AQ-1: Update the Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP) with New Growth Projections**, as described in Section 4.1, *Air Quality and Health Risk*.

For Impact-C-AQ-2:



Implement **MM-AQ-2: Implement Diesel-Reduction Measures During Construction and Operations**, as described in Section 4.1, *Air Quality and Health Risk*.

Implement **MM-AQ-3: Comply with San Diego Unified Port District Climate Action Plan Measures**, as described in Section 4.1, *Air Quality and Health Risk*.

Implement **MM-AQ-4: Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance**, as described in Section 4.1, *Air Quality and Health Risk*.

Implement **MM-AQ-5: Replace Gasoline/Diesel Passenger Van with Electric Passenger Van**, as described in Section 4.1, *Air Quality and Health Risk*.

### 5.3.1.6 Level of Significance After Mitigation

The temporary inconsistency with the current RAQS and SIP associated with the proposed land use designation changes (**Impact-C-AQ-1**) would be rectified with Mitigation Measure **MM-AQ-1**, and the project would no longer be inconsistent.

The proposed project's incremental contribution to cumulative air quality impacts (**Impact-C-AQ-2**) would not be cumulatively considerable and would be considered less than significant after implementation of Mitigation Measures **MM-AQ-2** through **MM-AQ-5** because project-related NO<sub>x</sub> would be reduced to a level below cumulative thresholds.

## 5.3.2 Greenhouse Gas Emissions, Climate Change, and Energy Use

There would be the potential for a cumulatively considerable GHG-related impact if the project would be inconsistent with the District's Climate Action Plan (CAP) reduction targets; non-compliant with regulatory programs outlined in the Scoping Plan and adopted by the California Air Resources Board (ARB) or other California agencies to reduce GHG emissions in 2020; inconsistent with the post-2020 reduction targets set forth through California EO S-03-05 and EO B-30-15; or non-compliant with plans, policies, and regulations promulgated to reduce GHG emissions post-2020. There would be the potential for a cumulatively considerable climate change impact if the project would expose property and persons to the physical effects of climate change including, but not limited to, flooding, public health risk, wildfire risk, or other impacts resulting from climate change. Finally, there would be the potential for a cumulatively considerable energy use-related impact if the project would contribute to a cumulatively significant impact related to the wasteful, inefficient, and unnecessary usage of direct or indirect energy.

### 5.3.2.1 Geographic Scope

Climate change is a cumulative issue, and the geographic scope for cumulative GHG emission impacts is global. Because climate change is the result of cumulative global emissions, no single project, when taken in isolation, can cause climate change—a single project's emissions are insufficient to change the radiative balance of the atmosphere. Because climate change is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, cumulative GHG emissions that contribute to global climate change will have a significant cumulative impact on the natural environment as well as on human development and activity. The global increase in GHG emissions that has occurred and will occur in the future is the result of the actions and choices of

individuals, businesses, local governments, states, and nations. Further, although climate change impacts will likely vary by geography and intensity, the impacts that will result from cumulative global emissions will be felt worldwide. The GHG and climate change analysis within Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*, is inherently a cumulative analysis. However, a summary of the discussion is provided below. Energy use is a regional issue and the geographic scope includes the service area of SDG&E.

### 5.3.2.2 Cumulative Effects

Past, present, and reasonably foreseeable future projects throughout the region, state, nation, and world, including but not limited to those projects listed in Table 5-2, have contributed to, and will continue to contribute to the cumulative impacts of global climate change. As with the proposed project, all the projects in Table 5-2, along with all other projects within the county, state, and region, would be required to comply with all applicable federal, state, and local policies and regulations regarding GHG emission reductions (e.g., AB 32, Pavley 1, Advanced Clean Cars, RPS, SB 350), adapting to climate change (e.g., sea level rise), and limiting energy use (e.g., Energy Policy Act and AB 2076). However, changes from past, present, and reasonably foreseeable future projects have contributed to and will continue to contribute to a cumulatively significant impact in the project vicinity.

Energy demand will continue to increase as SDG&E's service area accounts increase. However, on a project by project basis, energy demand is decreasing because of advances in energy technology and the cost-saving effects of using energy-efficient measures. Moreover, SDG&E will continue to increase its renewable energy mix as a percentage of its overall energy production, which will continue to provide reliable energy to present and future projects. Therefore, energy impacts from past, present, and reasonably foreseeable future projects are not cumulatively significant.

### 5.3.2.3 Project Contribution

As discussed under Threshold 1 of Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*, the proposed project would contribute GHG emissions to the cumulative condition. Equipment and vehicles used during construction (on-road motor vehicles and construction equipment) and operations (ocean going vessels, auto-carrier trucks, locomotives, electricity consumption, car processing, and worker trips) would result in a net increase in GHG emissions over existing conditions. Before mitigation, the proposed project would impede implementation of the District's CAP and statewide plans and strategies, as the project would exceed the CAP's reduction goal for 2020 for maritime activities (**Impact-C-GHG-1**), as shown in Tables 4.2-7 and 4.2-8 in Section 4.2. With Mitigation Measures **MM-C-GHG-1** through **MM-C-GHG-5** and compliance with state reduction measures, the proposed project would be consistent with the CAP's reduction goal for 2020 and, therefore, would be consistent with the CAP and statewide plans and strategies. However, the proposed project would not fully demonstrate substantial progress along a downward trajectory beyond 2020 toward 2030 and 2050 reduction targets given the uncertainty of statewide plans to achieve these targets and the amount of GHG emissions the project needs to achieve to contribute its fair share of reduction (**Impact-C-GHG-2**), as shown in Tables 4.2-7 and 4.2-8 in Section 4.2. With Mitigation Measures **MM-C-GHG-1** through **MM-C-GHG-6** and further implementation of state measures by 2030 and out to 2040 (i.e., through the life of the project), project GHG emissions demonstrate a downward trajectory and would be generally consistent with known statewide strategies to date, but the state has no framework (e.g., post-2020 Scoping Plan) to

achieve these targets. Therefore, while project emissions are generally in line with statewide targets and would help facilitate, rather than impede, local and statewide efforts to achieve the post-2020 targets in EO S-3-05 and EO B-30-15, the uncertainty of statewide target implementation at the local level, and the level of effort that will be required at the Port level to achieve these targets, is unknown at this time. Therefore, after mitigation, the proposed project would result in cumulatively considerable impacts related to GHG emissions because it may still impede the achievement of long-term state reduction targets.

Additionally, there is potential for the project site to be permanently and temporarily (during storm surges) inundated by sea water in the long-term future (i.e., near the end of the century). However, the project site would remain sufficiently above sea level rise projections throughout the life of the project (i.e., 2040). Thus, the threat is beyond the life of the project, and the project's incremental contribution to cumulative sea level rise impacts would be less than significant.

With respect to energy, the project would increase direct and indirect energy use at the project site, due to increased fuel combustion from mobile sources (truck activity, car processing, and worker vehicles), locomotives, and ocean going vessels, as well as electricity (for lighting). Electricity consumption is becoming increasingly renewable, as statewide renewable portfolio standards drive SDG&E's continued expansion of its renewable portfolio, with a goal of achieving 33% renewable sources by 2020 and recent legislative action of achieving 50% renewable sources by 2030. Moreover, GHG-related mitigation would act to reduce fuel consumption and energy, as GHG emissions (specifically CO<sub>2</sub>) are linked with energy consumption. Specifically, Mitigation Measures **MM-GHG-1** through **MM-GHG-4** would help reduce the use of fossil fuels in existing and future combustion engine associated with project operations. Fossil fuel energy would be further reduced by the incorporation of renewable energy project or the purchase of offsets that are linked to renewable energy production (i.e., **MM-GHG-5** and **MM-GHG-6**). Thus, no aspects of the proposed project would result in the use of energy in a wasteful, inefficient, and unnecessary manner, and the project would take steps to further reduce energy use beyond avoiding its wasteful, inefficient, and unnecessary use. Therefore, the project's incremental contribution to cumulative energy impacts would not be cumulative considerable.

#### 5.3.2.4 Level of Significance Prior to Mitigation

The proposed project's incremental contribution to cumulative impacts related to GHGs would be cumulatively considerable prior to mitigation. Potentially cumulatively considerable impact(s) include the following.

**Impact-C-GHG-1: Project GHG Emissions through 2020.** Project GHG emissions during combined project construction and operational activities, before mitigation, would not achieve the CAP's reduction target of 33% below unmitigated levels in 2020 and would only partially comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs.

**Impact-C-GHG-2: Project GHG Emissions Beyond 2020.** Although proposed project emissions would be on a downward trajectory in the post-2020 period, the proposed project's reduction in GHG emissions during combined project construction and operational activities, before mitigation, may not contribute sufficiently to post-2020 progress toward statewide 2030 and 2050 reduction targets and would be in non-compliance with plans, policies, and regulatory

programs adopted by ARB or other California agencies for post-2020 for the purpose of reducing the emissions of GHGs.

### 5.3.2.5 Mitigation Measures

For Impact-C-GHG-1:

Implement **MM-GHG-1: Implement Diesel-Reduction Measures During Construction and Operations**, as described in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*.

Implement **MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures**, as described in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*.

Implement **MM-GHG-3: Implement Vessel Speed Reduction Program Beyond Climate Action Plan Compliance**, as described in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*.

Implement **MM-GHG-4: Replace Gasoline/Diesel Passenger Van with Electric Passenger Van**, as described in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*.

Implement **MM-GHG-5: Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry**, as described in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*.

For Impact-C-GHG-2:

Implement **MM-GHG-6: Implement a Renewable Energy Project or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry**, as described in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*.

### 5.3.2.6 Level of Significance After Mitigation

The proposed project's incremental contribution to cumulative impacts related to consistency with the CAP, its reduction targets, and statewide reduction plans for 2020 (**Impact-C-GHG-1**) would not be cumulatively considerable after implementation of Mitigation Measures **MM-GHG-1** through **MM-GHG-5** because project GHG emissions would achieve the CAP's reduction target for maritime projects (33%) and the project would comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs.

The proposed project's incremental contribution to cumulative impacts related to GHG emissions and reduction targets and plans for post-2020 (**Impact-C-GHG-2**) would be cumulatively considerable after implementation of Mitigation Measures **MM-GHG-1** through **MM-GHG-6** because there are no known reduction targets that apply to the project based on its location and development type. In addition, there is no state-wide guidance document to indicate how to achieve the deep reductions set by EO S-03-05 and EO B-30-15.

The project's contribution to cumulative climate change (including sea level rise) and energy use impacts would not be cumulatively considerable.

### 5.3.3 Hazards and Hazardous Materials

A significant cumulative impact on hazards and hazardous materials would result if the proposed project were to contribute to impacts related to the routine transport, use, or disposal of hazardous materials; the release or emission of hazardous materials; or the interference of an adopted emergency response plan, when evaluated within the context of past, present, and reasonably foreseeable future projects. As identified in the analysis provided in the Initial Study/Environmental Checklist (Appendix B-1), project impacts are not expected to result from emitting hazardous materials near schools, being located on the list established by Government Code Section 65962.5, being located in proximity to airport or airstrip flight hazard areas, or exposing people to harm from wildfires. As such, cumulative impacts related to these issues are not evaluated.

#### 5.3.3.1 Geographic Scope

The hazards and hazardous materials geographic scope consists of the areas that could be affected by proposed project activities as well as areas affected by other projects whose activities could directly or indirectly affect the proposed activities on the project site. In general, projects occurring within 0.25 mile of the project site were considered in this analysis due to the localized nature of potential impacts associated with the release of hazardous materials into the environment.

#### 5.3.3.2 Cumulative Effects

There are several areas within 0.25 mile of the project site that involve the storage and/or use of hazardous materials. Eight hazardous materials sites identified during the database search are within a 0.25-mile radius of the proposed project (State Water Resources Control Board 2014). All sites have been granted closure, with the exception of the Pepper Oil Company site. The Pepper Oil Company is undergoing site assessments for contaminated groundwater. The site is approximately 300 feet northeast of the Quay Avenue and Bay Marina Drive intersection. However, while the presence of a contaminated site within the cumulative study area is necessary, it is not sufficient to conclude that a cumulatively significant impact is present. Evidence must suggest that the contamination has resulted in a cumulative condition to which other projects are contributing. This evidence was not encountered during the database research. As noted above, all but one of the hazardous materials sites in the project area have been granted closure, which means that remediation of the hazardous materials has occurred and the sites no longer contribute to threats to public health and safety or the environment, or contribute hazardous materials to other contaminated sites. The only site not granted closure is undergoing monitoring and assessment, and remediation at that site would ensure that further contamination of groundwater would not occur. Therefore, because it does not appear that cumulative impacts are occurring from past projects, the impact is less than cumulatively significant.

Present and reasonably foreseeable future projects within the cumulative study area could disrupt or result in the exposure of hazardous materials during construction activities; however, the risk for exposure to hazardous materials would be analyzed during project development. For projects having the potential to disrupt or result in the exposure of hazardous materials, mitigation measures during construction would be included to reduce potential impacts to a level below significance. These projects, like the proposed project, are required to comply with all federal, state, and local policies regarding hazards and hazardous materials, including the Resource Conservation and Recovery Act of 1976, the Department of Transportation Hazardous Materials Regulations, and the

local Certified Unified Program Agency regulations, which would reduce potential releases of hazardous materials into the environment. Because there is only one open-case hazardous materials sites within 0.25 mile of the project site—and present and reasonably foreseeable future projects would be subject to federal, state, and local hazardous materials laws—cumulative effects related to hazardous materials from past, present, and reasonably foreseeable future projects would be less than cumulatively significant.

### 5.3.3.3 Project Contribution

The proposed project's contribution to the less-than-significant cumulative hazards and hazardous materials impacts would be minimal. Construction activities would only occur at the tank farm and street closures where the sites would be graded, filled, and paved for vehicle storage, and at the former Weyerhaeuser site where two buildings would be demolished, followed by limited paving activities. No open contamination cases are present within the project sites, and the potential to encounter hazardous materials while excavation is occurring is low. However, if previously unidentified contamination is discovered, additional site assessment and cleanup would be required (County of San Diego 2009), pursuant to the existing laws summarized under Section 4.3.3, *Applicable Laws and Regulations* of Section 4.3, *Hazards and Hazardous Materials*. In addition, pursuant to OSHA regulations (29 CFR 1910, 1920, and 1926), the applicant would be required to prepare a site-specific site safety and health plan as well as a groundwater and soil management plan during construction activities as Mitigation Measure **MM-HAZ-1** and as conditions of approval for the project to further ensure the health and safety of workers and the environment.

Typical construction-related hazardous materials would be used during construction of the proposed project, including fuel, solvents, paints, oils, and grease. It is possible that any of these substances could be released during construction activities. However, compliance with federal, state, and local regulations described under Section 4.3.3, in combination with construction BMPs, would minimize any impacts. Consequently, the proposed project is not expected to create a significant hazard to the public or the environment through upset and accident conditions because no new acutely hazardous materials would be introduced at the project site.

Proposed project operations are not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Hazardous materials expected to be used, stored, or handled on site during normal project operations would consist of materials typical of vehicle maintenance and repair and would be located at the NCMT's warehouses where they are currently stored. These materials could include oils, greases, bonding materials, and other chemicals for maintenance and repair work. All materials would be stored and handled in accordance with federal, state, and local regulations and subject to inspection and requirements of the CUPA, in this case, the County DEH. This is currently the requirement for onsite storage of commonly used vehicle-related maintenance and repair hazardous materials and would continue to be with the proposed project.

Hazardous materials impacts from project construction or operational activities would be minimized through existing regulations, limited use of hazardous materials, and incorporation of BMPs and oversight by the local CUPA. Therefore, when combined with past, present, and reasonably foreseeable future project hazardous material impacts, the proposed project's small contribution would not be cumulatively considerable.

#### **5.3.3.4 Level of Significance Prior to Mitigation**

The proposed project's incremental contribution to cumulative impacts related to hazards and hazardous materials would not be cumulatively considerable.

#### **5.3.3.5 Mitigation Measures**

No mitigation is required.

#### **5.3.3.6 Level of Significance After Mitigation**

The proposed project's incremental contribution to cumulative hazards and hazardous materials impacts would not be cumulatively considerable and would be considered less than significant.

### **5.3.4 Hydrology and Water Quality**

A significant cumulative impact on hydrology and water quality would result if the proposed project were to contribute to impacts related to water quality standards violations, depletion of groundwater supplies or recharge, increased runoff in excess of available capacity, and alterations to drainage patterns, evaluated within the context of past, present, and reasonably foreseeable future projects. As identified in the analysis provided in the Initial Study/Environmental Checklist (Appendix B-1), project impacts are not expected to result from the placement of structures or housing within a 100-year flood hazard area. Therefore, cumulative impacts related to that issue are not evaluated.

#### **5.3.4.1 Geographic Scope**

The geographic scope of analysis for cumulative impacts on hydrology and water quality includes the Pueblo San Diego watershed, which includes all of the projects listed in Table 5-2.

#### **5.3.4.2 Cumulative Effects**

Past projects within the Pueblo San Diego watershed have contributed pollutants to the San Diego Bay as evidenced by the CWA Section 303(d) List of Water Quality Limited Segments Requiring TMDLs. Recent past, present, and future projects, as indicated in Table 5-2, could contribute pollutants such as oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens into the stormwater conveyance system and receiving waters. One of the projects listed in Table 5-2 would involve at least 1 acre of grading, the Westside Infill Transit Oriented Development (Cumulative Project #8). This project would be required to obtain an NPDES Construction General Permit, which requires preparation of a SWPPP and implementation of BMPs, as required by the SWPPP and the City of National City's Jurisdictional Runoff Management Plan (JRMP) to ensure runoff from individual projects meet current water quality standards. Similarly, other present and reasonably foreseeable future projects would be subject to regulations that require compliance with water quality standards, including state and local water quality regulations (such as the District's JRMP for projects within its jurisdiction) described in Section 4.4, *Hydrology and Water Quality*. However, because the San Diego Bay is currently an impaired water body, the cumulative effect of past, present, and reasonably foreseeable future projects may result in a cumulatively significant water quality impact.

### 5.3.4.3 Project Contribution

A cumulatively significant impact on hydrology and water quality presently exists because of the San Diego Bay's status as an impaired water body and the potential for present and future projects to further degrade the water body. The proposed project would require approximately 7 weeks of construction, a portion of which would be related to demolition, excavation, and grading activities. Because the project sites are greater than 1 acre, a SWPPP is required. The SWPPP would include BMPs that would be implemented to protect stormwater runoff and include monitoring of BMP effectiveness. At a minimum, BMPs would include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater and runoff. The SWPPP would specify properly designed, centralized storage areas that keep these materials out of the rain. If grading must be conducted during the rainy season, both erosion and sediment control BMPs would be required to keep sediment on the site. The project will be required to implement all minimum BMPs for construction activities.

In addition to the state-required SWPPP, the project applicant will also be required to implement the minimum BMPs that the District has identified for construction activities in tidelands pursuant to the Municipal Permit and the District's JRMP. Although one SWPPP may be prepared for the project, the SWPPP will be required to incorporate both the SWRCB General Construction Permit requirements and the District's JRMP requirements. All of the construction-related minimum BMPs listed in the District JRMP will be required to be implemented for the project.

Operations at the project sites would involve an increase in vehicle traffic as vehicles are driven to the sites and temporarily stored. Although the vehicles are typically new and in good working order, there may be occasional leakage of vehicle fluids (oil, grease, and petrochemicals) that could build up over time on impervious surfaces and discharge in runoff when the wet season begins.

The District's Article 10 (Stormwater Management and Discharge Control Ordinance) and the JRMP include specific requirements for all development and redevelopment activities. Pursuant to the District's JRMP and the District BMP Design Manual, post-construction BMPs are required for all priority development projects. Minimum BMPs consistent with the District BMP Design Manual require the use of site design BMPs, as well as source control and treatment control BMPs. Additionally, a post-construction SWQMP must also be included for all priority development projects. These requirements are discussed under Section 4.4.3, *Applicable Laws and Regulations*, and primarily under Section 4.4.3.3, *Local*.

Therefore, the proposed project's incremental contribution to significant cumulative water quality impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

### 5.3.4.4 Level of Significance Prior to Mitigation

The proposed project's incremental contribution to cumulative impacts related to hydrology and water quality would not be cumulatively considerable.

### 5.3.4.5 Mitigation Measures

No mitigation is required.



### 5.3.4.6 Level of Significance After Mitigation

The proposed project's incremental contribution to cumulative impacts related to hydrology and water quality would not be cumulatively considerable and therefore would be less than significant.

## 5.3.5 Land Use and Planning

Cumulatively considerable impacts from past, present, and future projects are determined by whether there are cumulative inconsistencies with the applicable land use plans that have resulted or will result in significant physical impacts or by the past, present, or future physical division of established communities.

### 5.3.5.1 Geographic Scope

The geographic scope of analysis for cumulative land use and planning impacts to which the proposed project may contribute includes the jurisdiction of the District (PMP) and National City (General Plan and LCP). There are 11 projects listed as past, present, and reasonably foreseeable future projects within the geographic study area.

### 5.3.5.2 Cumulative Effects

Several cumulative projects have recently been approved, as indicated in Table 5-2. Cumulative projects would have the potential to result in a cumulative impact if they would, in combination, conflict with existing land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental impact. All projects within the District's jurisdiction must be consistent with the PMP or must follow the amendment process to ensure consistency if changes to the PMP are needed to allow a development. The amendment process requires that the projects are consistent with the Coastal Act, Port Act, and Public Trust Doctrine. Projects located in the City of National City, such as Cumulative Project #8, had to demonstrate consistency with the National City General Plan. As such, it is not expected that these projects would result in a cumulatively significant land use impact.

### 5.3.5.3 Project Contribution

As discussed in Section 4.5, *Land Use and Planning*, the proposed land use changes would not result in land use designations that would be incompatible with existing PMP land use designations on site. The project includes a temporary Marine Related Industrial Overlay. No construction is proposed for either of the sites with the Overlay. Additionally, commercial recreational development is not proposed and therefore, details are unknown at this time. However, project-level review would be conducted prior to approval of any commercial development. Because the proposed land uses on the portions of the short-term permit sites that are designated as Tourist Commercial (in the City's LCP) or designated as Commercial Recreation in the PMP are already on the project site, and the project includes a Marine Related Industrial Overlay to allow for continuance of the maritime uses on a short-term temporary basis to accommodate more of the same types of existing uses (i.e., marine terminal operations, including import, export, handling, and storage of motor vehicles, and cargo transport), the proposed land use changes associated with the Marine Related Industrial Overlay would not result in land use designations that would be incompatible. Furthermore, the proposed amendment to the PMP would satisfy land use designation requirements, bringing the project into consistency with the PMP. As discussed above, past, present, and future projects within the

cumulative study area are generally consistent with the local land use plans, policies, and regulations because they have been accounted for by being within the development projections described in the PMP and City of National City plans, depending on which jurisdiction the project would fall within. Therefore, the impact is less than cumulatively significant, and the proposed project's contribution to this less-than-significant cumulative impact would not result in a cumulatively considerable effect.

#### **5.3.5.4 Level of Significance Prior to Mitigation**

The proposed project's incremental contribution to cumulative impacts related to land use and planning would not be cumulatively considerable.

#### **5.3.5.5 Mitigation Measures**

No mitigation is required.

#### **5.3.5.6 Level of Significance After Mitigation**

The proposed project's incremental contribution to cumulative land use and planning impacts would not be cumulatively considerable and would be considered less than significant.

### **5.3.6 Noise and Vibration**

A significant cumulative impact on noise and vibration would result if the proposed project were to contribute to impacts related to exceedances in noise standards, groundborne vibration, or ambient noise levels when evaluated within the context of past, present, and reasonably foreseeable future projects. Impacts related to air traffic noise were determined to have no impacts in the Initial Study/Environmental Checklist (Appendix B-1) and, as such, cumulative impacts related to air traffic noise are not evaluated.

#### **5.3.6.1 Geographic Scope**

Past projects have changed the area around the project site from its natural state to a highly developed, industrial area with the primary role of goods movement.

The geographic scope for identifying present and future projects includes a 0.5-mile radius around the project sites. In addition, because the operational traffic noise analysis considers both near-term (opening year) and future conditions with and without the project, cumulative noise impacts are considered along all the analyzed roadway segments that would serve project-related traffic.

#### **5.3.6.2 Cumulative Effects**

In general noise is a highly localized effect and noise point sources that are separated by at least 500 feet typically do not influence each other. Thus, there is no meaningful cumulative effect between two noise sources that are separated by 500 feet. For example, the WI-TOD project (Cumulative Project #8) is approximately 0.75 mile from the location of the proposed project construction activities, so there would be no meaningful cumulative noise effects from concurrent construction and operation activities at the project sites. Although there are a few projects within the vicinity of the project area with construction that may overlap and operations that would coexist, the lack of sensitive noise receptors directly surrounding the majority of the project sites

and the relatively short construction timeframes would minimize the amount of overlap and ensure highly sensitive individuals would not be exposed to noise levels that exceed the City's noise ordinance. Therefore, construction and operational noise from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

Construction vibration effects are highly localized as well. The projects listed in Table 5-2 would not likely combine to produce cumulative vibration impacts given the relative distances from each other and the short construction durations. Therefore, vibration effects from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

Cumulative traffic noise levels are summarized in Table 5-3. The only noise-sensitive receptor along the analyzed roadway segments that would serve project-related traffic is the Best Western Marina Gateway hotel, which is adjacent to Bay Marina Drive and Marina Way. The estimated worst case cumulative noise level of 69.4 dB CNEL (at the closest façade of the hotel) is *conditionally compatible* under the City's compatibility guidelines for visitor accommodations. Typical commercial construction provides approximately 25 dB of exterior-to-interior noise reduction with windows closed (the hotel is air conditioned, which allows the windows to remain closed); therefore, the interior noise levels at the hotel would comply with the City's standard of 45 dB CNEL ( $69.4 - 25 = 44.4$  dB CNEL). There are no other existing or planned noise-sensitive receptors along the analyzed roadways. Therefore, traffic noise from past, present, and reasonably foreseeable future projects would be considered less than cumulatively significant.

Cumulative railroad noise levels for up to two nighttime train trips (i.e., one round trip) per day would be approximately 60 dB CNEL at the Best Western Marina Gateway hotel and 54 dB CNEL at the Naval recreational facilities. These are the closest noise-sensitive receptors to the railroad at the NCMT. Referring to the City's noise compatibility guidelines (Figure 4.6-2) these noise levels are well within the compatibility guidelines for the respective land uses (65 dB CNEL for visitor accommodations and 70 dB CNEL for athletic fields). Therefore, railroad noise from past, present, and reasonably foreseeable future projects would be considered less than cumulatively significant.

### 5.3.6.3 Project Contribution

Based on the standards contained in the City's municipal code, noise and vibration from construction activities is effectively assessed based on distinct single events such as short-term (1 second)  $L_{max}$  noise levels from construction equipment or the instantaneous vibration (PPV) from a single piece of equipment. Therefore, the noise and vibration levels experienced at any specific time at a given receptor are typically dominated by a single piece of construction equipment, and the cumulative increase due to additional pieces of equipment is minimal. Consequently, even if other construction projects (e.g. Cumulative Project #9) occur in the project vicinity concurrently with the proposed project, the cumulative noise and vibration impacts would be minimal and would not result in a cumulatively considerable contribution to cumulative construction noise impacts.

Table 4.6-12 of Section 4.6, *Noise and Vibration*, summarizes predicted operational noise levels from the project at nearby receptors. Predicted operational noise levels at the nearest homes (5 dB below threshold), Naval recreational facilities (17 dB below threshold), Pepper Park (10 dB below threshold), and the Best Western Gateway Hotel (10 dB below threshold) are all below the applicable City of National City noise standards. Therefore, because the project's stationary operational noise levels are so far below thresholds and the cumulative noise condition is not

cumulatively significant, the proposed project's cumulative contribution would be less than cumulatively considerable.

As shown in Table 5-3, the project would increase noise levels along Bay Marina Drive by up to 0.8 dB CNEL closer to the NCMT and up to 0.3 dB CNEL near the Best Western Marina Gateway Hotel. A 0.3–0.8 dB increase in CNEL would not be perceptible, and cumulatively the overall noise levels would remain less than significant at sensitive noise receptors such as the hotel because the long-term cumulative noise level with the project would be 69.7 dB CNEL at the façade and 44.7 dB CNEL within the interior ( $69.7 - 25 = 44.7$  dB CNEL). Therefore, because the project would not cause the traffic noise to exceed the applicable traffic noise threshold, the project's incremental contribution to cumulative traffic noise would not be cumulatively considerable.

Cumulative railroad noise levels for up to two nighttime train trips (i.e., one round trip) per day would include the project's contribution. As discussed above, the noise levels would be approximately 60 dB CNEL at the Best Western Marina Gateway hotel and 54 dB CNEL at the Naval recreational facilities. These are the closest noise-sensitive receptors to the railroad at the NCMT. Referring to the City's noise compatibility guidelines (Figure 4.6-2) these noise levels are well within the compatibility guidelines for the respective land uses (65 dB CNEL for visitor accommodations and 70 dB CNEL for athletic fields). Therefore, the project's contribution to railroad noise from past, present, and reasonably foreseeable future projects would not be cumulatively considerable.

**Table 5-3. Estimated Traffic Noise Levels**

Estimated Unmitigated Traffic Noise Levels at 50 feet <sup>a</sup> from Roadway Centerline (dB CNEL)								
Roadway/ Segment	2016 without Project	2016 with Project	Increase over 2016 with Project	Future without Project	Future with Project	Increase over Future without Project	Nearby Sensitive Receptor?	Significant ?
Bay Marina Drive								
Tidelands Ave – Quay Ave	64.8	65.6	0.8	66.7	67.5	0.8	No	No
W 32nd St – Tidelands Ave	67.2	68.0	0.8	68.9	69.7	0.8	No	No
Cleveland Ave – Harrison Ave (50-foot setback)	69.5	69.9	0.4	72.9	73.2	0.3	No	No
Cleveland Ave – Harrison Ave (110-foot setback)	66.0	66.5	0.5	69.4	69.7	0.3	Yes—Best Western Marina Gateway hotel	No
I-5 SB Off-Ramp – Cleveland Ave	71.4	71.7	0.3	73.2	73.5	0.3		No
Quay Avenue								
Bay Marina Dr – 28th St	57.1	0.0 <sup>b</sup>	-57.1	60.1	0.0 <sup>b</sup>	-60.1	No	No
Tidelands Avenue								
19th St – Bay Marina Dr	63.1	63.6	0.5	68.5	68.7	0.2	No	No
Bay Marina Dr – 28th St	64.5	65.5	1.0	66.0	67.1	1.1	No	No
28th St – 32nd St	63.0	63.5	0.5	66.0	66.4	0.4	No	No
28th Street								
Terminal – Quay Ave	49.4	0.0 <sup>b</sup>	-49.4	50.6	0.0 <sup>b</sup>	-50.6	No	No
Quay Ave – Tidelands Ave	58.9	57.4	-1.5	60.7	59.2	-1.5	No	No
CNEL = community noise equivalent level, the average A-weighted noise level during a 24-hour day, which is obtained by adding 5 dB to sound levels in the evening (7 p.m. to 10 p.m.) and 10 dB to sound levels in the nighttime (10 p.m. and 7 a.m.).								
<sup>a</sup> A typical setback of 50 feet is used for all roadway segments except where specified for Bay Marina Drive between Cleveland Avenue and Harrison Avenue.								
<sup>b</sup> Street segment closed as a result of the project.								

#### 5.3.6.4 Level of Significance Prior to Mitigation

The proposed project would not contribute to impacts related to exceedances in noise standards, groundborne vibration, or ambient noise levels when evaluated within the context of past, present, and reasonably foreseeable future projects, and the impact would be less than significant.

#### 5.3.6.5 Mitigation Measures

No mitigation is required.

#### 5.3.6.6 Level of Significance After Mitigation

The proposed project's incremental contribution to cumulative impacts related to noise and vibration would not be cumulatively considerable and would be considered less than significant.

### 5.3.7 Transportation, Circulation, and Parking

Cumulative impacts on transportation, circulation, and parking could result when past, present, and reasonably foreseeable future projects combine to result in unacceptable roadway, intersection, or freeway ramp operations; inadequate pedestrian or bicycle facilities; or inadequate mass transit capacity and lowered service. A significant impact on roadway segment or intersection operations would occur if the proposed project caused a segment or intersection to degrade to LOS E or LOS F. Additionally, impacts on segments, intersections, or freeways would occur if any of the criteria in Table 5-4 are exceeded. Impacts on alternative transportation modes are considered, which include determining if there is sufficient pedestrian, bicycling, and mass transit facilities. Finally, cumulative parking impacts are also analyzed below based on whether there is sufficient supply to meet the projected demand.

**Table 5-4. Measure of Significant Project Traffic Impacts**

Level of Service (LOS) with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E & F (or ramp meter delays above 15 min)	0.01	1	0.02	1	2	2

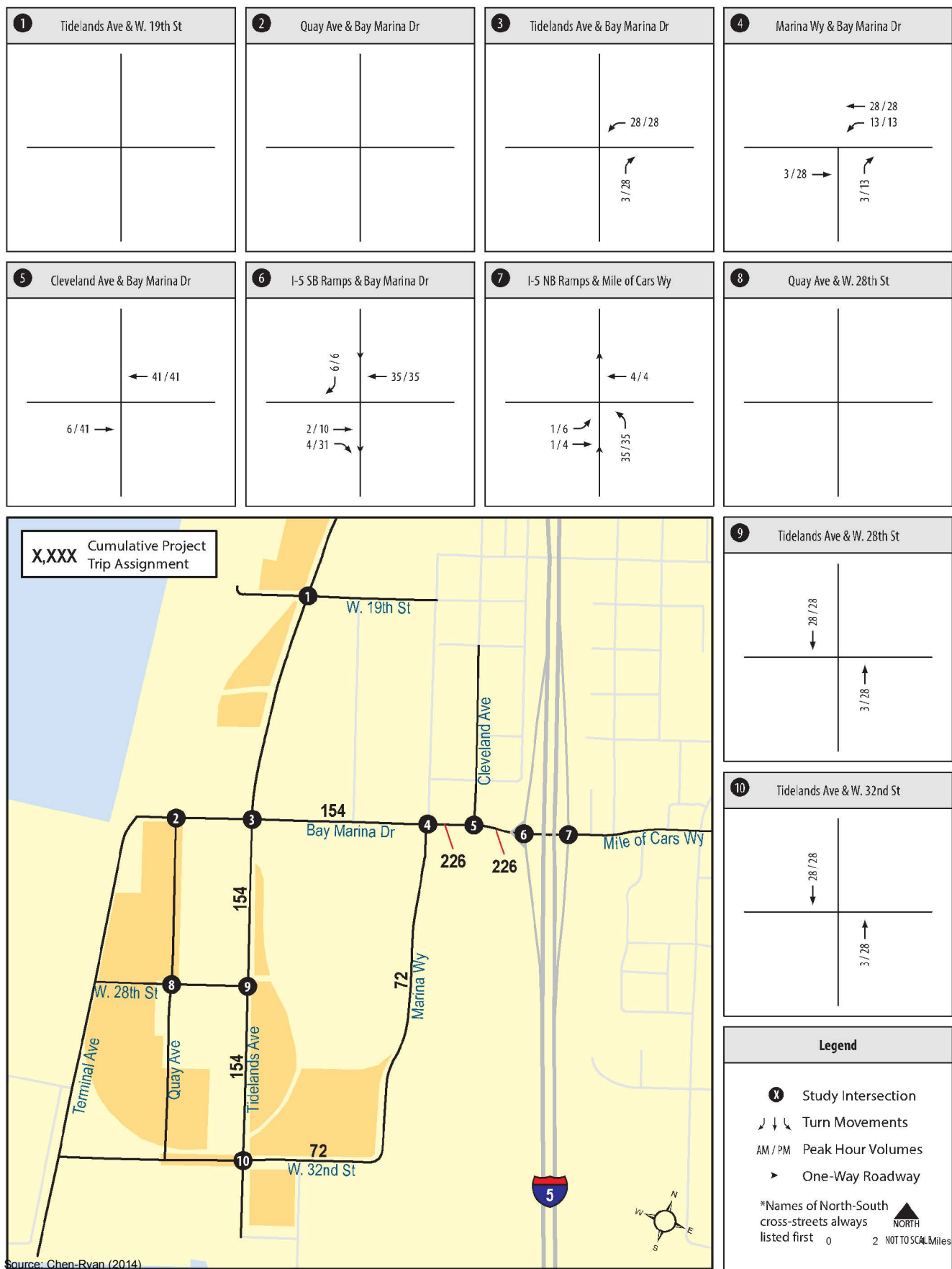
Source: Appendix G

#### 5.3.7.1 Geographic Scope

The geographic scope for cumulative transportation, circulation, and parking impacts includes all intersections and roadway segments to which the project would contribute 50 or more peak hour trips.

#### 5.3.7.2 Cumulative Effects

Future Year 2016 baseline daily roadway volumes and intersection turning movements were derived from reviewing the traffic analyses available for the projects listed in the project cumulative list, as shown in Table 5-5. Figure 5-2 illustrates the distribution of cumulative trips in the study



**Figure 5-2**  
**Cumulative Project Trip Assignments (Year 2016)**  
**NCMT Tank Farm Paving and Streets Closures Project & PMPA**





area. All other projects listed in Table 5-2 would not contribute trips within the project study area, either because they would not generate operational trips or because they would be east of I-5 and their trip distribution would not enter the project study area.

**Table 5-5. Cumulative Projects Vehicular Trip Generation**

#	Project	ADT	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
1	National City Aquatic Center	226	41	6	41	41
2	Bayshore Bikeway Segment 5	0	0	0	0	0
<b>Total</b>		<b>226</b>	<b>41</b>	<b>6</b>	<b>41</b>	<b>41</b>

Source: Appendix G.

ADT = average daily traffic; TIA = Transportation Impact Analysis

Future year traffic conditions were assumed at 2030 and developed by comparing existing daily roadway segment volumes to the forecasted future year daily volumes contained in the National City Circulation Element Traffic Impact Study. The daily roadway volumes contained in the Circulation Element assumes full buildout, but does not contain a specific year. Therefore, 2030 conditions are based on the land use development and transportation network assumptions outside of the City, which reflect 2030 conditions.

Additionally, the District is currently considering a proposal to close Tidelands Avenue south of Bay Marina Drive (Cumulative Project #10). Although the closure of Tidelands Avenue is not a part of the proposed project, it is a reasonably foreseeable future project. Therefore, an analysis with both Tidelands Avenue remaining open and cumulative analysis with it closed are provided.

The following scenarios are described below.

- Opening Year Baseline (Near-Term Year 2016).
- Long-term Baseline (Future Year 2030).
- Long-term Baseline (Future Year 2030) and Tidelands Avenue Closed.
- Opening Year Baseline (Near-Term Year 2016) Plus Project Conditions.
- Long-term Baseline (Future Year 2030) Plus Project Conditions.
- Long-term Baseline (Future Year 2030) and Tidelands Avenue Closed Plus Project Conditions.

### Opening Year Baseline (Near-Term Year 2016)

#### Roadway Segments

Figure 5-3 shows the traffic volumes along roadway segments with near-term future projects in place. As displayed in Table 5-6, roadway segments during the anticipated opening year for the proposed project are projected to operate at LOS A. Therefore, all cumulative impacts on study area roadway segments in 2016 would not be cumulatively significant.

**Intersections**

Figure 5-3 shows the traffic volumes at intersections with near-term future projects in place. As displayed in Table 5-7, intersections are predicted to operate at LOS C or better during the project's opening year. Therefore, the cumulative effects from past, present, and reasonably foreseeable future projects on intersections in the study area would not be cumulatively significant.

**Ramp Intersection Capacity Analysis**

Table 5-8 indicates operation at the I-5 southbound (SB)/Bay Marina Drive and I-5 northbound (NB)/Bay Marina Drive and I-5 off-ramp intersection would remain Under Capacity with past, present, and future projects forecasted in 2016. Therefore, impacts from past, present, and future projects would not be cumulatively significant.

**Queuing Analysis**

Table 5-9 indicates off-ramp queue lengths would remain in the projected 95th percentile, and key study off-ramp queue lengths are not projected to exceed their ramp storage lengths. Therefore, impacts from past, present, and future projects would not be cumulatively significant.

**Freeway Segment Level of Service**

Table 5-10 indicates key study freeway mainline LOS would operate at acceptable LOS D or better with past, present, and future projects forecasted in 2016, with the exception of 8th Street and Civic Center Drive, which would operate at LOS E in the NB direction. Therefore, the effect on 8th Street and Civic Center Drive NB from past, present, and reasonably foreseeable future projects in 2016 would be cumulatively significant; all other cumulative impacts on study area freeway segments in 2016 would not be cumulatively significant.

**Long-term Baseline (Future Year 2030)****Roadway Segments**

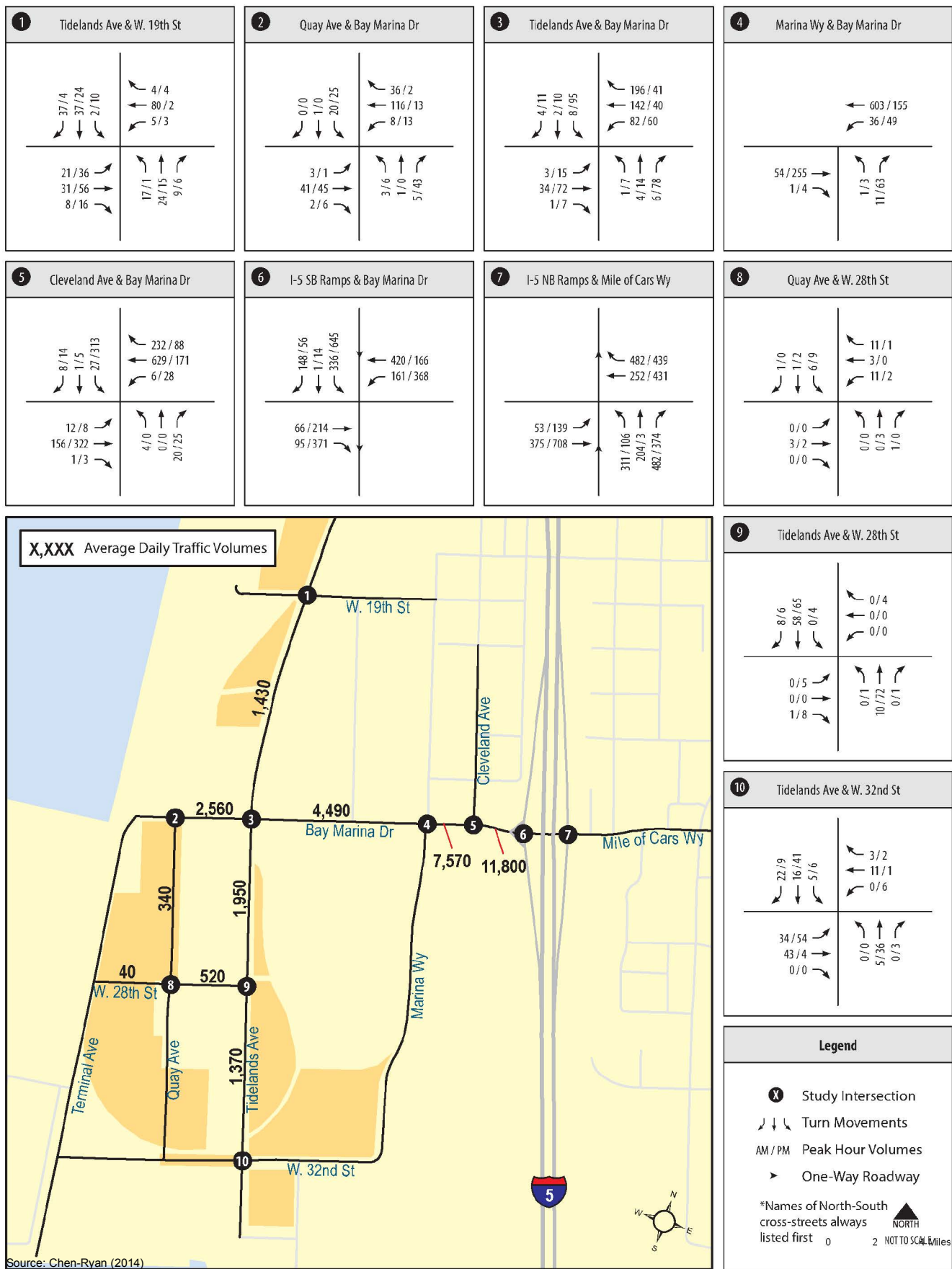
Figure 5-4 shows the traffic volumes along roadway segments with long-term future projects in place. Table 5-11 shows roadway segments are projected to operate at LOS C or better in the long term. Therefore, long-term cumulative impacts on study area roadway segments would not be cumulatively significant.

**Intersections**

Figure 5-4 shows the traffic volumes at intersections with long-term future projects in place. As displayed in Table 5-12, intersections are, in the long-term, predicted to operate at LOS C or better. Therefore, long-term cumulative impacts on study area intersections would not be cumulatively significant.

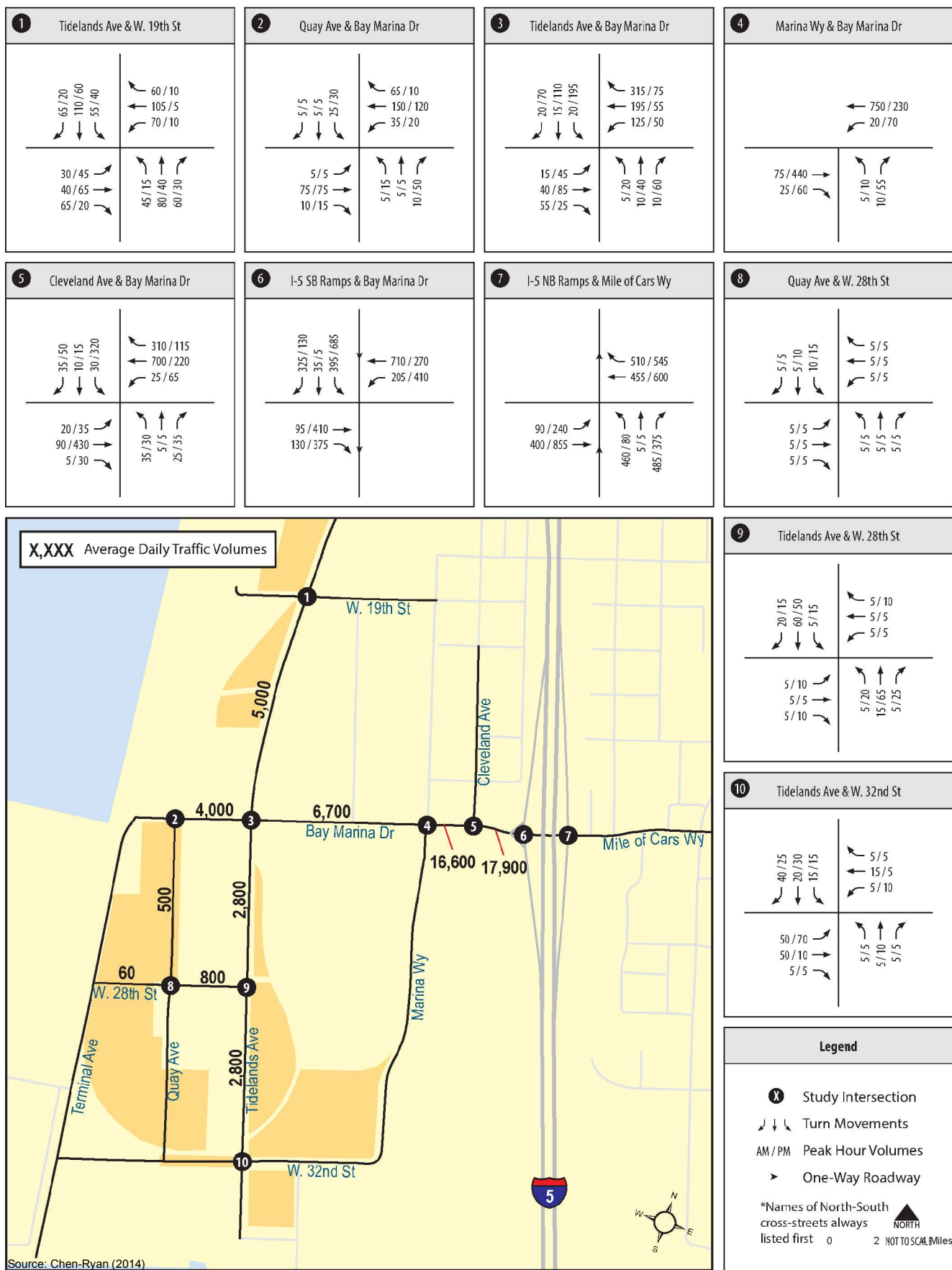
**Ramp Intersection Capacity Analysis**

Table 5-13 indicates operation at the I-5 SB and NB/Bay Marina Drive signalized ramp intersections would remain Under Capacity with past, present, and future projects forecasted through 2030. Therefore, long-term impacts from past, present, and future projects would not be cumulatively significant.



**Figure 5-3**  
**Cumulative Project Traffic Volumes (Year 2016)**  
**NCMT Tank Farm Paving and Streets Closures Project & PMPA**





**Figure 5-4**  
**Cumulative Project Traffic Volumes (Year 2035)**  
**NCMT Tank Farm Paving and Streets Closures Project & PMPA**



**Queuing Analysis**

Table 5-14 indicates operation at the I-5 SB and NB/Bay Marina Drive intersection queuing would not exceed their ramp storage lengths with past, present, and future projects forecasted through 2030. Therefore, long-term impacts from past, present, and future projects would not be cumulatively significant.

**Freeway Segment Level of Service**

Table 5-15 indicates key study area freeway mainline LOS would operate at acceptable LOS D or better with past, present, and future projects forecasted in 2030, with the exception of 8th Street and Civic Center Drive, which would operate at LOS F in the NB direction and LOS E in the SB direction; and Civic Center Drive and Bay Marina Drive, which would operate at LOS E in the SB direction. Therefore, the impact on 8th Street and Civic Center Drive NB and SB, and Civic Center Drive and Bay Marina Drive SB from past, present, and reasonably foreseeable future projects in 2030 would be cumulatively significant; all other cumulative impacts on study area freeway segments in 2030 would not be cumulatively significant.

**Long-term Baseline (Future Year 2030) and Tidelands Avenue Closed****Roadway Segments (Tidelands Avenue Closed)**

Figure 5-5 shows the traffic volumes along roadway segments with long-term future projects in place and Tidelands Avenue closed. Table 5-16 shows roadway segments are projected to operate at LOS C or better in the long-term. Therefore, long-term cumulative impacts on study area roadway segments would not be cumulatively significant with Tidelands Avenue closed.

**Intersections (Tidelands Avenue Closed)**

Figure 5-5 shows the traffic volumes at intersections with long-term future projects in place and Tidelands Avenue closed. As displayed in Table 5-17, intersections are, in the long-term, predicted to operate at LOS C or better. Therefore, long-term cumulative impacts on study area intersections would not be cumulatively significant with Tidelands Avenue closed.

**Ramp Intersection Capacity Analysis (Tidelands Avenue Closed)**

Table 5-18 indicates operation at the I-5 SB and NB/Bay Marina Drive signalized ramp intersections would remain Under Capacity with past, present, and future projects forecasted through 2030 and Tidelands Avenue closed. Therefore, long-term impacts from past, present, and future projects would not be cumulatively significant with Tidelands Avenue closed.

**Queuing Analysis (Tidelands Avenue Closed)**

Table 5-19 indicates operation at the I-5 SB and NB/Bay Marina Drive intersection queuing would not exceed their ramp storage lengths with past, present, and future projects forecasted through 2030 and Tidelands Avenue closed. Therefore, long-term impacts from past, present, and future projects would not be cumulatively significant when including closure of Tidelands Avenue.

**Freeway Segment Level of Service (Tidelands Avenue Closed)**

Table 5-20 indicates key study area freeway mainline LOS would operate at acceptable LOS D or better with past, present, and future projects forecasted in 2030 with Tidelands Avenue closed, with

the exception of 8th Street and Civic Center Drive, which would operate at LOS F in the NB direction and LOS E in the SB direction; and Civic Center Drive and Bay Marina Drive, which would operate at LOS E in the SB direction. Therefore, the impact on 8th Street and Civic Center Drive NB and SB, and Civic Center Drive and Bay Marina Drive SB from past, present, and reasonably foreseeable future projects in 2030 would be cumulatively significant; all other cumulative impacts on study area freeway segments in 2030 would not be cumulatively significant.

### **Cumulative Parking Impacts**

Cumulative Project #10 would close Tidelands Avenue, resulting in the loss of up to 216 on-street parking spaces. However, as this analysis does not specifically look at the impacts from Cumulative Project #10 in detail, it is not known if these spaces are generally used by employees working within the terminal and the associated marine related industrial facilities. If it is determined that these spaces are used by terminal employees, the terminal would be required to provide sufficient parking on the terminal to replace the loss of on-street parking. Additionally, if a public parking shortage would result from its closure, additional parking would need to be identified and secured. However, as noted on Table 9.2 of Appendix G, there is significant supply of available on-street parking that is anticipated to accommodate overflow of recreational facility users at Pepper Park, Pier 32 Marina, and the National City Aquatic Center (Cumulative Project #1) even with the loss of Tidelands Avenue. Therefore, because it is anticipated that Cumulative Project #10 would be required to provide on-terminal parking for any loss of on-street employee parking and because there is a sufficient on-street parking supply for the general public to access the Park/Plaza and Commercial Recreation land uses in the area, cumulative impacts on parking are considered less than significant.

### **Cumulative Effects on Emergency Access**

Cumulative Project #10 would close Tidelands Avenue and may result in impacts on emergency access to facilities south of Tidelands Avenue that currently use Tidelands Avenue for access. Emergency access could continue to use Marina Way to access facilities at Pier 32 Marina, Pepper Park, and the National City Aquatic Center. In addition, electronic access through the terminal could be provided to the Fire Department to provide an additional means of accessing sites south of Tidelands Avenue. Therefore, evidence would support emergency access would not be significantly impacted on a cumulative level; however, as this is a cumulative project and not proposed by the project under analysis herein, additional evaluation may be needed in the environmental document analyzing the impacts of the closure of Tidelands Avenue.

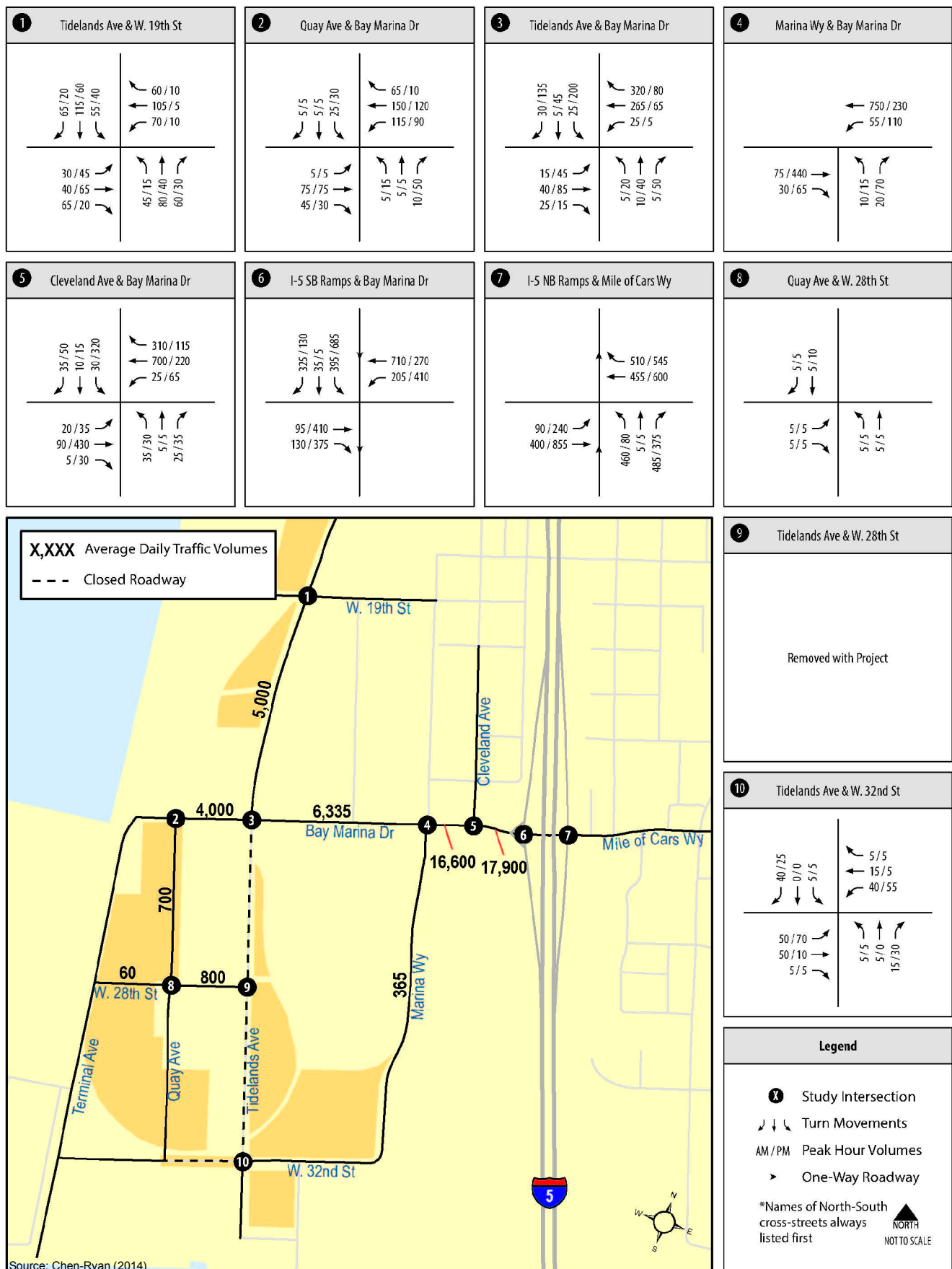
## **5.3.7.3 Project Contribution**

### **Opening Year (Near-Term Year 2016) with Project Contribution**

#### **Roadway Segments**

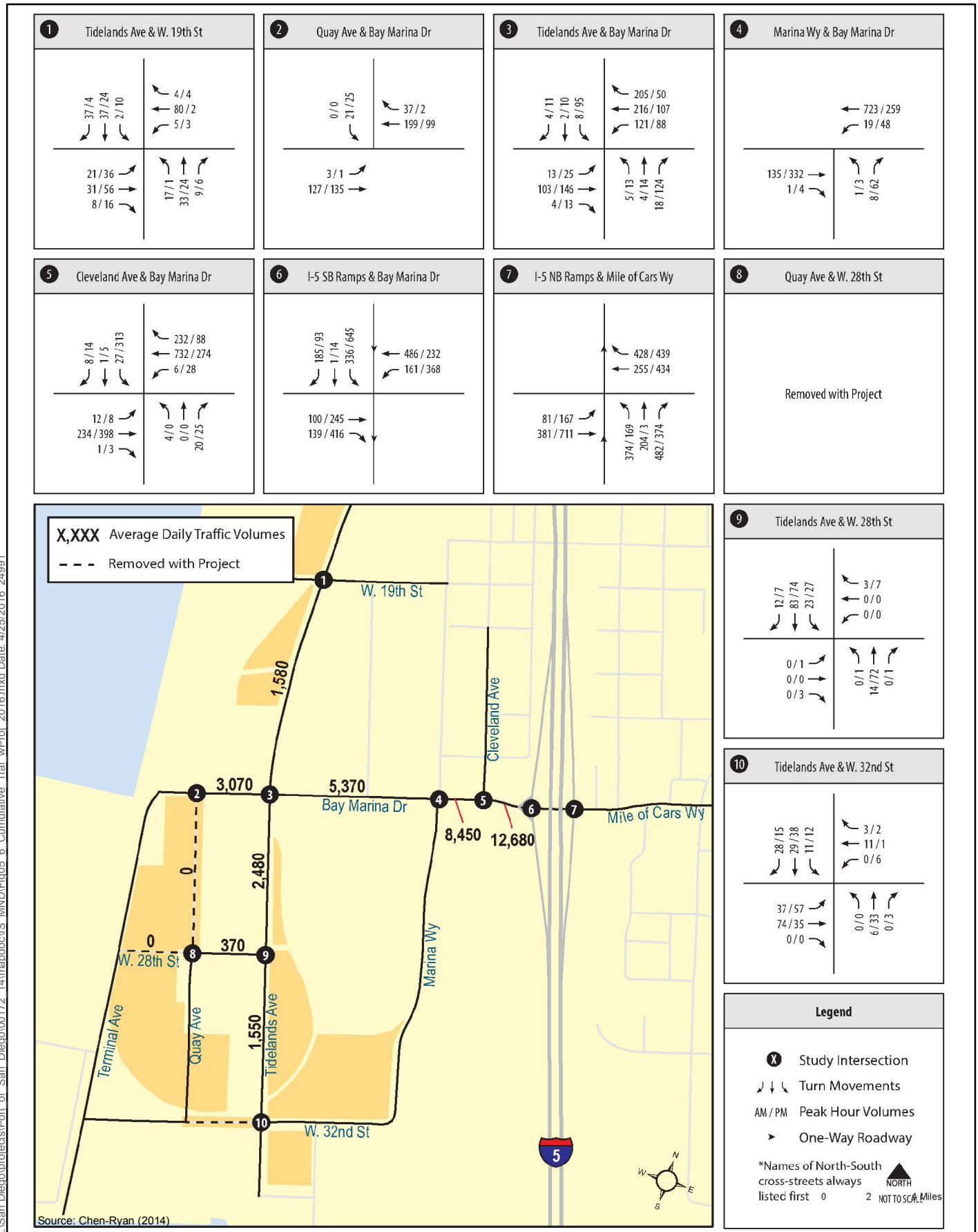
Figure 5-6 shows the 2016 cumulative baseline roadway segment traffic with the proposed project's contribution. As indicated in Table 5-6, the project would not significantly change LOS for any of the roadway segments, and all segments would remain at LOS A. The project's contribution to 2016 roadway segment volumes would not be cumulatively considerable.





**Figure 5-5**  
**Cumulative Baseline Traffic Volumes with Tidelands Avenue Closed (Year 2030)**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





**Figure 5-6**  
Cumulative Traffic Volumes with Project (Year 2016)  
NCMT Tank Farm Paving and Streets Closures Project & PMPA



### Intersections

Figure 5-6 shows the 2016 cumulative baseline intersection traffic with the proposed project's contribution. The project would not cause any of the study area intersections to fail, as indicated in Table 5-7. The project would change Bay Marina Drive/Cleveland Avenue in the AM peak hour from LOS B to LOS C. In addition, the project would change I-5 NB On-Ramp and Bay Marina Drive in the AM peak hour from LOS B to LOS C. However, this would not represent a significant impact because these intersections would still operate at acceptable levels. Therefore, the project's incremental contribution to impacts on all study area intersections in 2016 would not be cumulatively considerable.

### Ramp Intersection Capacity Analysis

As shown in Table 5-8, the ramp intersections of I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive were projected to operate Under Capacity in 2016 with the proposed project in operation. Therefore, the project's incremental contribution to impacts on the ramp intersections of I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive would not be cumulatively considerable.

### Queuing Analysis

As shown in Table 5-9, the I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive off-ramps are not projected to exceed their ramp storage lengths in 2016 with the proposed project in operation. Therefore, the project's incremental contribution to impacts on the I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive off-ramp intersections would not be cumulatively considerable.

### Freeway Segment Level of Service

As shown in Table 5-10, all freeway segments within the study area are projected to operate at LOS D or better in 2016, with the exception of 8th Street and Civic Center Drive, which would operate at LOS E in the NB direction. However, the project's contribution to the cumulative impact on 8th Street and Civic Center Drive NB would be insignificant. The City's threshold indicates a significant impact would occur if a project would contribute sufficient traffic to increase the V/C ratio greater than 0.01. However, the project would have no measurable effect on the V/C ratio and therefore would not exceed the threshold.

**Table 5-6. Roadway Segment LOS – 2016 Plus Project Conditions**

Roadway	Segment	Classification	Threshold (LOS E)	Future Year + Project			Future Year Base		
				ADT	V/C	LOS	ADT / V/C / LOS	Δ	S?
Bay Marina Dr	Between Quay Avenue and Tidelands Avenue	4-Lane Collector	20,000	3,070	0.154	A	2,560 / .128 / A	0.026	N
	Between Tidelands Avenue and Marina Way	4-Lane Collector	20,000	5,370	0.269	A	4,490 / .225 / A	0.044	N
	Between Marina Way and Cleveland Avenue	4-Lane Secondary Arterial	30,000	8,450	0.282	A	7,570 / .252 / A	0.029	N

Roadway	Segment	Classification	Threshold (LOS E)	Future Year + Project			Future Year Base		
				ADT	V/C	LOS	ADT / V/C / LOS	Δ	S?
	Between Cleveland Avenue and I- 5 SB Ramps	4-Lane Major Arterial	40,000	12,680	0.317	A	11,800 / .295 / A	0.022	N
Quay Ave	Between Bay Marina Dr and 28th St	Roadway Segment Removed by Proposed Project							
	Between 19th St and Bay Marina Dr	2-Lane Collector	10,000	1,580	0.158	A	430 / .043 / A	0.015	N
Tidelands Ave	Between Bay Marina Dr and 28th St	2-Lane Collector	10,000	2,480	0.248	A	1,950 / .195 / A	0.053	N
	Between 28th St and 32nd St	2-Lane Collector	10,000	1,550	0.155	A	1,370 / .137 / A	0.018	N
28th St	Between Terminal and Quay Ave	Roadway Segment Removed by Proposed Project							
	Between Quay Ave and Tidelands Ave	2-Lane Collector	10,000	370	0.037	A	520 / .052 / A	-0.015	N

Source: Appendix G

LOS = level of service; ADT = average daily traffic; V/C = volume to capacity; Δ = Change in V/C Ratio; S? = indicates if change in V/C ratio is significant.

**Table 5-7. Peak Hour Intersection LOS Results – 2016 Plus Project Conditions**

#	Intersection	AM Peak Hour Avg. Delay (sec)	LOS	PM Peak Hour Avg. Delay (sec)	LOS	Delay w/o Project (sec) AM/PM	LOS w/o Project AM/PM	Change in Delay (sec)	Significant Impact?
1	19th Street/ Tidelands Avenue	12.7	B	12.3	B	12.7/12.2	B/B	0.0/0.1	N
2	Bay Marina Drive/ Quay Avenue <sup>a</sup>	12.0	B	10.2	B	11.3/10.5	B/B	0.7/-0.3 <sup>3</sup>	N
3	Bay Marina Drive/ Tidelands Avenue	9.4	A	14.3	B	9.0/13.6	A/B	0.4/0.7	N
4	Bay Marina Drive/ Marina Way	10.6	B	19.5	B	10.4/19.2	B/B	0.2/0.3	N
5	Bay Marina Drive/ Cleveland Avenue	21.2	C	24.0	C	18.7/23.4	B/C	2.5/0.6	N
6	I-5 SB Off-Ramp and Bay Marina Drive	15.3	B	30.2	C	14.8/23.9	B/C	0.5/6.2	N
7	I-5 NB On-Ramp and Bay Marina Drive	21.6	C	15.4	B	19.7/14.4	B/B	1.9/1.0	N
8	28th Street/ Quay Avenue <sup>a</sup>	<i>Intersection Removed With Proposed Project</i>							
9	28th Street/ Tidelands Avenue <sup>a</sup>	9.9	A	9.9	A	9.6/9.8	A/A	0.3/0.1	N
10	32nd Street/ Tidelands Avenue <sup>b</sup>	8.1	A	8.4	A	7.9/8.3	A/A	0.2/0.1	N

Source: Appendix G

LOS = level of service; sec = seconds

<sup>a</sup> Indicates one- or two-way stop controlled intersection; the delay shown is the worst delay experienced by any of the approaches.<sup>b</sup> Indicates all-way stop controlled intersection.<sup>c</sup> The Bay Marina Drive / Quay Avenue intersection will be converted from a four to a three legged intersection under the “with project” conditions. The removal of the south leg (Quay Avenue) of this intersection will decrease the number of vehicular conflicts and may result in better operations, even with the addition of project traffic.**Table 5-8. Ramp Intersection Capacity Analysis – 2016 Plus Project Conditions**

#	Intersection	Peak Hour	ILV/Hour	Description
6	I-5 SB/Bay Marina Drive	AM	579	Under Capacity
		PM	952	Under Capacity
7	I-5 NB/Bay Marina Drive	AM	951	Under Capacity
		PM	712	Under Capacity

Source: Appendix G

ILV = Intersection Lane Volume; SB = southbound; NB = northbound

**Table 5-9. Off-Ramp Queuing Analysis – 2016 Plus Project Conditions**

#	Intersection	Peak Hour	Queue Length (feet)	Ramp Length (feet)
6	I-5 SB/Bay Marina Drive	AM	211	850
		PM	435	850
7	I-5 NB/Bay Marina Drive	AM	407	1,060
		PM	240	1,060

Source: Appendix G

SB = southbound; NB = northbound

**Table 5-10. Freeway (I-5) Segment Level of Service – 2016 Plus Project Conditions**

Segment	ADT <sup>a</sup>	Dir	# of Lanes	Capacity <sup>b</sup>	D <sup>c</sup>	K <sup>d</sup>	HV <sup>e</sup>	Peak Hour Vol	V/C	Change in V/C	LOS
8th Street and Civic Center Drive	173,000	NB	4M	9,400	76.0%	6.3%	13.0%	8,764	0.93	0.00	<b>E</b>
		SB	4M+1A	10,810	62.3%	8.1%	13.0%	9,343	0.86	0.00	D
Civic Center Drive and Bay Marina Drive	182,000	NB	5M+1A	13,160	76.0%	6.3%	13.0%	9,164	0.70	0.00	C
		SB	5M	11,750	62.3%	8.1%	13.0%	9,743	0.83	0.00	D
Bay Marina Drive and SR-54 Junction	183,000	NB	5M+1A	13,160	76.0%	6.3%	13.0%	9,294	0.71	0.01	D
		SB	5M+1A	13,160	62.3%	8.1%	13.0%	9,849	0.75	0.01	D
SR-54 Junction and E Street	127,000	NB	5M	11,750	76.0%	6.3%	13.0%	6,494	0.55	0.00	C
		SB	4M+1A	10,810	62.3%	8.1%	13.0%	6,849	0.63	0.00	C

Source: Appendix G

**Bold** letter indicates unacceptable LOS E or F.

M = Mainline; A = Auxiliary Lane; Dir = direction; Vol = volume; V/C = volume to capacity; LOS = level of service.

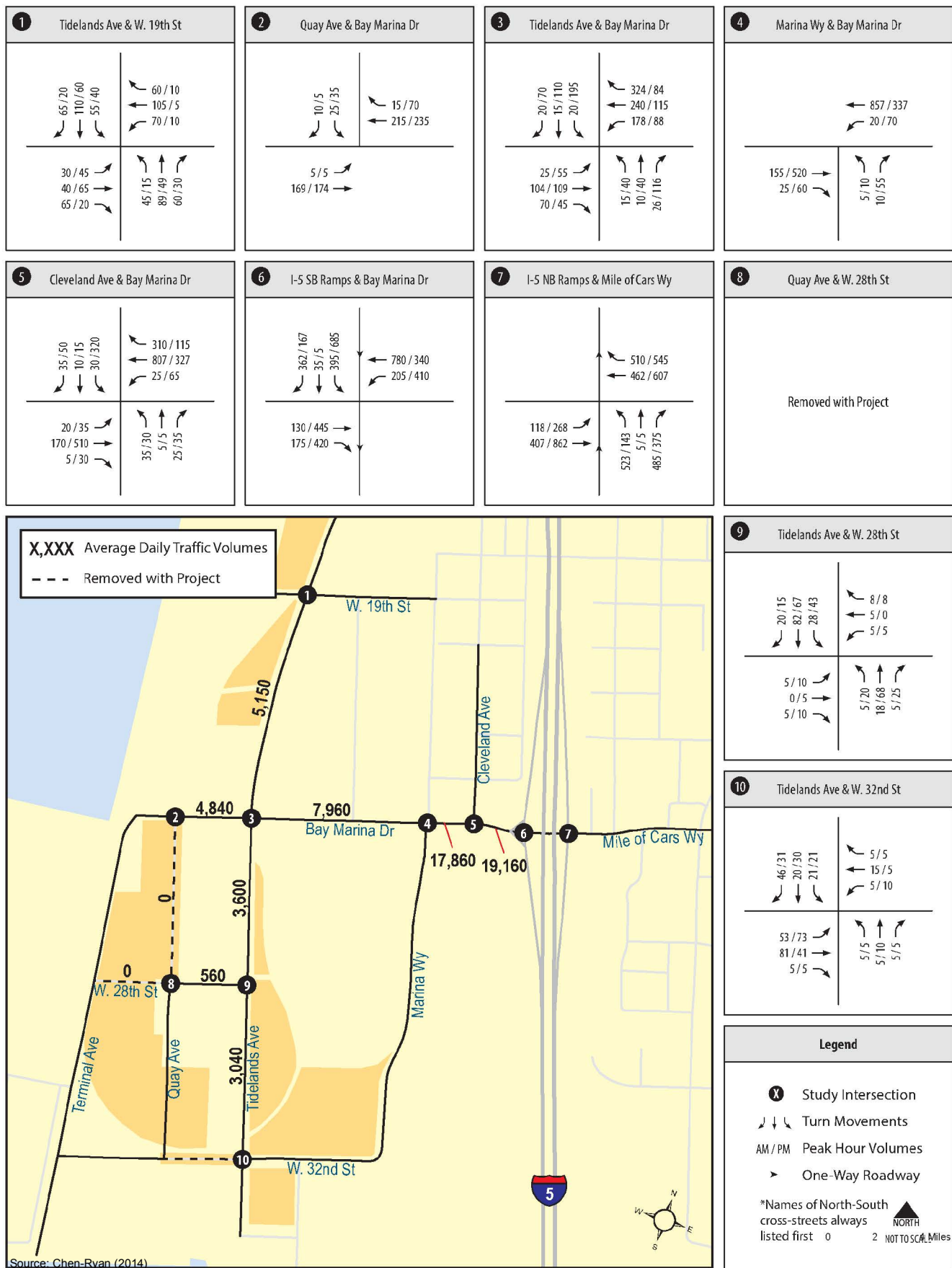
<sup>a</sup> ADT = Average Daily Traffic volumes.<sup>b</sup> The capacity is calculated as 2,350 ADT per main lane and 1,410 ADT (60% of the main lane capacity) per auxiliary lane.<sup>c</sup> D = Directional split.<sup>d</sup> K = Peak hour %.<sup>e</sup> HV = Heavy vehicle %, assumed to be the same as existing.

## Long-term (Future Year 2030) with Project Contribution

### Roadway Segments

Figure 5-7 shows the 2030 cumulative baseline traffic along roadway segments with the proposed project's contribution. The project would not cause any of the study area roadway segments to fail, as indicated in Table 5-11. The project's contribution would change the LOS on Bay Marina Drive, between Tidelands Avenue and Marina Way, from LOS A to B; however, this would not be considered significant as the segment would continue to operate at an acceptable level. Therefore, the project's incremental contribution to impacts on all study area roadway segments in 2030 would not be cumulatively considerable.





**Figure 5-7**  
**Cumulative Project Traffic Volumes with Project (Year 2035)**  
**NCMT Tank Farm Paving and Streets Closures Project & PMPA**



### Intersections

Figure 5-7 shows the 2030 cumulative baseline intersection traffic with the proposed project's contribution. The project would not cause any of the study area intersections to fail, as indicated in Table 5-12. The project would change Bay Marina Drive/Tidelands Avenue from LOS B to LOS C in the PM peak hour. However, this would not represent a significant impact. Therefore, the project's incremental contribution to impacts on all study area intersections in 2030 would not be cumulatively considerable.

### Ramp Intersection Capacity Analysis

As shown in Table 5-13, the ramp intersections of I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive were projected to operate Under Capacity in 2030 with the proposed project in operation. Therefore, the project's incremental contribution to impacts on the ramp intersections of I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive would not be cumulatively considerable.

### Queuing Analysis

As shown in Table 5-14, the I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive off-ramps are not projected to exceed their ramp storage lengths in 2030 with the proposed project in operation. Therefore, the project's incremental contribution to impacts on the I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive off-ramp intersections would not be cumulatively considerable.

### Freeway Segment Level of Service

As shown in Table 5-15, all freeway segments within the study area are projected to operate at LOS D or better in 2030, with the exception of 8th Street and Civic Center Drive, which would operate at LOS F in the NB direction and LOS E in the SB direction; and Civic Center Drive and Bay Marina Drive, which would operate at LOS E in the SB direction. However, the project's contribution to these cumulative impacts would be less than significant because it would not change V/C by more than 0.01 at an LOS E segment nor would it have a measureable impact (change in V/C is 0.00) on a segment that is projected to operate at LOS F.

**Table 5-11. Roadway Segment LOS – 2030 Plus Project Conditions**

Roadway	Segment	Classification	Threshold (LOS E)	Future Year + Project			Future Year Base	$\Delta$	S?
				ADT	V/C	LOS	ADT / V/C / LOS		
Bay Marina Dr	Between Quay Avenue and Tidelands Avenue	4-Lane Collector	20,000	4,840	0.242	A	4,000 / .200 / A	0.042	N
	Between Tidelands Avenue and Marina Way	4-Lane Collector	20,000	7,960	0.398	B	6,700 / .335 / A	0.063	N
	Between Marina Way and Cleveland Avenue	4-Lane Secondary Arterial	30,000	17,860	0.595	C	16,600 / .553 / C	0.042	N
	Between Cleveland	4-Lane Major Arterial	40,000	19,160	0.479	B	17,900 / .448 / B	0.032	N

Roadway	Segment	Classification	Threshold (LOS E)	Future Year + Project			Future Year Base ADT / V/C / LOS	Δ	S?
				ADT	V/C	LOS			
	Avenue and I-5 SB Ramps								
Quay Ave	Between Bay Marina Dr and 28th St	Roadway Segment Removed by Proposed Project							
	Between 19th St and Bay Marina Dr	2-Lane Collector	10,000	5,150	0.515	B	700 / .070 / A	0.015	N
Tidelands Ave	Between Bay Marina Dr and 28th St	2-Lane Collector	10,000	3,600	0.360	A	2,800 / .280 / A	0.080	N
	Between 28th St and 32nd St	2-Lane Collector	10,000	3,040	0.304	A	2,800 / .280 / A	0.024	N
28th St	Between Terminal and Quay Ave	Roadway Segment Removed by Proposed Project							
	Between Quay Ave and Tidelands Ave	2-Lane Collector	10,000	560	0.056	A	800 / .080 / A	-0.024	N

Source: Appendix G

LOS = level of service; ADT = average daily traffic; V/C = volume to capacity; Δ = Change in V/C Ratio; S? = indicates if change in V/C ratio is significant.

**Table 5-12. Peak Hour Intersection LOS Results – 2030 Plus Project Conditions**

#	Intersection	AM Peak Hour		PM Peak Hour		Delay w/o Project (sec) AM/PM	LOS w/o Project AM/PM	Change in Delay (sec)	Significant Impact?
		Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS				
1	19th Street/ Tidelands Avenue	13.6	B	12.8	B	13.6/12.8	B/B	0.0/0.0	N
2	Bay Marina Drive/ Quay Avenue <sup>a</sup>	11.6	B	11.2	B	12.1/11.3	B/B	-0.5/-0.1 <sup>c</sup>	N
3	Bay Marina Drive/ Tidelands Avenue	11.1	B	25.3	C	10.5/13.8	B/B	0.6/11.5	N
4	Bay Marina Drive/ Marina Way	10.9	B	21.2	C	10.7/20.5	B/C	0.2/0.7	N
5	Bay Marina Drive/ Cleveland Avenue	19.9	B	24.6	C	19.5/24.4	B/C	0.4/0.2	N
6	I-5 SB Off-Ramp and Bay Marina Drive	17.2	B	34.4	C	16.3/23.8	B/C	0.9/10.7	N
7	I-5 NB On-Ramp and Bay Marina Drive	25.6	C	17.1	B	23.1/15.7	C/B	2.5/1.4	N
8	28th Street/ Quay Avenue <sup>a</sup>	Intersection Removed With Proposed Project							
9	28th Street/ Tidelands Avenue <sup>a</sup>	10.0	A	11.4	B	9.7/11.1	A/B	0.3/0.3	N

#	Intersection	AM Peak Hour		PM Peak Hour		Delay w/o Project (sec) AM/PM	LOS w/o Project AM/PM	Change in Delay (sec)	Significant Impact?
		Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS				
10	32nd Street/ Tidelands Avenue <sup>b</sup>	8.1	A	8.2	A	7.9/8.1	A/A	0.2/0.1	N

Source: Appendix G

LOS = level of service; sec = seconds

<sup>a</sup> Indicates one- or two-way stop controlled intersection; the delay shown is the worst delay experienced by any of the approaches.

<sup>b</sup> Indicates all-way stop controlled intersection.

<sup>c</sup> The Bay Marina Drive/Quay Avenue intersection will be converted from a four to a three legged intersection under the “with project” conditions. The removal of the south leg (Quay Avenue) of this intersection will decrease the number of vehicular conflicts and may result in better operations, even with the addition of project traffic.

**Table 5-13. Ramp Intersection Capacity Analysis – 2030 Plus Project Conditions**

#	Intersection	Peak Hour	ILV/Hour	Description
6	I-5 SB/Bay Marina Drive	AM	785	Under Capacity
		PM	1,113	Under Capacity
7	I-5 NB/Bay Marina Drive	AM	1,054	Under Capacity
		PM	900	Under Capacity

Source: Appendix G

ILV = Intersection Lane Volume; SB = southbound; NB = northbound

**Table 5-14. Off-Ramp Queuing Analysis – 2030 Plus Project Conditions**

#	Intersection	Peak Hour	Queue Length (feet)	Ramp Length (feet)
6	I-5 SB/Bay Marina Drive	AM	335	850
		PM	428	850
7	I-5 NB/Bay Marina Drive	AM	445	1,060
		PM	253	1,060

Source: Appendix G

SB = southbound, NB=northbound

**Table 5-15. Freeway (I-5) Segment Level of Service – 2030 Plus Project Conditions**

Segment	ADT <sup>a</sup>	Dir	# of Lanes	Capacity <sup>b</sup>	D <sup>c</sup>	K <sup>d</sup>	HV <sup>e</sup>	Peak Hour Vol	V/C	Change in V/C	LOS
8th Street and Civic Center Drive	192,300	NB	4M	9,400	76.0%	6.3%	13.0%	9,628	1.02	0.00	<b>F</b>
		SB	4M+1A	10,810	62.3%	8.1%	13.0%	10,337	0.96	0.01	<b>E</b>

Segment	ADT <sup>a</sup>	Dir	# of Lanes	Capacity <sup>b</sup>	D <sup>c</sup>	K <sup>d</sup>	HV <sup>e</sup>	Peak Hour Vol	V/C	Change in V/C	LOS
Civic Center Drive and Bay Marina Drive	204,780	NB	5M+1A	13,160	76.0%	6.3%	13.0%	10,328	0.78	0.00	D
		SB	5M	11,750	62.3%	8.1%	13.0%	11,037	0.94	0.00	<b>E</b>
Bay Marina Drive and SR-54 Junction	201,165	NB	5M+1A	13,160	76.0%	6.3%	13.0%	10,163	0.77	0.01	D
		SB	5M+1A	13,160	62.3%	8.1%	13.0%	10,845	0.82	0.01	D
SR-54 Junction and E Street	143,735	NB	5M	11,750	76.0%	6.3%	13.0%	7,263	0.62	0.00	C
		SB	4M+1A	10,810	62.3%	8.1%	13.0%	7,745	0.72	0.00	D

Source: Appendix G

**Bold** letter indicates unacceptable LOS E or F.

M = Mainline; A = Auxiliary Lane; Dir = direction; Vol = volume; V/C = volume to capacity; LOS = level of service.

<sup>a</sup> ADT = Average Daily Traffic volumes.

<sup>b</sup> The capacity is calculated as 2,350 ADT per main lane and 1,410 ADT (60% of the main lane capacity) per auxiliary lane.

<sup>c</sup> D = Directional split.

<sup>d</sup> K = Peak hour %.

<sup>e</sup> HV = Heavy vehicle %, assumed to be the same as existing.

## Long-term (Future Year 2030) with Project Contribution and Tideland Avenue Closed

### Roadway Segments (Tideland Avenue Closed)

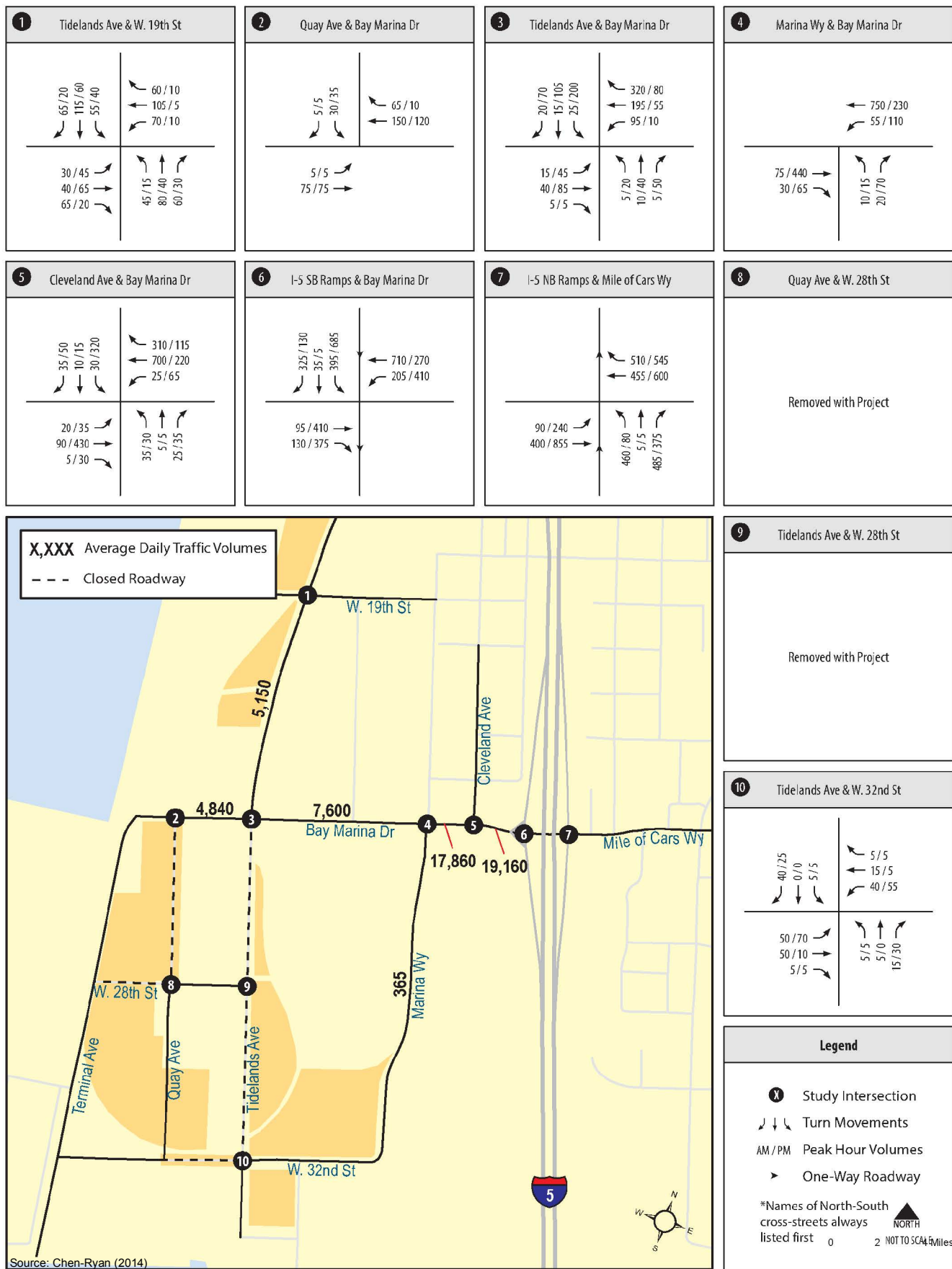
Figure 5-8 shows the 2030 cumulative baseline traffic along roadway segments with the proposed project's contribution and Tideland Avenue closed. The project would not cause any of the study area roadway segments to fail, as indicated in Table 5-16. The project's contribution would change the LOS on Bay Marina Drive, between Tideland Avenue and Marina Way, from LOS A to LOS B; however, this would not be considered significant as the segment would continue to operate at an acceptable level. Therefore, the project's incremental contribution to impacts on all study area roadway segments in 2030 would not be cumulatively considerable.

### Intersections (Tideland Avenue Closed)

Figure 5-8 shows the 2030 cumulative baseline traffic at study area intersections with the proposed project's contribution and Tideland Avenue closed. The project would not cause any of the study area intersections to fail, as indicated in Table 5-17. The project would change Bay Marina Drive/Cleveland Avenue from LOS B to LOS C in the AM peak hour. However, this would not represent a significant impact because the intersection would operate at an acceptable level. Therefore, the project's incremental contribution to impacts on all study area intersections in 2030 with Tideland Avenue closed would not be cumulatively considerable.

### Ramp Intersection Capacity Analysis (Tideland Avenue Closed)

As shown in Table 5-18, the ramp intersections of I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive were projected to operate Under Capacity in 2030 with the proposed project in operation.



**Figure 5-8**  
**Cumulative Traffic Volumes with Project and Tidlands Avenue Closed (Year 2030)**  
**NCMT Tank Farm Paving and Street Closures Project & PMPA**





Therefore, the project's incremental contribution to impacts on the ramp intersections of I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive would not be cumulatively considerable if Tidelands Avenue is closed.

#### Queuing Analysis (Tidelands Avenue Closed)

As shown in Table 5-19, the I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive off-ramps are not projected to exceed their ramp storage lengths in 2030 with the proposed project in operation and Tidelands Avenue closed. Therefore, the project's incremental contribution to impacts on the I-5 SB/Bay Marina Drive and I-5 NB/Bay Marina Drive off-ramp intersections would not be cumulatively considerable.

#### Freeway Segment Level of Service (Tidelands Avenue Closed)

As shown in Table 5-20, all freeway segments within the study area are projected to operate at LOS D or better in 2030, with the exception of 8th Street and Civic Center Drive, which would operate at LOS F in the NB direction and LOS E in the SB direction; and Civic Center Drive and Bay Marina Drive, which would operate at LOS E in the SB direction. However, the project's contribution to these cumulative impacts would be less than significant because it would not change V/C by more than 0.01 at an LOS E segment nor would it have a measureable impact (change in V/C is 0.00) on a segment that is projected to operate at LOS F.

**Table 5-16. Roadway Segment LOS – 2030 Plus Project Conditions (Tidelands Avenue Closed)**

Roadway	Segment	Classification	Threshold (LOS E)	Future Year + Project			Future Year Base	$\Delta$	S?
				ADT	V/C	LOS	ADT / V/C / LOS		
Bay Marina Dr	Between Quay Avenue and Tidelands Avenue	4-Lane Collector	20,000	4,840	0.242	A	4,000 / .200 / A	0.042	N
	Between Tidelands Avenue and Marina Way	4-Lane Collector	20,000	7,600	0.380	B	6,335 / .317 / A	0.063	N
	Between Marina Way and Cleveland Avenue	4-Lane Secondary Arterial	30,000	17,860	0.595	C	16,600 / .553 / C	0.042	N
	Between Cleveland Avenue and I-5 SB Ramps	4-Lane Major Arterial	40,000	19,160	0.479	B	17,900 / .448 / B	0.032	N
Quay Ave	Between Bay Marina Dr and 28th St	Roadway Segment Removed by Proposed Project							
Tidelands Ave	Between 19th St and Bay Marina Dr	2-Lane Collector	10,000	5,150	0.515	B	500 / .050 / A	0.015	N
	Between Bay Marina Dr and 28th St	Roadway Segments Removed under this Scenario							

	Between 28th St and 32nd St									
28th St	Between Terminal and Quay Ave	Roadway Segment Removed by Proposed Project								
	Between Quay Ave and Tidelands Ave	2-Lane Collector	10,000	560	0.056	A	800 / .080 / A	-0.024	N	

Source: Appendix G

LOS = level of service; ADT = average daily traffic; V/C = volume to capacity; Δ = Change in V/C Ratio; S? = indicates if change in V/C ratio is significant.

**Table 5-17. Peak Hour Intersection LOS Results – 2030 Plus Project Conditions (Tidelands Avenue Closed)**

#	Intersection	AM Peak Hour Avg. Delay (sec)	LOS	PM Peak Hour Avg. Delay (sec)	LOS	Delay w/o Project (sec) AM/PM	LOS w/o Project AM/PM	Change in Delay (sec)	Significant Impact?
1	19th Street/ Tidelands Avenue	13.6	B	12.8	B	13.6/12.8	B/B	0.0/0.0	N
2	Bay Marina Drive/ Quay Avenue <sup>a</sup>	11.5	B	10.9	B	15.4/13.5	C/B	-3.9/-2.6	N
3	Bay Marina Drive/ Tidelands Avenue	11.2	B	19.4	B	11.1/13.9	B/B	0.1/5.5	N
4	Bay Marina Drive/ Marina Way	14.5	B	23.9	C	14.2/23.5	B/C	0.3/0.4	N
5	Bay Marina Drive/ Cleveland Avenue	20.2	C	25.5	C	19.8/24.4	B/C	0.4/1.1	N
6	I-5 SB Off-Ramp and Bay Marina Drive	17.2	B	34.4	C	16.3/23.8	B/C	0.9/10.7	N
7	I-5 NB On-Ramp and Bay Marina Drive	25.6	C	17.1	B	23.1/15.7	C/B	2.5/1.4	N
8	28th Street/ Quay Avenue <sup>a</sup>	<i>Intersection Removed With Proposed Project</i>							
9	28th Street/ Tidelands Avenue <sup>a</sup>	<i>Intersection Removed under this Scenario</i>							
10	32nd Street/ Tidelands Avenue <sup>b</sup>	8.1	A	8.2	A	7.9/8.2	A/A	0.2/0.0	N

Source: Appendix G

LOS = level of service; sec = seconds

<sup>a</sup> Indicates one- or two-way stop controlled intersection; the delay shown is the worst delay experienced by any of the approaches.

<sup>b</sup> Indicates all-way stop controlled intersection.

<sup>c</sup> The Bay Marina Drive / Quay Avenue intersection will be converted from a four to a three legged intersection under the “with project” conditions. The removal of the south leg (Quay Avenue) of this intersection will decrease the number of vehicular conflicts and may result in better operations, even with the addition of project traffic.

**Table 5-18. Ramp Intersection Capacity Analysis – 2030 Plus Project Conditions (Tidelands Avenue Closed)**

#	Intersection	Peak Hour	ILV/Hour	Description
6	I-5 SB/Bay Marina Drive	AM	785	Under Capacity
		PM	1,113	Under Capacity
7	I-5 NB/Bay Marina Drive	AM	1,054	Under Capacity
		PM	900	Under Capacity

Source: Appendix G

ILV = Intersection Lane Volume; SB = southbound; NB = northbound

**Table 5-19. Off-Ramp Queuing Analysis – 2016 Plus Project Conditions (Tidelands Avenue Closed)**

#	Intersection	Peak Hour	Queue Length (feet)	Ramp Length (feet)
6	I-5 SB/Bay Marina Drive	AM	335	850
		PM	428	850
7	I-5 NB/Bay Marina Drive	AM	445	1,060
		PM	253	1,060

Source: Appendix G

SB = southbound; NB = northbound

**Table 5-20. Freeway (I-5) Segment Level of Service – 2030 Plus Project Conditions (Tidelands Avenue Closed)**

Segment	ADT <sup>a</sup>	Dir	# of Lanes	Capacity <sup>b</sup>	D <sup>c</sup>	K <sup>d</sup>	HVF <sup>e</sup>	Peak Hour Vol	V/C	Change in V/C	LOS
8th Street and Civic Center Drive	192,300	NB	4M	9,400	76.0%	6.3%	13.0%	9,628	1.02	0.00	F
		SB	4M+1A	10,810	62.3%	8.1%	13.0%	10,337	0.96	0.01	E
Civic Center Drive and Bay Marina Drive	204,780	NB	5M+1A	13,160	76.0%	6.3%	13.0%	10,328	0.78	0.00	D
		SB	5M	11,750	62.3%	8.1%	13.0%	11,037	0.94	0.00	E
Bay Marina Drive and SR-54 Junction	201,165	NB	5M+1A	13,160	76.0%	6.3%	13.0%	10,163	0.77	0.01	D
		SB	5M+1A	13,160	62.3%	8.1%	13.0%	10,845	0.82	0.01	D
SR-54 Junction and E Street	143,735	NB	5M	11,750	76.0%	6.3%	13.0%	7,263	0.62	0.00	C
		SB	4M+1A	10,810	62.3%	8.1%	13.0%	7,745	0.72	0.00	D

Segment	ADT <sup>a</sup>	Dir	# of Lanes	Capacity <sup>b</sup>	D <sup>c</sup>	K <sup>d</sup>	HVF <sup>e</sup>	Peak Hour Vol	V/C	Change in V/C	LOS
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Source: Appendix G

**Bold** letter indicates unacceptable LOS E or F.

M = Mainline; A = Auxiliary Lane; Dir = direction; Vol = volume; V/C = volume to capacity; LOS = level of service.

<sup>a</sup> ADT = Average Daily Traffic volumes.

<sup>b</sup> The capacity is calculated as 2,350 ADT per main lane and 1,410 ADT (60% of the main lane capacity) per auxiliary lane.

<sup>c</sup> D = Directional split.

<sup>d</sup> K = Peak hour %.

<sup>e</sup> HV = Heavy vehicle %, assumed to be the same as existing.

## Cumulative Effects on Pedestrian, Bicycle and Transit Facilities

There are no pedestrian, bicycle, or transit facilities within the project sites, although a Class III bike route is within the project study area and runs along Tidelands Avenue. However, the project would not modify the designated bikeway or otherwise contribute to an impact.<sup>1</sup> Some streets have sidewalks for pedestrian use; however, except for 28th Street, none of the streets proposed for closure have sidewalks, and, aside from on-street parking, there is very little pedestrian activity at or adjacent to the project sites.

In addition, the project would not create a significant demand on pedestrian, bicycle, or transit facilities that could lead to insufficient capacity or the physical deterioration of such facilities. The primary reason is because workers commuting to the project site would generally use personal vehicles. Therefore, the project would not contribute to a potential cumulative pedestrian, bicycle, or transit impact, and the proposed project's incremental contribution to such facilities would not be cumulatively considerable.

## Cumulative Effects on Parking

Sufficient parking for the project would be provided within the NCMT on I-Lot, as noted in Section 4.7, *Transportation, Circulation, and Parking*, through the incorporation of Mitigation Measure **MM-TRA-1**. This mitigation measure would ensure the proposed project would provide sufficient onsite parking for NCMT employees. Furthermore, as indicated in Table 9-2 of Appendix G, there would be a sufficient supply of existing on-street parking to ensure parking is available for non-employees, particularly related to visiting and using Pepper Park, Pier 32 Marina, and the National City Aquatic Center (Cumulative Project #1). Therefore, the project would not contribute to a potential cumulative parking impact, and the proposed project's incremental contribution would not be cumulatively considerable.

## Cumulative Effects on Emergency Access

Cumulative Project #10, Closure of Tidelands Avenue, was discussed above as it relates to emergency access. Based on the evidence available at this time, it appears there would continue to be suitable access to facilities that are accessed from Tidelands Avenue, including Marina Way and

<sup>1</sup> Note, that one of the cumulative projects—Closure of Tidelands Avenue—would require that the Bayshore Bikeway be realigned, which could occur along or near Marina Way. However, the proposed project would not cause the realignment. Future study as part of the closure of Tidelands Avenue would be required to determine the best alternatives for the bikeway.

potentially direct Fire Department access through the NCMT, if it were to be expanded and enclosed as part of Cumulative Project #10. When combined with the project, access would still be available along Marina Way and could still be granted to the Fire Department through the expanded NCMT. Thus, the project would not contribute to a potentially significant cumulative impact and its impact would not be cumulatively considerable.

#### **5.3.7.4 Level of Significance Prior to Mitigation**

The project's incremental contribution to transportation, circulation, and parking impacts from past, present, and reasonably foreseeable projects at the project opening year of 2016, the long-term cumulative year of 2030, and the long-term cumulative year with Tidelands Avenue closed would not be cumulatively considerable.

#### **5.3.7.5 Mitigation Measures**

No mitigation is required.

#### **5.3.7.6 Level of Significance After Mitigation**

The proposed project's incremental contribution to cumulative transportation, circulation, and parking impacts would not be cumulatively considerable and would be considered less than significant.

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## **Additional Consequences of Project Implementation**

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### **6.1 Introduction**

This chapter addresses the potential for additional consequences related to the implementation of the proposed project, pursuant to State CEQA Guidelines 15126.2(c), (d), and 15128. Specifically, this chapter (1) addresses significant irreversible changes to the environment that would result from implementation of the proposed project; (2) discusses growth-inducing impacts of the proposed project, which pertain to ways in which the proposed project could promote either direct or indirect growth; and (3) discusses the environmental effects of the project that were determined not to be significant during the initial environmental review process.

### **6.2 Significant Irreversible Environmental Changes**

Pursuant to State CEQA Guidelines Section 15127, the proposed project would include a Port Master Plan Amendment (PMPA), and, therefore, the EIR is required to comply with State CEQA Guidelines Section 15126.2(c). Section 15126.2(c) requires that the EIR identify any significant irreversible environmental changes resulting from the proposed project.

The proposed project proposes a PMPA to convert streets to marine-related industrial land, which would permit the future use of the project site for marine terminal-related operations. However, there are no buildings or structures proposed and therefore, such facilities would not be precluded in the future; in this manner, the proposed project would not be irreversible. The project also includes placing a Marine Related Industrial Overlay over two sites that are designated for commercial recreation type uses; however, both sites are currently used by the project applicant as part of its operations. The Overlay would permit flexibility of operations at these sites, allowing Marine Related Industrial land uses to continue until a project consistent with the Commercial Recreation land use is proposed and approved by the BPC or for up to 7 years from final approval of the PMPA, whichever occurs first. If a Commercial Recreation development is not proposed and approved by the BPC upon expiration of the Overlay, the two affected sites would be placed in vacant, unused states until such time as a Commercial Recreation development is proposed and approved by the BPC. In sum, while the proposed project would change a few of the project sites (i.e., tank farm site, street closures, and the former Weyerhaeuser site) from their current underutilized state to one that is productive with marine-related industrial uses, these actions would not preclude future development or changes at these sites and, consequently, would not be irreversible.

Implementation of the proposed project would require a permanent commitment of non-renewable natural resources primarily from the direct consumption of fossil fuels. These fossil fuels would be consumed during both construction and operation in the form of diesel and gasoline used in construction equipment, vehicles, trucks, an additional train, and longer vessel hoteling times.

Electricity would also be consumed during construction and operation from power tools, electric equipment, and lighting during evening and night operations, although not all of it would be from

non-renewable sources. The portion of electricity generated from fossil fuels such as natural gas, however, would be irretrievable and irreversible.

Therefore, the project's potential to result in irreversible environmental changes is primarily related to the use of fossil fuels for construction and operation. As discussed in Section 4.2, *Greenhouse Gas Emissions, Climate Change, and Energy Use*, impacts on energy would not be significant.

## 6.3 Growth-Inducing Impacts

State CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the ways in which a proposed project could directly or indirectly foster economic development, population growth, or additional housing, and how that growth would affect the surrounding environment. Direct growth inducement would result if a project, for example, involved construction of new housing. Indirect growth might occur if a project were to establish substantial new permanent employment opportunities that would stimulate the need for additional housing, utilities, and public services.

Similarly, a project would indirectly induce growth if it would remove an obstacle to additional development, such as removing a constraint on a required public service or utility. A project proposing to expand water supply capabilities in an area where limited water supply has historically restrained growth would be considered growth-inducing.

This section discusses the characteristics and consequences of the proposed project that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. However, the following analysis does not assume that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment (State CEQA Guidelines 15126.2(d)). Rather, Chapters 4, *Environmental Analysis*, and 5, *Cumulative Analysis*, discuss the adverse impacts on resources, including any that would be caused by cumulative conditions.

### 6.3.1 Economic Growth

One criterion by which growth inducement can be measured involves economic growth. Economic growth considerations range from a demand for temporary and permanent employees, to an increase in the overall revenue base for an area, to a new demand for supporting services such as retail, restaurant, and entertainment uses.

The proposed project would foster growth through three primary means: (1) the creation of new jobs, (2) an increase in business and tax revenues, and (3) an increase in the demand for supporting services.

#### 6.3.1.1 Economic Growth through New Jobs and Local Revenue

Construction of the project is relatively short at only 7 weeks. During this time, however, the project's construction would induce economic growth by introducing temporary employment opportunities associated with the redevelopment of the former tank farm, the street closures, and the demolition at the former Weyerhaeuser site. In addition to the direct short-term employment, these workers would likely patronize surrounding businesses in National City, resulting in additional short-term indirect economic benefits as well. Moreover, if a Commercial Recreation



development is not proposed and approved by the BPC upon expiration of the Overlay, the sites would be left vacant until such time as a Commercial Recreation development is approved by the BPC. As of the date of the Revised NOP, no Commercial Recreation project was proposed or reviewed by the BPC, and the particulars of such a development are unknown. Furthermore, such development would undergo CEQA analysis prior to approval.

In the long term, operation of the project would induce economic growth by creating long-term employment opportunities. The proposed project would directly add 211 permanent jobs, many of which would be high-paying unionized jobs. The jobs and additional flow of income would have indirect benefits on surrounding businesses and taxes collected, and would have a modest contribution to the economic growth of the District, National City, and the region as a whole.

### **6.3.1.2 Economic Growth through More Terminal Throughput and Support Services**

In addition to direct job growth, the project would require additional trucks, train cars, and up to one Sunday train to haul vehicles to destinations throughout the region and beyond. Therefore, the project would stimulate additional economic growth indirectly through an increase in terminal throughput and goods movement.

## **6.3.2 Population Growth**

The proposed project does not propose the development of housing, which would increase the City of National City's permanent population. The proposed project would, however, result in the creation of both temporary and permanent employment opportunities to support the construction and operation of the Pasha facility.

Temporary employment opportunities created by the proposed project could result in some people temporarily moving into the National City area. However, the likelihood of this occurring is low given the availability of a local work force; jobs would more than likely be filled by persons already located within the National City area or neighboring cities. Consequently, the potential introduction of some construction workers into the National City area would not result in a significant increase in the local population and is not considered to be growth inducing.

Additionally, the proposed project would result in permanent employment opportunities associated with increased daily throughput at the NCMT and surrounding marine-related industrial land uses. The proposed project would add approximately 211 permanent onsite jobs at buildout. According to the State of California Employment Development Department's monthly labor force data, as of August 2015, National City had an unemployment rate of 6.5% and an available labor force of 1,700 persons (Employment Development Department 2015a). Regionally, San Diego County had an unemployment rate of 5.1% in August 2015, which equates to an available labor force of 80,900 persons (Employment Development Department 2015b). Because of the region's available workforce, any demand for permanent new employees is anticipated to be accommodated from the local region. As such, the additional employment created by the proposed project would not increase the City's population because future onsite employees (and their families) currently live in the City and surrounding area. Therefore, construction and operation of the proposed project would not induce population growth. Furthermore, the creation of new jobs likely to be filled by existing National City and San Diego County residents would not cause a substantial displacement of the existing population.

### **6.3.3 Construction of Additional Housing**

The proposed project does not call for the construction of housing, which is prohibited on District property under the Public Trust Doctrine, nor would it increase the City's population in a manner that would necessitate the construction of additional housing. However, the new permanent jobs may allow current residents to upgrade their existing housing. For these reasons, while the project would not result in the direct construction of additional housing, it may result in the indirect construction of housing. Therefore, the project may indirectly stimulate the construction of some housing due to the increase in permanent and unionized jobs.

### **6.3.4 Removal of Obstacles to Population Growth**

As stated above, a project would indirectly induce growth if it would remove a constraint on a required public service or utility. A project would also indirectly induce growth if it would establish a precedent-setting action (e.g., an innovation, a change in zoning, general plan amendment approval). The proposed project would require a PMPA, which could result in the removal of obstacles to growth, as described below.

#### **6.3.4.1 Port Master Plan Amendment**

The project site currently involves land designated in the PMP for Street uses. As part of the proposed project, a PMPA is proposed to change portions of the project site's existing Street use to Marine Related Industrial use, upon which the proposed project would grow the marine-related industrial terminal operational space and remain consistent with the PMP. Therefore, with an increase in the available space on the tank farm and street closures sites for marine terminal operations, it is reasonable to conclude that the PMPA would indirectly result in growth-inducing impacts related to a larger area for industrial uses. However, this larger area would not necessarily cause an increase in population. As such, the indirect growth-inducing impacts of the proposed project are not expected to result in a significant impact on the environment.

The addition of the Uplands Properties to the PMP involves the incorporation of two District-acquired uplands parcels into the PMP. These parcels were historically designated with a commercial land use in the City of National City's Local Coastal Program, but one of the properties has been used by the project applicant for marine industrial-related operations. The proposed PMPA would incorporate those uplands parcels into the PMP as Commercial Recreation land uses; however, no Commercial Recreation development is proposed and, therefore, details are unknown at this time. However, project-level review would be conducted prior to approval of any development. This component of the PMPA is not anticipated to result in growth-inducing impacts, as the proposed land use is consistent with the historical land use and the Uplands Properties are surrounded by existing development.

### **6.3.5 Summary of Growth-Inducing Impacts**

The proposed project is expected to foster economic growth by providing new jobs in the National City and San Diego area and may generate a modest demand for move-up housing due to the high-paying jobs that would be created. However, the proposed project would not directly induce

population growth or directly cause the construction of new housing in the region. Overall, the project would have a modest but measureable effect on regional growth.<sup>1</sup>

## 6.4 Effects Not Found to be Significant

Early in the environmental scoping process it was determined that one or more effects related to aesthetics; agriculture and forestry resources; biological resources; cultural resources; geology and soils; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise and vibration; population and housing; public services; recreation; transportation, circulation, and parking; and utilities and service systems would not be significant. In accordance with State CEQA Guidelines Section 15128, a brief explanation indicating the reasons the effects on these resources would not be significant is provided under each subheading below.

Notably, because the proposed project includes a Marine Related Industrial Overlay over two of the project sites (eastern portion of Lot K and Port Parcel 028-007), activities would continue as they currently exist at these two sites (although an increase in throughput is anticipated and analyzed within this EIR). If developments consistent with the Commercial Recreation land use designation are proposed and approved, the Overlay would be removed or the Overlay would be removed upon the expiration of the 7-year term of the Overlay. Upon expiration of the Overlay, future Commercial Recreation developments could be proposed. However, no proposals had been submitted to the District for review at the time of the issuance of the Revised NOP and no Commercial Recreation project has been considered by the BPC for preliminary project review at the time of this writing. Accordingly, it is unknown what type of Commercial Recreation development may occur on the sites and when such a development may be initiated. Until such time, the site would remain vacant and undeveloped or used by the project applicant. If no Commercial Recreation projects are proposed during the life of the Overlay, then upon its expiration 7 years after final approval of the PMPA, the two Overlay sites would sit in vacant, unused states until an unknown time when a development proposal might be submitted and approved, and construction is initiated. Critically, because the type of Commercial Recreation project that may be proposed could vary widely (e.g., hotel, restaurants, visitor-serving retail) and because a possible project's timing cannot be known,<sup>2</sup> a development proposal is needed in order to provide a project-specific environmental review to satisfy the requirements of CEQA. Such a proposal would be required to undergo further CEQA review.

### 6.4.1 Aesthetics

#### 6.4.1.1 Scenic Vistas

The PMP provides a framework for the consideration of vistas and views that have been recognized as scenic and important to the area and the region. The project is in Planning District 5 (National City Bayfront) of the PMP. There is one scenic vista area in Planning District 5, on the western portion of Pepper Park, facing southwest across the Sweetwater Channel and toward the San Diego

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<sup>1</sup> Note that the potentially significant environmental effects of the project are analyzed in Chapters 4 and 5 of this EIR.

<sup>2</sup> Note that when a development might occur significantly influences the potential environmental effects of a project. This is because CEQA requires a project to analyze its change to the existing condition at the time the development is proposed (State CEQA Guidelines 15125).

Bay National Wildlife Refuge. This scenic vista area does not face toward the project sites and, consequently, the project would not have an adverse effect on the scenic vista. The project sites are not visible from the scenic vista areas identified in other planning districts of the PMP. Therefore, impacts would not occur.

#### **6.4.1.2 Scenic Resources**

The former tank farm site and the Uplands Property east of Marina Way are vacant, unpaved sites with ruderal vegetation. No rock outcroppings, historic buildings, or other scenic resources are located on the properties under the current short-term use permits or the street closures sites. The former Weyerhaeuser site contains an approximately 1,800-square-foot, 1-story office building and an approximately 20,000-square-foot shed structure. Several small trees are located on the former tank farm site and the Uplands Property east of Marina Way, but they do not constitute a scenic resource as they are ornamental and not substantial in size. As such, no scenic resources would be damaged as a result of the proposed project. Additionally, no physical modifications to that Uplands Property are proposed as part of the project. Furthermore, views of the project sites would not be available from any of the five designated scenic highways in San Diego County. The nearest designated scenic highway to the project sites is SR-75, which travels in a north/south direction from Coronado to Imperial Beach. SR-75 is at least 2 miles west of the project sites, across San Diego Bay. Some brief and fleeting views of the western edge of the NCMT may be available on a clear day; however, no views of the project sites are available from SR-75. Other designated scenic highways, such as portions of SR-78, SR-94, SR-125, and SR-163, are several miles from the project sites and do not have views of the sites. Impacts on scenic resources along a scenic highway would not occur. Therefore, the project would not damage scenic resources.

#### **6.4.1.3 Visual Character or Quality**

Project approval and implementation would result in the grading and paving of a largely vacant site, which is surrounded by existing marine terminal operations. The tank farm and street closures sites would accommodate uses similar to those in the surrounding area. Although project implementation at the tank farm site would result in a noticeable visual change as the site transitions from an unpaved dirt area to a paved and striped area for vehicle storage, the character and quality of the site would be similar to that of the surrounding area. Also, renewal of the short-term use permits, including those proposed to have the Marine Related Industrial Overlay, would result in the temporary continuation of vehicle storage at the sites. Even with a potential increase in operations, the use and visual character would be similar to that under existing conditions. The use of the former Weyerhaeuser site for vehicle storage would be consistent with the surrounding marine terminal and marine-related industrial uses. Historically, the former Weyerhaeuser site was used for lumber import operations. If developments consistent with the Commercial Recreation designation are proposed and approved, the Overlay would be removed. No details of the Commercial Recreational development were known as of the date of the Revised NOP. Regardless of whether a Commercial Recreation development occurs, the Overlay would be removed 7 years after the PMPA approval. Upon expiration of the Overlay, the two Overlay sites would sit in a vacant, unused state for the reasonably foreseeable future and would not affect visual character or quality. Impacts would be less than significant, and no mitigation measures would be required.

#### **6.4.1.4 Daytime or Nighttime Lighting and Glare**

Implementation of the project would create a new source of light or glare; however, the additional light would not be substantial, and no adverse effects related to daytime or nighttime views in the area would occur. New perimeter lighting would be installed on poles throughout the tank farm site and street closures sites. When considered in relation to the adjacent terminal, which is similarly illuminated by lights on poles, the new lighting would not be substantial. The lighting would be typical for a marine terminal and for uses in the surrounding industrial area. No lighting is proposed on the uplands parcel east of Marina Way, and no changes would occur at this location because no operations are proposed to occur on this site. Therefore, impacts from lighting would be less than significant.

Once vehicles are stored on the tank farm site, street closures sites, and the former Weyerhaeuser site, there would be some new sources of glare (e.g., vehicles' sheet metal and glass could reflect sunlight). However, the majority of the NCMT and the surrounding area is used for vehicle storage. Therefore, some level of glare is inevitable. When considered in context of the surrounding industrial area, the proposed project would not represent a substantial new source of glare that would adversely affect daytime or nighttime views. Moreover, light and glare impacts associated with the short-term use permit sites would be similar to the existing site conditions, as vehicles are currently stored at three out of four of these sites (the fourth site is a strip of landscape), and these sites would continue to store vehicles. If developments consistent with the Commercial Recreation designation are proposed and approved, the Overlay would be removed. No details of the Commercial Recreation development were known as of the date of the Revised NOP. Regardless of whether a Commercial Recreation development occurs, the Overlay would be removed 7 years after the PMPA approval. Upon expiration of the Overlay, the two Overlay sites would sit in a vacant, unused state for the reasonably foreseeable future and would have no effect on lighting or glare. The impacts would be less than significant.

### **6.4.2 Agriculture and Forestry Resources**

#### **6.4.2.1 Important Farmland**

The project sites are not used as active agricultural land, nor are they planned or zoned for agricultural uses. Implementation of the project would have no effect on agricultural uses in the region, City of National City, or the Port District. According to the San Diego Important Farmland Map, the project sites and surrounding area are classified as "Urban and Built-Up Land" (California Department of Conservation 2012). Therefore, project approval would not result in the conversion of Farmland to a non-agricultural use, and no impact would occur.

#### **6.4.2.2 Williamson Act Contracts or Agricultural Zoning**

The proposed project sites and surrounding area are not zoned for agricultural uses and would not conflict with a Williamson Act contract. According to the California Department of Conservation's San Diego County Williamson Act Lands Map, the project sites and surrounding area are designated as "Urban and Built-up Land," and no Williamson Act lands occur on the site or surrounding area (California Department of Conservation 2013). Therefore, the proposed project would not conflict with existing zoning for agricultural use or with a Williamson Act contract. No impact would occur.

### **6.4.2.3 Conflicts with Forest Land Zoning**

The project sites are within Port District tidelands and are not used or zoned for agricultural use. The project sites do not contain forest lands, as defined in Public Resources Code Section 12220(g), or timberland, as defined by Public Resources Code Section 4526, and are not zoned for forest land or timberland or Timberland Production, as defined by Government Code Section 51104(g). Project approval would not conflict with existing zoning for forest land or timberland; therefore, no impact would occur.

### **6.4.2.4 Conversion of Forest Land to Non-Forest Use**

The project sites do not contain any forest lands as defined in Public Resources Code Section 12220(g); therefore, the project would not result in the loss or conversion of forest land to a non-forest use. In addition, the project is not located in the vicinity of offsite forest resources. Therefore, no impact would occur.

### **6.4.2.5 Conversion of Farmland to Non-Agricultural Use**

No agricultural land use, forest land, or timberland exists in the vicinity of the proposed project sites. The project would not result in conversion of important farmland or conversion of other agricultural resources to a non-agricultural use because the project sites and the surrounding area are developed land that is mostly used for industrial purposes. Therefore, the proposed project would not involve a change to the existing environment that, because of its location or nature, would result in the conversion of Farmland to non-agricultural use or forest land to non-forest use, and no impact would occur.

## **6.4.3 Biological Resources**

### **6.4.3.1 Sensitive Species**

The proposed project would not have a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species. No special-status species have been detected on the tank farm, street closures sites, any of the short-term permit sites, or the former Weyerhaeuser site, and special-status species have low to no potential to occur on the sites. The Uplands Property east of Marina Way is heavily disturbed and supports low-quality ruderal vegetation. No specific site survey was conducted at this site to confirm the absence of special-status species; however, the project does not propose any physical changes to this parcel. Any Commercial Recreation development proposals that would follow would have to survey the project site to confirm the absence of special-status species.

#### **Existing Habitat**

The proposed tank farm site encompasses a relatively flat lot with earthen berms in areas that previously supported large tanks. The proposed street closures sites consist of paved roadway and landscaping. The sites are surrounded by industrial maritime uses. The short-term use permit sites and the former Weyerhaeuser site are paved with asphalt. Three of the short-term use permit sites are currently used as outdoor storage areas for vehicles while the fourth is a strip of landscape. Vegetation in the vicinity of the short-term use permit sites and the former Weyerhaeuser site is limited to ornamental and ruderal types, which are found in planters or medians to provide visual

screening and decoration along local roadways. Vegetation at the tank farm site and street closures sites consists of a combination of weedy nonnative plant species and common native shrubs, which are classified as “ruderal” and “developed” habitat and land cover types that include several small ornamental trees. Based on a review of aerial photography, the uplands parcel east of Marina Way appears to have the same characteristics, with heavily disturbed (i.e., previously graded) ruderal habitat. A description of each is provided below.

### **Ruderal**

All vegetated areas support ruderal habitat, which composes approximately 5.7 acres on the tank farm site. Bare ground and the remnants of an old access road also occur within the site. Native species such as telegraph weed (*Heterotheca grandiflora*), broom baccharis (*Baccharis sarothroides*), and mule fat (*Baccharis salicifolia*) are present on the tank farm site; however, on the site, these species occur in disturbed areas and are not part of a native, functioning habitat, and therefore are not considered to be sensitive habitat. Dominant nonnative species include fountain grass (*Pennisetum setaceum*), salt-cedar (*Tamarix ramosissima*), feathertop (*Pennisetum villosum*), tocalote (*Centaurea melitensis*), Mediterranean schismus (*Schismus barbatus*), and spiny Russian thistle (*Salsola tragus*). Additionally, several small ornamental trees are scattered around the site. The uplands parcel east of Marina Way appears to have many of the same characteristics, although the project would make no modifications to this uplands parcel.

### **Developed**

Developed portions consist of paved areas, which compose approximately 5 acres on the Quay Avenue, 28th Street, and 32nd Street closure sites. This also includes a portion of the BNSF right-of-way. These areas are mostly devoid of vegetation. A few sparse, nonnative plants occur within the rail right-of-way. In addition, the short-term use permit sites and the former Weyerhaeuser site are developed, covering approximately 53.4 acres.

### **Special-Status Species**

No special-status species have been detected on site; however, a search of the California Natural Diversity Database for special-status species occurrences within 1 mile of the project area determined that 10 special-status plant species and eight special-status wildlife species have the potential to occur at the project sites (California Department of Fish and Wildlife 2014). A site visit by a biological consultant was conducted on May 13, 2013, and indicated that the tank farm site currently supports ruderal vegetation, and no special-status plant or animal species were observed on the site or the adjacent and nearby street closures sites. A site visit by an ICF biologist on April 21, 2014, also indicated that the sites are disturbed, do not support suitable vegetation that would support most of the potential special-status species, do not occur adjacent to native areas, and are surrounded by industrial maritime uses, all of which limit the potential for special-status plant and wildlife species to occur on site. Ornamental trees in the area of the tank farm site, the street closures sites, the short-term permit sites, and the former Weyerhaeuser site do provide suitable nesting habitat for the various avian species protected under the Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, Section 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). Proposed project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the avian breeding season, which generally runs

from February 1 to September 1 (as early as January 1 for some raptors) to avoid take of birds or their eggs.

If avoidance of the avian breeding season is not feasible, beginning 30 days prior to the initiation of project activities, a qualified biologist with experience in conducting breeding bird surveys should conduct weekly bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). The surveys should continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of project activities. If a protected native bird is found, the project proponent should delay all project activities within 300 feet of on- and offsite suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist could continue the surveys in order to locate any nests. If an active nest is located, project activities within 300 feet of the nest (within 500 feet for raptor nests) or otherwise as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing should be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the project activities and the nest. Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. The project proponent should provide the District the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to the protection of native birds. If the biological monitor determines that a narrower buffer between the project activities and observed active nests is warranted, he/she should submit a written explanation as to why (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the project activities and the nest and foraging areas) to the District and, upon request, the California Department of Fish and Wildlife (CDFW). Based on the submitted information, the District (and CDFW, if CDFW requests) will determine whether to allow a narrower buffer. The biological monitor should be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor should send weekly monitoring reports to the District during the grubbing and clearing of vegetation, and notify the District immediately if project activities damage active avian nests.

As this is a requirement established by existing federal and state law with guidance supplied by CDFW, compliance is mandatory and will be part of the permit conditions, but mitigation in the environmental document is not required. Therefore, the potential impacts on special-status species would be less than significant.

#### **6.4.3.2 Sensitive Natural Community**

Riparian habitat is composed of vegetation and physical features normally found on stream banks and floodplains and is directly associated with streams, lakes, or other bodies of water. No riparian habitat or other sensitive natural communities exist on or adjacent to the project sites. Therefore, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Consequently, no impact would occur.



### **6.4.3.3 Federally Protected Wetlands**

No wetlands as defined by Section 404 of the Clean Water Act are on the project sites. Therefore, the proposed project would not have a substantial adverse effect on federally protected wetlands. No impact would occur.

### **6.4.3.4 Wildlife Movement Areas**

The former tank farm site, as well as the short-term permit sites and former Weyerhaeuser site, are currently fenced, which limits their function as wildlife movement areas. Furthermore, the project sites are surrounded by developed areas and do not provide any links to areas of native habitat. The uplands parcel east of Marina Way is near the Sweetwater Marsh National Wildlife Refuge, but no physical changes are proposed to this uplands parcel. Any future Commercial Recreation development on this site, which is not part of this proposed project, would undergo project-level environmental review to ensure compliance with CEQA prior to its development. In addition, the proposed project would not be within the boundaries of a native wildlife nursery and would not otherwise interfere with the use of native wildlife nursery sites. Therefore, no impact would occur.

### **6.4.3.5 Local Policies or Ordinances Protecting Biological Resources**

The proposed project would not conflict with any local policies or ordinances to protect biological resources, and the existing trees are small ornamental saplings. The Port District has established goals to protect, preserve, and enhance natural resources in San Diego Bay in Section II of the PMP, Planning Goals (Goal XI). The project sites are not within PMP Planning Districts 7, 8, or 9, which contain areas identified for conservation purposes by the Port District. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources. In addition, the project sites are not subject to any other local policies or ordinances protecting biological resources, as the project sites are within the jurisdiction of the Port District. Therefore, no impact would occur.

### **6.4.3.6 Local, Regional, or State Habitat Conservation Plan**

The Port District and the U.S. Navy Southwest Division maintain the Integrated Natural Resource Management Plan (INRMP). The INRMP catalogues the plant and animal species around the bay and identifies habitat types with the purpose of ensuring the long-term health, recovery, and protection of San Diego Bay's ecosystem in concert with economic, Naval, recreational, navigational, and fisheries needs. The project sites and surrounding land are currently developed or only support low-quality ruderal habitat and do not contain natural habitat, and development would not conflict with the goals or intent of the INRMP.

In addition, the Port District has established goals to protect, preserve, and enhance natural resources in San Diego Bay in Section II of the PMP, Planning Goals (Goal XI). The project sites are not within PMP Planning Districts 7, 8, or 9, which contain areas identified for conservation purposes by the Port District. Therefore, the proposed project would not conflict with the District's conservation goals in the PMP.

The project sites are not subject to any local conservation plans or ordinances because the project sites are within the jurisdiction of the Port District. The proposed project would not conflict with the ordinances protecting biological resources established by the Port District because the protected coastal resources identified in the PMP (wetlands, estuary, salt ponds, and habitat replacement area)

do not occur in the project area. Therefore, the proposed project would not result in any conflicts with any local, regional, or state policies or ordinances protecting biological resources, and no impact would occur.

## 6.4.4 Cultural Resources

### 6.4.4.1 Historical Resource

The proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5. A review of historic topographic maps and aerial photographs was completed to determine the potential presence of any historic resources. A 1944 topographic map created from surveys conducted in 1938 and 1939 illustrates that the project study area was within the waters of San Diego Bay. The map shows that during the last years of the 1930s, the westernmost portion of dry land in the vicinity of the project sites was occupied by an extensive railroad yard that connected to major regional rail lines operated by the Southern Pacific, the Atchison, Topeka & Santa Fe, and the San Diego and Arizona Eastern railroads (U.S. Geological Survey 1944). A historic aerial photograph shows that, by 1953, the land that encompasses the project study area had been created through the placement of artificial compacted fill material west and southwest of the rail yard's southern end and north of the Paradise Creek outlet to San Diego Bay. No buildings or structures are visible within the project site in that 1953 photograph.

A 1964 aerial photograph shows that a sizeable cylindrical tank had been constructed within the tank farm site. A north/south-aligned rail spur had also been constructed in the eastern portion of the tank farm site parallel to Quay Avenue. A 1972 aerial photograph shows that two more large cylindrical tanks had been constructed south of the older tank. New fill had also extended the dry land on the western side of the tank farm site approximately 0.25 mile to the west by 1972 (National Environmental Title Research 2009). None of the tanks that were visible at the tank farm site in the historic aerial photographs stand today.

The project would not affect any buildings that have reached the 50-year age threshold for consideration as potential historical resources under CEQA. Numerous buildings constructed as part of the terminal's development stood west and east of Tidelands Avenue by 1964, but none would be affected by project activities. The two buildings at the Weyerhaeuser site subject to potential demolition as part of the project include a 20,000-square-foot shed constructed after 1972, and a small office building constructed during the 1990s. The shed is a utilitarian structure lacking architectural distinctiveness, and the small office building is an architecturally commonplace example of its type. The office building was constructed adjacent to the concrete foundation of a historic-period building demolished prior to construction of the office building. The office building is easily misidentified as the demolished historic-period building visible in historic aerial photographs (Algert Engineering, Inc. 1996; National Environmental Title Research 2009). However, neither the shed nor the office building at the Weyerhaeuser site will reach the 50-year age threshold for potential historical resource consideration under CEQA by the time the project is implemented. Therefore, demolition of the two structures would not be considered a significant impact.

A field survey conducted by an ICF archaeologist on April 21, 2014, confirmed a rail spur parallel to the west of Quay Avenue is present today and is the only intact structure from the historic period that remains within the project site. Historic aerial photographs show that the rail spur was

constructed sometime between 1953 and 1964. The spur is composed of typical railroad materials and is an entirely unremarkable example of railroad infrastructure. It is not part of one of the major historic railroad alignments in the San Diego area, all of which were developed decades before the spur parallel to Quay Avenue. Therefore, because the rail spur is a common and recent example of railroad infrastructure from the historic period, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5. Impacts would be less than significant.

#### **6.4.4.2 Archaeological Resource**

The proposed project would not cause a substantial adverse change in the significance of an archaeological resource as defined in State CEQA Guidelines Section 15064.5. The tank farm and street closures sites are the only areas of the project for which ground-disturbing activities are proposed. Some demolition activities would occur on the former Weyerhaeuser site, but little to no subsurface soils would be disturbed. A records search of the California Historical Resources Information System was conducted at the South Coastal Information Center at San Diego State University on June 5, 2014. The records search area, which included a quarter-mile buffer zone around the Area of Potential Effect, included all relevant site records on file with the South Coastal Information Center, the National Register of Historic Places, the California Register of Historical Resources, and local registries. No prehistoric or historic sites were identified within the tank farm and street closures sites or immediately adjacent to the sites; however, an archaeological site (CA-SDI-7454) is about 0.25 mile to the east. Originally recorded in 1979, CA-SDI-7454 consists of a shell midden along the railroad right-of-way. An update in 2002 failed to relocate the site.

In addition to the records search and archival research, a field survey was conducted by an ICF archaeologist on April 21, 2014. The survey methods consisted of walking the project area and inspecting the ground surface for cultural materials. No previously unrecorded cultural resources were identified during the course of the project site survey.

The reclaimed land within the project footprint consists of fill placed there in the 1940s or early 1950s; during the historic period, up through the late 1930s, the footprint of the project study area was within the waters of San Diego Bay. For this reason, there does not appear to be any possibility that prehistoric archaeological deposits exist anywhere near the surface of the project sites today. It is possible that prehistoric archaeological deposits are deeper, below the level of the bay floor prior to the reclamation of extant project-site land during the 1940s or early 1950s. Ground disturbances associated with project implementation would include grading, relocation of excess dirt and demolished pavement, new paving and pole mounting, and installation of perimeter light fixtures, security fencing, and new drainage features on the tank farm and street closures site. This would not involve excavation that would expose potential prehistoric archaeological deposits, which, if they exist under the project footprint, would have to be deep enough to have intact underwater prehistoric archaeological deposits that withstood tidal fluctuations and the erosive action of the nearby Paradise Creek outlet during the historic period, up through the 1930s, and earlier. For this reason, the project would have no impacts that would result in an adverse change in the significance of a prehistoric archaeological resource, pursuant to State CEQA Guidelines Section 15064.5.

Although the potential exists for historic archaeology (circa 1940s to early 1960s) to be discovered within the project site during construction, there is no reason to suspect that any such sites would be significant. The project study area may contain the remains of the three sizeable tanks and associated infrastructure that was present from the early 1960s through the 1990s. However, it is

clear from available historic aerial imagery that the tanks and associated built-environment features were common examples of these types of infrastructure. Examples of such infrastructure are widely observable today. It appears highly unlikely that study of any historic archaeological sites within the project area could answer important scientific research questions or yield information for which there is a demonstrable public interest. The infrastructure observed in aerial photographs of the tank farm was recent and commonplace; any remnants discovered during construction would not be particularly rare or old examples of their type and would not be special in any other way. The tank farm site was developed during the most recent historic period and does not appear to be associated with an important historical event or individual. Any project-related impacts on a historical archaeological resource, pursuant to State CEQA Guidelines Section 15064.5, would be less than significant, and no mitigation would be required.

Finally, upon expiration of the Overlay, the two affected sites would sit in vacant, unused states and would have no effect on archaeological resources. Alternatively, if a Commercial Recreation project is proposed and approved, it would undergo independent CEQA review.

#### **6.4.4.3 Paleontological Resource**

The proposed project would not destroy a unique paleontological resource, site, or geologic feature. The project study area is on reclaimed land and is the product of fill placed to create the sites during the 1940s or early 1950s. During the historic period up through the 1930s, the project footprint was within the waters of San Diego Bay west of the Paradise Creek outlet. Tidal fluctuations combined with drainage flows from Paradise Creek prior to site reclamation would have removed or otherwise disturbed any paleontological deposits at or near the surface of the submerged bay floor. It is possible that deeper paleontological deposits remain underneath the reclaimed land of the project study area. However, it is not anticipated that ground disturbance would reach to this depth, as the only ground disturbances associated with project implementation would occur on the tank farm and street closures sites, and ground-disturbing activities would only involve grading, relocation of excess dirt and demolished pavement, new paving and pole mounting, and installation of perimeter light fixtures, security fencing, and new drainage features and would not involve excavation to depths at which paleontological resources could be present. Some demolition activities would occur on the former Weyerhaeuser site, but little to no subsurface soils would be affected. No construction activity, including ground excavation, would occur with the short-term use permit sites, even with the Marine Related Industrial Overlay. Therefore, the proposed project would have a less-than-significant impact on paleontological resources.

Finally, upon expiration of the Overlay, the two affected sites would sit in vacant, unused states and would have no effect on paleontological resources. Alternatively, if a Commercial Recreation project is proposed and approved, it would undergo independent CEQA review.

#### **6.4.4.4 Human Remains**

The proposed project would not disturb any human remains, including those interred outside of formal cemeteries. The proposed project would involve limited ground disturbance and grading of the previously developed tank farm site and street closures sites, relocation of excess dirt and demolished pavement, new paving and pole mounting, and installation of perimeter light fixtures, security fencing, and new drainage features. This construction activity would not involve excavation to depths at which prehistoric human remains would be present, because the project sites consist of reclaimed land. Prior to the placement of fill in the 1940s or early 1950s, the project footprint was

within the waters of San Diego Bay. Record searches and review of past surveys have not uncovered any evidence of significant prehistoric activities in the project's Area of Potential Effect. Based on the anticipated shallow soil disturbance and the lack of archaeological resources in the project area, it is highly unlikely that human remains would be encountered during construction of the proposed project. Moreover, in the unlikely event that human remains are discovered, the project construction manager would be required to comply with Health and Safety Code Section 7050.5 and Public Resources Code Section 5097, which specify procedures to be followed in the event of human remains on a non-dedicated cemetery or non-federal lands. Therefore, given the low likelihood of discovering human remains on site and the existing laws in place that govern the handling of human remains encountered during excavation work, impacts related to the disturbance of human remains would be less than significant.

Finally, upon expiration of the Overlay, the two affected sites would sit in vacant, unused states and would have no effect on the potential to encounter human remains. Alternatively, if a Commercial Recreation project is proposed and approved, it would undergo independent CEQA review.

## **6.4.5 Geology and Soils**

### **6.4.5.1 Exposure of People or Structures to Potential Substantial Adverse Effects, Including**

#### *1. Rupture of Known Earthquake Fault*

The proposed project would not expose people or structures to potential substantial adverse effects from the rupture of a known earthquake fault. No active faults are in the vicinity of the proposed project, and, therefore, fault rupture is unlikely to occur during project implementation. Additionally, the project area is not within a State of California Alquist-Priolo Earthquake Fault Hazard Zone, and project features would not include the addition of new structures meant for human occupancy within 50 feet of the nearest fault. The fault nearest to the project site is the Rose Canyon Fault, approximately 2.5 miles to the northwest. Furthermore, the proposed project is not expected to draw a substantial amount of people, either during construction activities or permanently, because the project involves vehicle storage activities. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval. As such, people or structures would not be exposed to substantial adverse effects from a rupture of a known earthquake fault as a result of project implementation, and the impact would be less than significant.

#### *2. Strong Seismic Ground Shaking*

The proposed project would not expose people or structures to potential substantial adverse effects from strong seismic ground shaking. The Rose Canyon Fault is the closest fault to the project site, approximately 2.5 miles to the northwest. The next closest fault is the Elsinore Fault, approximately 40 miles to the northeast. Additionally, the National City area is in Seismic Zone 4, which is a designation used to denote the areas of the highest risk to earthquake ground motion (California Seismic Safety Commission 2005). As a result, the project could be subject to future seismic shaking and strong ground motion resulting from seismic activity. However, the proposed project is not expected to draw a substantial amount of people, either during project construction activities or permanently, because the project would primarily involve vehicle storage. Furthermore, no structures intended for human occupation would be built and, therefore, the potential risk to the

occasional personnel working on site would be extremely limited. Additionally, no construction would occur with the former Weyerhaeuser site. Finally, construction of the proposed project would be subject to applicable ordinances of the 2013 California Building Code (California Code of Regulations Title 24), which would reduce anticipated impacts related to the proximity of earthquake faults by requiring the project be built to withstand seismic ground shaking. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would be required to comply with the California Building Code at the time of development. As a result, impacts associated with the proposed project would be less than significant.

### *3. Seismic-related Ground Failure, including Liquefaction*

Implementation of the proposed project would not expose people or structures to substantial adverse effects from seismically related ground failure, including liquefaction. Liquefaction occurs when saturated, low-density, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. Liquefaction occurs most often in areas underlain by silts and fine sands and where shallow groundwater exists.

The Rose Canyon or Elsinore Faults could cause seismic shaking and strong ground motion at the proposed project site. Furthermore, onsite, near-surface soils are composed of fill material and sand, silty sand, clayey sand, sandy silt, and silt. As such, near-surface soils characteristics, in conjunction with a shallow groundwater depth in the area (approximately 8–10 feet below ground surface), would make soil liquefaction possible, although the County of San Diego’s Multijurisdictional Hazard Mitigation Plan indicates the site has a low potential for liquefaction (San Diego County Office of Emergency Services 2010).

The proposed project is not expected to draw a substantial amount of people, either during project construction activities or permanently, because the project would involve additional vehicle storage space. Furthermore, no structures intended for human occupation would be built and, therefore, the potential risk to the occasional personnel working on site would be extremely limited. Additionally, no construction would occur on the short-term use permit sites, even with the Marine Related Industrial Overlay. Finally, construction activities, including any future Commercial Recreation development, would be subject to applicable ordinances of the 2013 California Building Code (California Code of Regulations Title 24), which would reduce anticipated geologic hazards, including substantial adverse effects from liquefaction. Impacts associated with the proposed project would be less than significant.

### *4. Landslides*

Implementation of the proposed project would not expose people or structures to substantial adverse effects from landslides. The proposed project sites are generally flat, thus creating site topography with minimal relief and making slope instability and landslide potential in the project area negligible. Furthermore, the proposed project is not expected to draw a substantial amount of people, either during construction activities or permanently, because the project would involve vehicle storage activities. Moreover, no structures intended for human occupation would be built and, therefore, the potential risk to the occasional personnel working on site would be extremely limited. Additionally, no construction would occur with the short-term use permit sites, even with the Marine Related Industrial Overlay. Finally, construction of the tank farm and street closures—and any future Commercial Recreation development, which is not proposed at this time—would be

subject to applicable ordinances of the 2013 California Building Code (California Code of Regulations Title 24) and would require an approved grading plan (from the City of National City) that has undergone engineering review, which would further reduce anticipated impacts related to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Impacts associated with the proposed project would be less than significant.

#### **6.4.5.2 Substantial Soil Erosion or Loss of Topsoil**

Implementation of the proposed project would not result in substantial soil erosion or the loss of topsoil. Erosion is a condition that could adversely affect development on any site. Construction activities could exacerbate erosion conditions by exposing soil and adding water to the soil, either from irrigation or runoff from new impervious surfaces. The General Construction Permit, which was adopted by the State Water Resources Control Board as Water Quality Order 2009-0009-DWQ as amended by 2010-0014-DWQ, is required for soil disturbance activities that would be greater than 1 acre. The tank farm and street closures sites where all construction activities would occur encompass approximately 11 acres of land, in addition to any future Commercial Recreation development, which could encompass up to 6.98 acres of land on Port Parcel 027-047, up to 3.35 acres of land on Port Parcel 028-007, and up to 4.48 acres of land on the area of Lot K east of the mean high tide line, all of which would be subject to the General Construction Permit. As such, the project is required to develop and implement a Storm Water Pollution Prevention Plan, which will include Best Management Practices (BMPs), such as sediment and erosion control measures, to prevent pollutants from leaving the sites that would be employed during construction. Additionally, consistent with the Port District's Jurisdictional Runoff Management Program (JRMP) (pursuant to the Regional Water Quality Control Board [RWQCB] Municipal Separate Storm Sewer System [MS4] Permit, adopted by RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 [National Pollutant Discharge Elimination System (NPDES) Permit #CAS0109266, Municipal Permit]), the project sites undergoing construction would be designed with BMPs consistent with the Port BMP Design Manual, which requires the use of low-impact development (LID) BMPs, as well as source control and treatment control BMPs. Additionally, a post-construction stormwater management plan or stormwater quality management plan must be included for all priority development projects, which would include the proposed project. Furthermore, the project would comply with the City of National City's grading ordinance. Therefore, both construction and operational impacts related to soil erosion or loss of topsoil would be less than significant.

#### **6.4.5.3 Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse**

Although the County of San Diego's Multi-jurisdictional Hazard Mitigation Plan indicates the site has a low potential for liquefaction, because of the underlying soil characteristics and shallow groundwater depth in the area, the proposed project could be subject to geologic hazards (i.e., liquefaction), which could contribute to potential impacts related to soil instability during construction and operation. However, the proposed project is not expected to draw a substantial amount of people, either during project construction activities or permanently, because the project involves vehicle storage. Furthermore, no structures intended for human occupation would be built and, therefore, potential risk to the occasional personnel working on site would be extremely limited. Additionally, no construction would occur on the short-term use permit sites. Finally, construction of the proposed project would be subject to applicable ordinances of the 2013 California Building Code (California Code of Regulations Title 24), which would reduce anticipated

geologic hazards, including substantial adverse effects from potential soil instability. Impacts would be less than significant.

#### **6.4.5.4 Expansive Soil**

Implementation of the proposed project would not result in substantial risks to life or property related to expansive soils. Expansive soils are fine-grained soils (generally high-plasticity clays) that can undergo a significant increase in volume with an increase in water content as well as a significant decrease in volume with a decrease in water content. Changes in the water content of highly expansive soils can result in severe distress for structures constructed on or against the soils. Underlying soils found on site are partially composed of clays and, as such, could be subject to expansion. Should any soil failure occur, there would be minimal risk because no structures are proposed as part of the project. Moreover, the proposed project is not expected to draw a substantial amount of people, either during project construction activities or permanently, because the proposed project would serve primarily as a temporary storage lot for vehicles. Additionally, no construction would occur with the short-term use permit sites. Furthermore, construction of the proposed project would be subject to applicable ordinances of the 2013 California Building Code (California Code of Regulations Title 24). Impacts associated with the proposed project would be less than significant.

#### **6.4.5.5 Septic Tanks or Alternative Wastewater Disposal Systems**

No septic tanks or alternative wastewater disposal systems are proposed; therefore, no impact would occur.

### **6.4.6 Hazards and Hazardous Materials**

#### **6.4.6.1 Routine Transport, Use, or Disposal of Hazardous Materials**

Implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction associated with the tank farm and street closures sites and any demolition of the two structures on the former Weyerhaeuser site is expected to be complete within 7 weeks. During that time, the temporary transport, use, and disposal of hazardous materials, such as fuel, solvents, paints, oils, and grease, may occur. Additionally, future Commercial Recreation development, which is unknown at this time, may result in the temporary transport, use, and disposal of hazardous materials, such as fuel, solvents, paints, oils, and grease. Such transport, use, and disposal must comply with applicable regulations, such as the Resource Conservation and Recovery Act of 1976, Department of Transportation Hazardous Materials Regulations, and local Certified Unified Program Agency regulations. Although small amounts of solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during the construction phase, these materials are typically used in construction projects and would not represent the transport, use, and disposal of acutely hazardous materials. No construction would occur on the short-term use permit sites.

Proposed project operations would involve storage space for marine terminal operations, including primarily the handling and storage of motor vehicles, which do not include hazardous materials. No routine transport, use, or disposal of hazardous materials would occur on the project site during project operations. Furthermore, Commercial Recreation development typically does not involve routine transport, use, or disposal of hazardous materials, but any future development would be



required to comply with all regulations and laws related thereto. Impacts associated with the proposed project would be less than significant.

#### **6.4.6.2 Existing or Proposed Schools**

Implementation of the proposed project would not create any impacts associated with hazardous emissions or handling of acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. There are no existing or proposed schools within 0.25 mile of the project area. The closest school, Kimball Elementary School, is approximately 0.9 mile northeast of the project site. As discussed above, the proposed project would not release hazardous emissions or involve handling substantial amounts of hazardous materials that could result in significant impacts within 0.25 mile of an existing or proposed school. No impact would occur.

#### **6.4.6.3 Listed Hazardous Materials Sites**

None of the project sites are included on a list of hazardous materials sites that are compiled pursuant to Government Code Section 65962.5. Therefore, there would be no impact.

#### **6.4.6.4 Airport Land Use Plans**

Implementation of the proposed project would not result in a safety hazard for people residing or working in the project area. The proposed project area is not within an airport land use plan area or within 2 miles of a public airport or public use airport. No impact would occur.

#### **6.4.6.5 Private Airstrips**

Implementation of the proposed project would not result in a safety hazard for people residing or working in the project area. The proposed project area is not within the vicinity of a private airstrip. No impact would occur.

#### **6.4.6.6 Emergency Response Plan or Emergency Evacuation Plan**

Implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project would not result in any substantial traffic queuing along Bay Marina Drive, the main arterial road into the NCMT, and would not allow any construction vehicles or equipment to park or remain stationary within the roadway. Although the proposed project would involve closure of Quay Avenue between Bay Marina Drive and 28th Street and of 28th Street west of Quay Avenue and the western end of 32nd Street, access to the area would remain open via Bay Marina Drive and Tidelands Avenue. Closure of the portion of 32nd Street west of Tidelands Avenue would not affect circulation or emergency access in the area as it currently terminates at the NCMT.

The proposed project, including any future Commercial Recreation development, would also be required to comply with applicable requirements set forth by the County of San Diego Office of Emergency Services' Operational Area Emergency Plan, the National City Police Department, and the National City Fire Department. The Office of Emergency Services coordinates emergency response at the local level in the event of a disaster, including fires. This emergency response coordination is facilitated by the Operational Area Emergency Operations Center and responding agencies to the proposed project site, the Southern Division of the National City Police Department, National City Fire Department Station No. 34, and San Diego Harbor Police Department (HPD).

Compliance with the aforementioned programs, rules, and regulations for emergency response would reduce the potential impacts on emergency response to less-than-significant levels.

#### **6.4.6.7 Wildland Fires**

According to the California Department of Forestry and Fire Protection (2009), the proposed project is not within a High Fire Risk Area. Furthermore, the proposed project area is neither adjacent to nor intermixed with wildlands. It is surrounded by marine-related industrial uses. No impacts would occur.

### **6.4.7 Hydrology and Water Quality**

#### **6.4.7.1 Groundwater Supplies**

The tank farm project site is mostly pervious with ruderal vegetation and would be mostly paved after project completion. Bioretention swales would be installed at the tank farm and street closures sites to meet the Port District's JRMP design capture volume requirements and to promote infiltration. Runoff that is not captured by the LID measures would be treated before being discharged to San Diego Bay through onsite stormwater BMPs that will be required by the JRMP. This, as well as any future Commercial Recreation development, may result in a reduction of groundwater infiltration at the sites. However, the closest groundwater wells to the project sites are 1.5 miles away (Sweetwater Authority 2007), and reduced groundwater infiltration at the sites is unlikely to affect production rates of existing wells. Groundwater infiltration from planned bioretention swales is anticipated to prevent substantial reduction in groundwater levels. Moreover, no changes in perviousness would occur at the short-term use permit sites or the former Weyerhaeuser site. Any future Commercial Recreation development on the Overlay sites or the Uplands Property parcel located east of Marina Way, which is unknown at this time and which had not been proposed as of the date of the Revised NOP, would undergo project-level environmental review prior to approval and would be required to comply with the Port District's JRMP that is instituted at the time of development. Therefore, impacts related to potentially lowering the groundwater table and groundwater recharge resulting from project implementation would be less than significant.

#### **6.4.7.2 Erosion or Siltation On Site or Off Site**

The existing drainage patterns would be altered, because the tank farm would be converted from mostly pervious to mostly impervious, but the project would not alter the course of a stream or river. After project completion, little soil would be exposed, as the majority of the sites would be paved; therefore, there is little potential for erosion or siltation on site.

Increased stormwater velocity as a result of increased impervious surface area has the potential to cause erosion or siltation downstream. However, stormwater discharges from the site would be treated in accordance with the Port District's BMP Design Manual and directed to the storm drain system and discharged to San Diego Bay. Therefore, downstream erosion would not occur. Furthermore, no changes to existing drainage are proposed at the short-term use permit sites or the former Weyerhaeuser site. Upon expiration of the Overlay, any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would be required to comply with the District's BMP Design Manual that is

instituted at the time of development. Impacts related to substantial erosion or siltation on site or off site from the proposed project's implementation would be less than significant.

#### **6.4.7.3 Surface Runoff in a Manner that Would Result In Flooding On Site or Off Site**

The existing drainage patterns would be altered, as the tank farm site would be converted from mostly pervious to mostly impervious, but the project would not alter the course of a stream or river. An increased rate or amount of stormwater runoff from the increase in impervious surface area at the tank farm site would be managed by the inclusion of new stormwater drains and porous concrete swales. Moreover, drainage at the short-term use permit sites and the former Weyerhaeuser site would remain unchanged with the proposed project. Upon expiration of the Overlay, any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would be required to comply with the District's BMP Design Manual that is instituted at the time of development. Therefore, potential for flooding on site or off site is low, and project impacts related to flooding would be less than significant.

#### **6.4.7.4 Stormwater Drainage Systems**

The proposed project would increase the amount of sheet flow off the tank farm site. However, porous asphalt concrete swales and new storm drains have been incorporated into the design of the tank farm and street closures sites that would prevent this increase from exceeding the capacity of the storm drainage system. The porous asphalt concrete swales would also treat and improve the water quality of runoff. Moreover, drainage at the short-term use permit sites and the former Weyerhaeuser site would remain unchanged with the proposed project. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would be required to comply with the District's BMP Design Manual that is instituted at the time of development. Impacts would be less than significant.

#### **6.4.7.5 100-Year Flood Hazard Areas**

No housing is proposed on site, nor are the sites on a 100-year floodplain. The Federal Emergency Management Agency delineates floodplains throughout the nation and presents the data on Flood Insurance Rate Maps. However, the project sites are outside of the 100-year floodplain (Federal Emergency Management Agency 2014). Therefore, no related impacts would occur.

#### **6.4.7.6 Impede or Redirect Flood Flows**

The project sites are not within a 100-year floodplain. Therefore, no impact would occur.

#### **6.4.7.7 Flooding**

Dam failures are rated as a low-probability, high-loss events. Only two major dam failures have been recorded in San Diego County. These occurred in 1916 and were caused by a flood event (County of San Diego 2010). The project sites are downstream of the Sweetwater Dam, which is approximately 5.3 miles to the east. In the event of a dam failure or failure of the levees along the Sweetwater River Channel, portions of National City including the NCMT and the project sites are at high risk of inundation (County of San Diego 2011). An emergency evacuation plan is in place for the

Sweetwater Dam, however, and would be implemented in the unlikely event that the dam fails. Moreover, the proposed project would expand vehicle throughput, which would include vehicles being temporarily stored prior to transportation by truck or rail to the final destination point. Over 100 workers may be present throughout the day, but they would be highly mobile, moving cars from vessel to storage lots to rail or haul trucks. The project is not expected to draw a substantial amount of people that might occur with developments such as large civic development projects or very large commercial/residential developments. Furthermore, no structures intended for human occupation would be built and, therefore, the potential risk to the personnel working on site would be limited. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would be required to comply with the emergency evacuation plan. Because dam failure is considered highly unlikely and because a Sweetwater Dam-specific evacuation and emergency plan is in place, as identified in the County of San Diego's Multi-jurisdictional Hazard Mitigation Plan (San Diego County Office of Emergency Services 2010), and would be implemented should a failure occur, impacts would be less than significant.

#### **6.4.7.8 Inundation by Seiche, Tsunami, or Mudflow**

The California Emergency Management Agency has developed detailed tsunami inundation maps. According to the maps for National City, the project sites are outside of the tsunami hazard zone (California Department of Conservation 2009). Therefore, the project would not result in impacts related to potential tsunami inundation.

Seiches are waves generated in an enclosed body of water, such as the Sweetwater Reservoir 5.3 miles to the east of the project sites, from seismic activity. Seiches are related to tsunamis for enclosed bays, inlets, and lakes. These tsunami-like waves can be generated by earthquakes, subsidence or uplift of large blocks of land, submarine and onshore landslides, sediment failures, and volcanic eruptions. The strong currents associated with these events may be more damaging than inundation by waves. Sweetwater Reservoir is considered to be too far away to affect the project sites. The closest body of water that could result in an earthquake-induced seiche is San Diego Bay, adjacent to the project sites. However, it is generally believed that a seismic event of sufficient magnitude to cause a seiche capable of causing significant damage would be of unprecedented scale for the region and, therefore, is remote and speculative (City of San Diego 2007). Therefore, no impact on the project sites would result from inundation caused by a seiche.

The risk of mudslides, or flood-induced landslides, is determined by a combination of factors, including slopes with gradient of 25% or greater, soil series data, and soil-slip susceptibility. The project sites are in an area with generally flat topography that does not have the relief or slope to support a mudflow. Steep topography and high levels of precipitation are the primary requirements to generate a mudflow. Therefore, the proposed project would not result in impacts associated with mudflows (City of National City 2012).

### **6.4.8 Land Use and Planning**

#### **6.4.8.1 Physically Divide an Established Community**

The proposed project would not physically divide an established community. The proposed project would provide additional space for marine terminal operations by redeveloping a vacant and unpaved property, utilizing a vacant paved property, and closing portions of three streets, and

would also potentially renew existing short-term use permits to continue support of marine terminal operations, as well as a potential future unknown Commercial Recreation development. All project-related areas are surrounded by existing maritime and other Port-related uses.

As a result of project approval, the project would allow for further integration with and connections to existing terminal operations and for uses similar to that of existing surrounding operations. Potential renewal of existing short-term use permits would allow for continued operation of these areas and would likewise not physically divide an established community. No impact would occur.

#### **6.4.8.2 Habitat Conservation Plan or Natural Community Conservation Plan**

The protection of biological resources within the Port District is guided by the PMP. Section II, Planning Goals (Goal XI), of the PMP has established goals to protect, preserve, and enhance natural resources in San Diego Bay. The street closures, former Weyerhaeuser site, and short-term permit sites and surrounding properties are currently developed and do not contain vegetation. Existing vegetation on the tank farm site is limited to low-quality ruderal types. Furthermore, the project sites are not within PMP Planning Districts 7, 8, or 9, which contain areas identified for conservation purposes by the Port District.

In addition, the San Diego Bay INRMP is a long-term strategy, implemented by both the Port District and U.S. Navy, which provides direction and planning guidance for good stewardship of the natural resources within San Diego Bay. Therefore, implementation of the proposed project would not conflict with the provisions of a conservation plan.

### **6.4.9 Mineral Resources**

#### **6.4.9.1 Known Mineral Resource**

The project sites are in an area characterized by industrial, marine-related activities that does not contain any known mineral resources. In addition, the project sites are underlain by artificial fill material. No commercial mining operations exist on the project sites or in the immediate vicinity. The project sites and the surrounding area are not designated or zoned as land with the availability of mineral resources. In addition, the project sites do not contain aggregate resources and are not located in a mineral resource zone that contains important resources, as designated by the California Department of Conservation's Division of Mines and Geology. Therefore, the proposed project would not result in a loss of known mineral resources. No impact would occur.

#### **6.4.9.2 Important Mineral Resource**

The project sites are underlain by artificial fill material. The PMP does not identify any mineral resources in the area or designated plans for mineral resource extraction. The project sites and the surrounding area do not contain locally important mineral resources. The project would not result in the loss of availability of a known mineral resource or regionally important mineral resource recovery site that is delineated on any plan. Therefore, implementation of the project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur.

## **6.4.10 Noise**

### **6.4.10.1 Airport Land Use Plan Area**

The project sites are not within the Airport Influence Area of any airport as defined by an Airport Land Use Compatibility Plan. The closest air facilities to the project sites are Naval Air Station North Island, Naval Outlying Landing Field Imperial Beach, San Diego International Airport, and Brown Field municipal airport, the closest of which is more than 5.5 miles from the project site. In addition, the proposed project would not construct any habitable structures or buildings and would not attract large numbers of people to the project site. As a result, the project would not expose people residing or working within the project area to excessive airport noise levels.

### **6.4.10.2 Private Airstrip**

There are no private airstrips within 2 miles of the project site. Furthermore, the proposed project would not construct any habitable structures or buildings and would not attract large numbers of people to the project site. As a result, the project would not expose people residing or working within the project area to excessive private airstrip noise levels.

## **6.4.11 Population and Housing Resources**

### **6.4.11.1 Population Growth**

The proposed project is anticipated to expand current vehicle throughput through paving of the former NCMT tank farm; closure of portions of Quay Avenue, 28th Street, and 32nd Street; utilization of the former Weyerhaeuser site; and the potential renewal of current in-use, short-term use permits. The construction activities would temporarily increase workers for approximately 7 weeks as the tank farm and street closures sites are graded and paved and minor demolition activities occur on the former Weyerhaeuser site. Expansion of operations would create up to an additional 211 operational jobs associated with the increase in available vehicle storage area and the labor needed to move the vehicles, and, potentially, the vehicle shops where repairs are made and vehicle options are installed. A future Commercial Recreation development may occur in the future, as well, but has not been proposed at this time and no details are known.

Although implementation of the proposed project would require the addition of new employees and temporarily increase the number of construction workers in the area, the introduction of additional employees would not result in a significant increase in the local population and would not induce substantial population growth. The additional jobs are anticipated to be filled by residents currently living in the San Diego region. Therefore, the proposed project would not directly or indirectly induce substantial population growth through new homes or businesses in the San Diego region. Impacts would be less than significant.

Additionally, the proposed project would not extend, or create the need for, infrastructure expansion into previously undeveloped areas. The project sites are currently served by existing roadways, water, wastewater, gas, and electrical infrastructure. Land uses that surround the sites are also served by existing utilities. The proposed project would not construct any buildings, extend roads, or involve the addition of any growth-inducing infrastructure, including water and gas lines or electricity, into previously undeveloped areas, because the project sites are within a developed area. Therefore, the proposed project would not directly or indirectly induce substantial population

growth through extension of roads or other infrastructure in the surrounding area. Impacts would be less than significant.

#### **6.4.11.2 Displacement of Housing**

The project sites are developed with maritime industrial uses and no existing housing units or persons are located on the project sites. No residential land uses are within the project sites or surrounding area. Implementation of the proposed project would not displace any housing units or necessitate the construction of housing units elsewhere. Therefore, there would be no impact.

#### **6.4.11.3 Displacement of People**

The project sites are developed with maritime industrial uses and no existing housing units or persons are located on the project sites. Implementation of the proposed project would not result in the displacement of people, nor would it necessitate the construction of replacement housing elsewhere. Therefore, no impact would occur.

### **6.4.12 Public Services**

#### **6.4.12.1 Fire**

The proposed project would result in expanded vehicle throughput, including increased daily throughput at the NCMT, which would require an additional 211 employees to handle the additional throughput. A future Commercial Recreation development may occur, as well, but has not been proposed at this time and no details are known.

The National City Fire Department and fireboats operated by the San Diego HPD provide fire protection services to the project sites. The National City Fire Department responds from two fire stations: 343 East 16th Street, approximately 2 miles northeast of the project sites, and 2333 Euclid Avenue, approximately 3.4 miles east of the project sites. HPD provides law enforcement and marine firefighting services in and around the San Diego Bay for the Port District. There are HPD offices in San Diego and Chula Vista. The HPD office at 3380 North Harbor Drive in San Diego serves as the headquarters and administration building, while the Chula Vista and Shelter Island offices serve as dispatch centers.

The proposed project may increase demand for National City and HPD fire protection services. However, the nominal increases in employees, truck trips, and rail trips per day are not expected to result in adverse impacts on fire protection services for National City or HPD and would not require the construction of new or improved facilities. Furthermore, the renewal of the existing short-term use permits would not result in a substantial increase in demand for fire protection services because vehicle storage operations already exist, and the potential for the need for fire protection services is low. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would likely be required to ensure that all services are available to meet its needs. Therefore, the proposed project would result in less-than-significant impacts on fire protection services.

### 6.4.12.2 Police

The proposed project would result in expanded vehicle throughput, including increased daily throughput at the NCMT, which would require an additional 211 employees per day to handle the additional throughput. The National City Police Department and HPD provide police protection services to the project sites. HPD is the law enforcement authority for the Port District and provides public safety services for the project sites.

The proposed project may increase demand for National City and HPD police protection services. However, the increases in employees, truck trips, and rail trips per day are not expected to result in adverse impacts on police protection services for National City or HPD and would not require the construction of new or improved facilities. Additionally, the tank farm site, street closures sites, and former Weyerhaeuser site would be surrounded by chain link fencing; access would be restricted by a security guard and would require authorized approval to enter the site. This would reduce the potential for criminal activities to occur on the project sites and the need for police protection services. Furthermore, the renewal of the existing short-term use permits would not result in an increased demand for police protection services, as existing operations would continue unchanged. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review to assess whether all services are available to meet its needs. Therefore, the proposed project would result in less-than-significant impacts on police protection services.

### 6.4.12.3 Schools

Physical impacts on school facilities and services are typically associated with population in-migration and growth, which increase the demand for schools, the construction of which may result in physical impacts on the environment. As discussed in Section 6.4.11, *Population and Housing*, implementation of the proposed project would introduce new employees and would temporarily increase the number of construction workers in the area; however, the introduction of additional employees would not result in a significant increase in the local population and would not induce substantial population growth because it is anticipated the jobs would be filled by residents in the region. Consequently, the proposed project would have a negligible effect on population growth and school demand. Therefore, the proposed project would not result in a significant increase in demand requiring the need for new or physically altered school facilities, and the impact would be less than significant.

### 6.4.12.4 Parks

The closest recreational facility to the project sites is Pepper Park. Although the proposed project would have a negligible effect on population growth, it is possible that use of recreational facilities in the vicinity of the project sites could increase slightly due to the increase in employees, particularly at lunch breaks. However, this insignificant increase in use would result in very light use of the park (e.g., sitting at benches eating lunch) and would not substantially degrade the existing facilities. Therefore, the proposed project would not result in an increased demand requiring the need for new or physically altered park facilities, and any related impact would be less than significant.



### **6.4.12.5 Other Public Facilities**

The proposed project would not substantially increase the local population. Therefore, the proposed project would not result in an increased demand requiring the need for new or physically altered public facilities, and the impact would be less than significant.

## **6.4.13 Recreation**

### **6.4.13.1 Physical Deterioration of Facilities**

An increase in the use of existing parks and recreational facilities typically results from an increase in housing or population in an area. The proposed project would provide additional space for vehicle throughput operations and would result in an increase in the number of Pasha employees and daily throughput at the NCMT. Additionally, future Commercial Recreation development may result in increased employees or visitors in the area, but such details are unknown at this time. The closest recreational facility to the project sites is Pepper Park, which is approximately 0.4 mile southeast of the tank farm site, south of the 32nd Street closure site, and southwest of short-term use permit Port Parcel 028-007. Although the proposed project would have a negligible effect on population growth, it is possible that use of recreational facilities in the vicinity of the project sites would increase due to the increase in employees. However, as a maritime industrial use, the proposed project would not result in an increase in the use of existing recreational facilities such that substantial physical deterioration of recreation facilities would occur, nor would the project require construction of new recreation facilities. Moreover, any future Commercial Recreation development would be required to undergo project-level environmental review if and when it is proposed. Therefore, impacts would be less than significant.

### **6.4.13.2 Construction or Expansion of Recreational Facilities**

The project would not include the development of any recreational facilities. The proposed project would not result in significant impacts or otherwise require expansion of existing recreational facilities. Therefore, the proposed project would not include recreational facilities or require the construction or expansion of other recreational facilities that might have an adverse physical effect on the environment. No impact would occur.

## **6.4.14 Transportation/Traffic**

### **6.4.14.1 Air Traffic Patterns**

The closest air facilities to the project sites are Naval Air Station North Island, Naval Outlying Landing Field Imperial Beach, San Diego International Airport, and Brown Field municipal airport, the closest of which is more than 5.5 miles from the project site. In addition, the project sites are not within the Airport Influence Area of any airport as defined by an Airport Land Use Compatibility Plan or Airport Impact Zones for any of these airports. Furthermore, the proposed project would not involve the development of any structure that would extend into airspace or be tall enough to result in a change in air traffic patterns or a change in location. Therefore, the project would not result in a change in air traffic patterns or otherwise result in a safety risk, and impacts would not occur.

## 6.4.15 Utilities

### 6.4.15.1 Wastewater Treatment Requirements

Wastewater conveyance from the project site is maintained by the National City wastewater division. Wastewater collected within National City, including the NCMT, is treated by the City of San Diego at the Point Loma Wastewater Treatment Plant (PLWTP). The PLWTP treats approximately 175 million gallons per day (MGD) of wastewater generated in a 450-square-mile area by more than 2.2 million residents. Located on a 40-acre site on the bluffs of Point Loma, the plant has a treatment capacity of 240 MGD. Treated effluent is discharged to the ocean through a 4.5-mile-long ocean outfall off Point Loma.

Project construction is anticipated to use approximately 1,000 gallons of water per day over several weeks, mainly for dust suppression and construction site cleaning. This water is anticipated to evaporate or be absorbed into the soil during grading operations. Water usage associated with project operations would be minimal and limited primarily to restroom use by the additional employees and the use of mobile water trucks for vehicle cleaning.

Assuming three bathroom breaks per shift for 211 employees, toilets with 1.6 gallons per flush, and sinks using 2 gallons per minute with an average use of 10 seconds and automatic shutoff, total daily water consumption during project operations would be approximately 1,583 gallons per day. This is equivalent to the daily water consumed at approximately five single-family homes in the Sweetwater Authority (SWA) service area (Sweetwater Authority 2011, Table 3-2: Actual Water Deliveries, 2005 and 2010). Assuming a conservative estimate of 1 gallon of water use converting to 1 gallon of wastewater generated, there would be approximately 1,583 gallons of wastewater produced per day by the additional employees. The amount of wastewater is similar to the amount of wastewater generated by approximately four to five single-family homes.

Additionally, the renewal of the short-term use permits and use of the former Weyerhaeuser site would not result in an increased generation of wastewater. Water usage associated with the mobile vehicle cleaning truck would be approximately 333 gallons per day, which is slightly greater than the amount of water used at one single-family home per day in the SWA service area. Moreover, the amount of water used per vehicle washed is only approximately 4.34 gallons (only 13.29% of vehicles are sprayed, primarily to remove bird droppings), and this water is almost entirely removed through evaporation, resulting in little to no runoff off site or into the sewer or storm drain system.

Cleaning the pavement on the project sites consists of the use of a self-contained catching street sweeper, and no water would be used as part of that sweeping process.

Because the increase in wastewater would equate to less than the wastewater use at three single-family homes per day during construction and five single-family homes during operation, the project would not result in an exceedance of the wastewater treatment requirements and would have no effect on the wastewater treatment requirements set forth by the San Diego RWQCB.

Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would assess whether there are sufficient wastewater conveyance systems available to meet its needs.

The project would have a less-than-significant impact on wastewater treatment requirements.

## 6.4.15.2 Water or Wastewater Treatment Facilities

### Water

National City receives its water from SWA, a member agency of the San Diego County Water Authority. SWA provides water service to approximately 186,907 people in National City, Bonita, and the western and central portions of Chula Vista.

SWA obtains its water supply from four sources: imported treated and untreated water from the San Diego County Water Authority; surface runoff from the Sweetwater River watershed, which is fully appropriated to SWA; the National City well field; and the Richard A. Reynolds Desalination Facility, a brackish groundwater desalination facility. In addition, the system has emergency water connections to three other water agencies: Otay Water District, the City of San Diego, and the California American Water Company.

SWA owns and operates two surface water reservoirs: Sweetwater Reservoir and Loveland Reservoir. Sweetwater Reservoir was constructed in 1888 and has an approximate capacity of 28,079 acre-feet, and Loveland Reservoir was constructed in 1945 and has an approximate capacity of 25,387 acre-feet. Additionally, SWA operates the Robert A. Perdue Water Treatment Plant adjacent to the Sweetwater Reservoir. The Robert A. Perdue Water Treatment Plant has a treatment capacity of 30 MGD and is capable of treating surface runoff stored at Sweetwater Reservoir or imported raw water from the San Diego County Water Authority.

SWA also operates the National City Wells, which produce potable groundwater, and the Desalination Facility, which produces drinking water from brackish groundwater. The National City Wells consist of three wells: Nos. 2, 3, and 4. Well Nos. 3 and 4 operate, while Well No. 2, which is the oldest well, serves as a backup. Sweetwater Reservoir has produced an average of 1,810 acre-feet per year from the National City Wells from 1954 to 2010. The Desalination Facility commenced operation in January 2000 and treats brackish groundwater using reverse osmosis technology. The Desalination Facility was initially designed to produce 4.0 MGD of drinking water; however, it was constructed with enough space to accommodate an expansion to produce up to 8 MGD.

SWA also has 20 storage tanks that represent approximately 43.5 million gallons of treated water throughout its system, including a major buried reservoir with a capacity of 18 million gallons. The whole conveyance system has 23 pumping stations, with a total pumping capacity of approximately 36,000 gallons per minute from all distribution pumping sources. Conveyance pipeline sizes range from 2-inch to 48-inch, with a collective length of approximately 388 miles.

Local water sources currently meet approximately 59% of the water needs within the SWA service area, while the 41% balance is met with imported water. According to the SWA 2010 Urban Water Management Plan, SWA verifies that there will be sufficient water supply to serve the projected SWA service area population in normal, single dry, and multiple dry year scenarios. An adequate supply is further confirmed by the Southern California Metropolitan Water District's 2010 Regional Urban Water Management Plan, Metropolitan Water District's Integrated Resources Plan, and San Diego County Water Authority's 2010 Urban Water Management Plan.

The existing conditions at the former tank farm site do not generate a demand for potable water; however, existing water mains do run along the eastern and southern boundaries of the former tank farm site (City of National City 2012). The short-term use permit sites, which have mostly impervious surfaces, are used as parking lots for Pasha operations and do not generate a demand for

water. Finally, the former Weyerhaeuser site, which is entirely paved and developed, also would not generate a demand for water. The increase of up to 210,818 cars processed per year would require approximately 333 gallons per day (or the equivalent water demand of approximately one single-family home per day) from use of a mobile water cleaning truck. Mobile washing would be designed (as it currently is) to minimize water use so that there is no runoff, which would be consistent with Executive Order B-29-15 of April 1, 2015 and the State Water Resources Control Board's Emergency Conservation Regulations of May 18, 2015, which require businesses to implement water efficiency measures. In addition, the project would increase jobs by 211 employees in order to process the additional cars. These additional 211 employees would require approximately 1,583 gallons per day (or the equivalent of approximately five single-family homes per day) from increased restroom use.

State CEQA Guidelines Section 15155, which is based on Sections 10910–10915 of the California Water Code, provides guidance on what is considered a water-demand project. The proposed project does not meet any of the water-demand project definitions. The categories most applicable to the project are described in Section 15155(a)(1)(E), which includes industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area. However, the proposed project does not propose to construct any new industrial buildings and is not an industrial plant. Additionally, it would not house more than 1,000 persons. Although the project sites total more than 40 acres, most of the area is currently used as vehicle storage, and the proposed project would only increase vehicle storage at the sites. This type of use generates no need for water use on its own. Additionally, Section 15155(a)(1)(G) states that a water-demand project would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-residential-dwelling-unit project. Given that the project would only demand water equivalent to approximately six single-family homes, the project's water demand would be substantially lower than the threshold. Therefore, new or expanded water facilities would not be needed because the existing facilities would be able to accommodate this increase in water use.

Because the increase in water demand would be minimal, the additional demand would not result in a significant impact on available water supply or existing water infrastructure. No increase in water is anticipated at the short-term permit sites. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would consider a project's specific water needs compared with the available supply. Therefore, impacts would be less than significant, as no new or expanded water treatment facilities would be required as the result of the project.

## **Wastewater**

As mentioned above, the National City wastewater division maintains the sanitary sewer mainlines in the project area and wastewater collected within National City is treated by the City of San Diego at the PLWTP. The PLWTP treats approximately 175 MGD of wastewater generated in a 450-square-mile area by more than 2.2 million residents, but the PLWTP has a treatment capacity of 240 MGD. The project's small amount of additional wastewater (approximately 1,583 gallons per day) would easily be accommodated by the PLWTP.

In 2011, the City of National City prepared a Sewer System Master Plan to serve as a guide for improvements to and expansion of the City's sewer system. It also establishes wastewater flows, recommends improvements, and estimates proposed facility cost estimates. The Sewer System Master Plan reported an average dry weather flow of 4.22 MGD in 2009 and anticipated flows to

increase by 56%, reaching 6.57 MGD in 2027. It also identified that current pipes and infrastructure are not large enough to accommodate projected population growth in the City and that 260 gravity mains are recommended for upsizing by 2027.

The existing condition at the former tank farm site consists of a vacant lot with a mostly pervious surface and does not generate wastewater; however, existing sewer piping does run along the eastern and southern boundaries of the former tank farm site. The short-term use permit sites and former Weyerhaeuser site, which have mostly impervious surfaces, do not generate wastewater.

The project would result in a minor increase in demand for wastewater treatment as the result of the increase of additional employees associated with the project. The existing infrastructure is currently sufficient to convey the minimal increase in wastewater flows to treatment facilities, and no construction of new wastewater treatment plants or expansion of existing facilities would be required as a result of the project's implementation. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would consider a project's specific demand on wastewater systems to ensure it would be sufficient. Therefore, impacts would be less than significant.

#### **6.4.15.3 Stormwater Drainage Facilities**

The tank farm site is vacant land that consists mostly of dirt and low-quality ruderal vegetation with some remnant paving. Implementation of the proposed project would alter the existing drainage patterns, as the site would be converted from mostly pervious to mostly impervious surfaces. To address the increase in impervious surface area, stormwater runoff would be managed by the inclusion of new stormwater drains and porous concrete swales that would ensure runoff is directed to adequate drainage infrastructure and treated using BMPs. The project would require preparation of a stormwater plan that would specify the BMPs required to capture and treat stormwater runoff, in accordance with the District's JRMP (pursuant to the RWQCB MS4 Permit, adopted by RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 [NPDES Permit #CAS0109266, Municipal Permit]). The BMPs would be consistent with the Port BMP Design Manual, which requires the use of LID BMPs as well as source control and treatment control BMPs. The stormwater plan will describe how the project will minimize the short- and long-term impacts on receiving water quality. The plan will clearly convey the process used to identify pollutants of concern, conditions of concern, and BMPs selected for the project and will identify BMP maintenance requirements. The project's plan must be prepared by the Project Applicant and approved by the Port District prior to the commencement of construction. The use of the former Weyerhaeuser site and renewal of the short-term permits would not result in the generation of additional stormwater runoff, as these sites are already paved (with the exception of Port Parcel 027-043, which is and would remain a strip of landscape). Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would be required to comply with the District's JRMP. Impacts would be less than significant.

#### **6.4.15.4 Landfills**

During site preparation, approximately 1,200 cubic yards of concrete would be exported off site to an approved facility for recycling. Non-recyclable solid waste would be sent to the Otay Landfill, at 1700 Maxwell Road in Chula Vista, approximately 10 miles southeast of National City and operated by Allied Waste Industries. The landfill has a maximum permitted throughput of 5,830 tons of solid waste per day and a remaining capacity of 24,514,904 cubic yards as of March 31, 2012. The

landfill's cease operation date is estimated at 2028 (Cal Recycle 2014). There are 15 facilities in San Diego County that accept concrete for recycling (County of San Diego 2012), the closest of which is SANCO Resource Recovery, 9 miles northeast of the project site. The existing conditions at the former tank farm site, former Weyerhaeuser site, and the short-term use permit sites do not generate a demand for solid waste disposal needs. During operations, the project would generate very small amounts of waste associated with the additional 211 permanent employees. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would be required to analyze whether there is sufficient landfill capacity for such development. Therefore, the proposed project would have a less-than-significant impact related to solid waste disposal needs.

#### **6.4.15.5 Solid Waste**

Assembly Bill 939 requires each city and county in the state to divert at least 50% of its solid waste from landfill disposal through measures such as source reduction, recycling, and composting. The bill also requires cities and counties to prepare Source Reduction Recycling Elements in their General Plans. Concrete associated with demolition of the tank farm and street closures sites would be exported and recycled at an approved facility. The existing conditions at the former tank farm and street closures sites, former Weyerhaeuser site, and the short-term use permit sites do not generate solid waste. During operations, the project would generate very small amounts of waste associated with the additional 211 permanent employees, which would consist primarily of food packaging that would be disposed of on site in appropriate waste and recycling receptacles. Any future Commercial Recreation development, which is unknown at this time, would undergo project-level environmental review prior to approval and would be required to comply with Assembly Bill 939. Therefore, the proposed project would have a less-than-significant impact related to compliance with federal, state, and local statutes and regulations related to solid waste.

## Chapter 7

# Alternatives to the Proposed Project

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## 7.1 Overview

This chapter describes and analyzes a range of reasonable alternatives that could feasibly attain most of the basic project objectives while avoiding or substantially lessening one or more of the significant effects of the proposed project. The primary purpose of this chapter is to ensure that the comparative analysis provides sufficient detail to foster informed decision-making and public participation in the environmental process.

Five alternatives to the proposed project are analyzed in this chapter and discussed in terms of their merits relative to the proposed project.

- Alternative 1—Redevelop NCMT Tank Farm Only (No Renewal of Short-Term Use Permits).
- Alternative 2—Renew Short-Term Use Permits Only (No NCMT Tank Farm or Street Closures).
- Alternative 3—Remove Port Parcel 028-007 from Project.
- Alternative 4—No Marine Related Industrial Overlay.
- Alternative 5—No Project.

Based on the analysis below, Alternative 1 would be the environmentally superior alternative.

## 7.2 Requirements for Alternatives Analysis

State CEQA Guidelines requires that an EIR present a range of reasonable alternatives to a project, or to the location of a project, that could feasibly attain a majority of the basic project objectives, but that would avoid or substantially lessen one or more significant environmental impacts of the project. The range of alternatives required in an EIR is governed by a “rule of reason” that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider every conceivable alternative to a project. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are not feasible, or do not avoid or substantially lessen any significant environmental effects (State CEQA Guidelines, Section 15126.6(c)).

In addition to the requirements described above, CEQA requires the evaluation of a No Project Alternative, which analyzes the environmental effects that would occur if the project were not to proceed (Section 15126.6(e)). Moreover, the EIR is required to identify the environmentally superior alternative. The environmentally superior alternative cannot be the No Project Alternative.

## 7.3 Selection of Alternatives

In developing alternatives that meet the requirements of CEQA, the starting point is the proposed project’s objectives. The proposed project includes the following objectives.

1. Implement a project that allows the District's tenant to meet current and anticipated future market demand for imports and exports in an effort to ensure the District remains competitive in the already highly competitive marketplace of water-dependent commerce.
2. Implement a project that provides tangible economic benefits to the District and the greater San Diego region to help ensure continued prosperity for the District and region.
3. Implement a project that helps to minimize the need for new marine terminals within the District's jurisdiction by maximizing the operating efficiency of the NCMT and surrounding areas, thereby helping to minimize environmental impacts across the region while ensuring waterborne commerce continues to thrive within the San Diego Bay.
4. Implement the District's mission to permit land uses consistent with the Public Trust and the Coastal Act, specifically water-dependent uses and marine-dependent commerce, fisheries, navigation, ecological preservation, and recreation.
5. Incorporate District properties into the PMP that are not currently regulated by the PMP to ensure consistency with the Public Trust Doctrine and Port Act and allow for flexibility of land uses to facilitate meeting current and future needs.
6. Be consistent with the District's Climate Action Plan, Clean Air Program, and Jurisdictional Runoff Management Program, to ensure that the proposed project does not adversely affect the District's ability to attain its long-range environmental and sustainability goals.

CEQA also requires that alternatives be feasible. Feasible is defined in CEQA as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Public Resources Code Section 21061.1). The State CEQA Guidelines further define factors that may be taken into account when addressing the feasibility of alternatives: site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (Section 15126.6).

Finally, the alternatives should also avoid or substantially lessen one or more significant environmental impact that would occur under the proposed project. Table 7-1 summarizes the proposed project's significant impacts, which have been identified to assist with focusing the analysis of alternatives in Section 7.5.



**Table 7-1. Summary of Significant Effects of the Proposed Project**

<b>Resource Impact</b>	<b>Significant and Unavoidable</b>	<b>Less than Significant with Mitigation</b>
<b>Section 4.1 – Air Quality and Health Risk</b>		
Violate any air quality standard or contribute substantially to an existing or projected air quality violation (i.e., NO <sub>x</sub> )		X
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (i.e., NO <sub>x</sub> )		X
Expose sensitive receptors to substantial pollutant concentrations (i.e., NO <sub>x</sub> )		X
<b>Section 4.2 – Greenhouse Gas Emissions, Climate Change, and Energy</b>		
Exceed GHG emissions thresholds from project construction and operations through 2020		X
Exceed GHG emissions thresholds from project construction and operations beyond 2020	X	
<b>Section 4.3 – Hazards and Hazardous Materials</b>		
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment		X
<b>Section 4.6 – Noise and Vibration</b>		
Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.		X
<b>Section 4.7 – Transportation, Circulation, and Parking</b>		
Result in an insufficient supply of parking to meet the project demand		X

## 7.4 Alternatives Considered

A total of seven alternatives were initially considered for evaluation. Based on the criteria described in Section 7.3, *Selection of Alternatives*, in addition to evaluating the No Project Alternative, four alternatives were carried forward. The alternatives that were considered, but rejected are described in Section 7.4.1. The alternatives that were selected for analysis are described in Section 7.4.2.

### 7.4.1 Alternatives Considered but Rejected

#### 7.4.1.1 Parking Structure

A comment was raised during the EIR scoping process to consider an alternative that would reduce the surface area required for processing additional vehicles on short-term use permit sites by constructing a parking structure on the 5.71-acre tank farm site. Under this alternative, some or even all of the short-term use permit sites would not be needed in the reasonably foreseeable future.

**Project Objectives.** This alternative would generally meet all of the project objectives because it would allow for an increase in throughput and would improve efficiency of the NCMT by freeing up land for other marine related industrial uses.

**Feasibility.** The parking structure would have the benefit of freeing up land for other marine related industrial uses. However, a structure would present logistical challenges not currently present at the project sites. Currently, and as proposed under the project, trucks can travel to each storage site, pull up near the stored vehicles and load them. Under the parking structure alternative, trucks would park outside the structure and vehicles would be driven down to them. This presents additional movements associated with cargo that would be spread over hundreds of thousands of vehicles. This may add up to a significant amount of time and/or personnel needed, particularly if the structure is several stories. In addition, truck traffic would be concentrated at Quay Avenue and 28th Street, which would conceivably lead to queuing as trucks wait to be loaded. This would potentially cause longer loading times for trucks and could lead to ingress and egress blockage for other nearby marine related industrial businesses.

Moreover, construction of a structure would remove flexibility of alternative uses of the site when compared with paving a surface lot at the tank farm, which would allow for future modifications much more easily than attempting to reuse a parking structure for non-vehicle cargo uses. Otherwise, the structure would require demolition to allow for alternative cargo types in the long-term future.

**Significant Impacts.** Significant project-related impacts were identified with respect to air quality, greenhouse gas (GHG) emissions, hazardous materials, noise, and parking. Significant impacts associated with air quality and GHGs are primarily the result of increased truck traffic and increased vessel hoteling times. This alternative would not reduce either of these sources of emissions. Moreover, this alternative would result in substantially greater construction-related impacts, particularly greater air and GHG emissions than the proposed project. The significant impact related to hazardous materials is from potential discovery of burn ash from a former dump in the project vicinity, which would require the same mitigation as the project. The significant impact related to noise would be from the increase in trucks and the potential for them to idle along roadways near sensitive receptors; like the noise impact, this would be a similar level of impact with mitigation as the proposed project. The significant but mitigable parking impacts would occur from removing on-street parking, but would require sufficient on-terminal parking to account for terminal employees. This would potentially be reduced by not converting existing District streets to storage area.

**Reason for Rejection.** This alternative would potentially worsen significant air quality and GHG impacts of the project as well as increase impacts related to construction activities. This alternative would reduce parking impacts; however, parking impacts under the project would be reduced to less-than-significant levels with the incorporation of mitigation. This alternative would also present logistical challenges and likely slow throughput compared to the project.

#### 7.4.1.2 Alternative Site

The Alternative Site alternative would result in the relocation of the proposed project. Under this alternative, the proposed project would use a different site or multiple sites with the capacity to handle the anticipated increase in throughput. This alternative would not require closure of Quay

Avenue, 28th Street, and 32nd Street, demolition of the former Weyerhaeuser structures, or grading of the tank farm site.

**Project Objectives.** This alternative would not meet the central objective to maximize the efficiency of existing terminal and marine related industrial activities because it would add significant distance between the NCMT wharves and the storage sites.

**Feasibility.** This alternative would be feasible, but would be less efficient than the proposed project because of the greater travel distances.

**Significant Impacts.** This alternative would increase criteria pollutant and GHG emissions from longer vehicle and truck travel, resulting in greater air quality and GHG impacts than the proposed project. It is also likely that similar hazardous materials, noise, and parking impacts would occur.

**Reason for Rejection.** This alternative would not reduce any significant impacts of the project and would increase impacts related to air pollutants and GHG emissions. This alternative would also not meet a central objective of the project, which is to maximize the efficiency of the existing terminal and marine related industrial land to minimize environmental impacts.

## 7.4.2 Alternatives Selected for Analysis

### 7.4.2.1 Alternative 1—Redevelop NCMT Tank Farm Only (No Renewal of Short-Term Use Permits)

Alternative 1 would include paving of the former NCMT tank farm, but would not include the street closures, use of the former Weyerhaeuser site, the Marine Related Industrial Overlay for Lot K and Port Parcel 028-007, or an extension of the short-term use permits. Because incorporation of the two upland properties as Commercial Recreation does not affect annual vehicle throughput, this component of the PMPA would still occur, but without the Overlay.

Alternative 1 would substantially reduce the number of vehicles that could be processed at the terminal and the surrounding marine industrial lands compared to the proposed project. Without the short-term use permits, future annual vehicle throughput would be less than the current throughput. It is assumed all 5.71 acres would be used for vehicle storage. Therefore, Alternative 1 would provide for a maximum annual throughput increase of 29,446 vehicles on the NCMT tank farm site.<sup>1</sup> However, because the short-term use permits would be allowed to expire, the annual vehicle throughput for the Pasha facility would decrease by 96,740 vehicles.<sup>2</sup> Therefore, Alternative 1 would actually result in a net decrease in throughput of 67,294 vehicles compared to existing conditions.

### 7.4.2.2 Alternative 2—Short-Term Use Permits Only (No NCMT Tank Farm or Street Closures)

Alternative 2 would involve renewing the short-term use permits only, which would include the PMPA to add the Marine Related Industrial Overlay. Unlike the proposed project, under Alternative 2 the NCMT tank farm would not be redeveloped and Quay Avenue, 28th Street, and 32nd Street

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<sup>1</sup> See Mercator (2013). Approximately 5,157 vehicles can be parked per acre per year. Therefore, 5.71 acres x 5,157 = 29,446 maximum vehicles per year.

<sup>2</sup> Existing annual vehicle throughput on short-term permit sites (see Chapter 3).

would remain open. Use of the former Weyerhaeuser site would be part of this alternative. The uplands properties would be incorporated into the PMP as Commercial Recreation; however, only the eastern half of Lot K, through the addition of the Marine Related Industrial Overlay, would affect throughput, as no marine terminal operations are proposed on the Upland Parcel east of Marina Way. The project area would be reduced to approximately 53.44 acres (because the acreage associated with the tank farm and street closures sites is removed under this alternative), with approximately 48.44 acres dedicated to vehicle storage and the remaining 5 acres for maintenance and haul-way operations.<sup>3</sup> Therefore, Alternative 2 would provide for a maximum annual throughput of 218,129 on the short-term permit sites.<sup>4</sup> However, because the existing annual throughput on the short-term permits sites is 96,740 vehicles, Alternative 2 would result in a net annual throughput increase of 153,065 vehicles (or 73% of the proposed project).

#### **7.4.2.3 Alternative 3—Remove Port Parcel 028-007 from Project**

The Remove Port Parcel 028-007 from Project Alternative was developed based on a scoping comment received. It would grade and pave the tank farm site and street closures sites, and demolish the two structures at the former Weyerhaeuser site and enter into the new real estate agreement for vehicle storage at the former Weyerhaeuser site. It would also include all of the short-term use permit sites except for Port Parcel 028-007. It would still incorporate the eastern portion of Lot K and Port Parcel 027-047 east of Marina Way into the PMP as Commercial Recreation. This alternative would not allow for a Marine Related Industrial Overlay to be placed on Port Parcel 028-007 (3.35 acres), but the eastern half of Lot K could still have the Overlay on it under this alternative. Thus, throughput would be reduced by 17,276 vehicles per year,<sup>5</sup> which would equal a total throughput of approximately 193,542 vehicles per year under this alternative (or 92% of the proposed project).

#### **7.4.2.4 Alternative 4—No Marine Related Industrial Overlay and No Renewal of Short-term Agreements on Overlay Sites**

The No Marine Related Industrial Overlay Alternative would involve no overlay on the eastern half of Lot K or Port Parcel 028-007. Under this alternative, the tank farm and street closures sites would still be graded and paved, the two structures on the former Weyerhaeuser site would still be demolished, and a new real estate agreement for vehicle storage would still be proposed. It would also include most of the short-term use permit sites except for Port Parcel 028-007 and the portion of Lot K east of the mean high tide line. Under this alternative, the Uplands Property (the eastern half of Lot K and Port Parcel 027-047 [east of Marina Way]) would still be incorporated into the PMP as Commercial Recreation land uses. This alternative would not allow for maritime uses to continue on the eastern half of Lot K or Port Parcel 028-007 and these sites would be placed in a vacant, unused state until an unknown future Commercial Recreation-related project is proposed, approved, and implemented. Thus, throughput would be reduced by 40,379 vehicles per year,<sup>6</sup> which would

<sup>3</sup> Approximately 5 acres of short-term use permit sites are not usable for vehicle storage (Mercator 2013:39) because they have other uses.

<sup>4</sup> See Mercator (2013). Approximately 5,157 vehicles can be parked per acre per year. Therefore, 48.44 acres x 5,157 = 249,805 maximum vehicles per year.

<sup>5</sup> 3.35 acres x 5,157 vehicles = 17,276 maximum vehicles per year

<sup>6</sup> 5,157 vehicles per acre x 7.83 acres (4.48 acres + 3.35 acres) = 40,379 maximum vehicles per year

equal a total throughput of approximately 170,439 vehicles per year under this alternative (or 81% of the proposed project).

#### **7.4.2.5 Alternative 5—No Project**

The No Project Alternative is required by CEQA to discuss and analyze potential impacts that would occur if the proposed project was not implemented. Under Alternative 5, the NCMT tank farm would remain vacant land, the short-term use permits would be allowed to expire, and there would be no real estate agreement for or use of the former Weyerhaeuser site. Quay Avenue, 32nd Street, and 28th Street would also remain open and a PMPA would not be required. As a result of the short-term use permits not being renewed, the annual vehicle throughput for the Pasha facility would decrease by 96,740 vehicles. This alternative would not meet any of the proposed project objectives.

## **7.5 Analysis of Alternatives**

This section discusses each of the project alternatives and determines whether each alternative would avoid or substantially reduce any of the significant impacts of the proposed project. Impacts that were determined not to be significant with the project's implementation are not discussed below. However, this section briefly identifies any additional impacts resulting from the alternatives that would not result from the proposed project and considers the alternatives' respective relationships to the proposed project's basic objectives. A summary comparison of the impacts of the proposed project and the alternatives under consideration is included as Table 7-2.

**Table 7-2. Summary Impacts of Alternatives Relative to the Proposed Project**

<b>Environmental Resource</b>	<b>Proposed Project</b>	<b>Redevelop NCMT Tank Farm Only (Alternative 1)</b>	<b>Renew Short-Term Use Permits Only (Alternative 2)</b>	<b>Remove Port Parcel 028-007 from Project (Alternative 3)</b>	<b>No Marine Related Industrial Overlay or Short-Term Agreements on Overlay Sites (Alternative 4)</b>	<b>No Project (Alternative 5)</b>
Air Quality and Health Risk	LTS w/Mitigation	Reduced (LTS)	Reduced (LTS w/Mitigation)	Reduced (LTS w/Mitigation)	Reduced (LTS w/ Mitigation)	Reduced (No Impact)
Greenhouse Gas Emissions/ Climate Change	SU <sup>a</sup>	Reduced (LTS)	Reduced (SU)	Reduced (SU)	Reduced (SU)	Reduced (No Impact)
Hazards and Hazardous Materials	LTS w/Mitigation	Similar (LTS w/Mitigation)	Reduced (No Impact)	Similar (LTS w/Mitigation)	Similar (LTS w/ Mitigation)	Reduced (No Impact)
Noise and Vibration	LTS w/Mitigation	Reduced (LTS)	Reduced (LTS w/Mitigation)	Reduced (LTS w/Mitigation)	Reduced (LTS w/ Mitigation)	Reduced (No Impact)
Transportation, Circulation, and Parking	LTS w/Mitigation	Reduced (LTS)	Reduced (LTS w/Mitigation)	Similar (LTS w/Mitigation)	Similar (LTS w/ Mitigation)	Reduced (No Impact)
SU=Significant and Unavoidable; LTS=Less than Significant						
<sup>a</sup> Post-2020 GHG emissions						

## **7.5.1 Analysis of Alternative 1—Redevelop NCMT Tank Farm Only (No Renewal of Short-Term Use Permits)**

Alternative 1 would involve redeveloping the NCMT tank farm only. This alternative would provide storage for up to 29,446 vehicles, but would actually result in a net decrease in throughput by 67,294 vehicles per year compared to what is currently handled under the existing short-term use permit sites (i.e., 96,740).

### **7.5.1.1 Air Quality and Health Risk**

Significantly reduced throughput under Alternative 1 would reduce air emissions compared to the proposed project. Because the short-term use permits would no longer be in place after they expired, vehicle storage would only be available at the tank farm. The result is a significant loss of available acreage for storage, which would substantially reduce Pasha's overall throughput capacity. NO<sub>x</sub> emissions under this alternative would be less than significant. Therefore, compared with the proposed project, overall air quality impacts under Alternative 1 would be significantly reduced, and impacts would be less than significant.

### **7.5.1.2 Greenhouse Gas Emissions and Climate Change**

Significantly reduced throughput under Alternative 1 would reduce GHG emissions compared to the proposed project. As stated above, the short-term use permits would no longer be in place after they expired, which would result in substantially less acreage for vehicle storage compared to the existing condition. This loss of available acreage would substantially reduce Pasha's overall throughput capacity. GHG emissions under this alternative would be significantly less than the project because this alternative would result in far fewer trucks, no additional weekly train, and lower vessel hoteling times. Thus, impacts associated with GHG emissions would be less than significant. Therefore, compared with the proposed project, overall GHG impacts under Alternative 1 would be significantly reduced.

### **7.5.1.3 Hazards and Hazardous Materials**

Like the proposed project, Alternative 1 would still have ground-disturbing activities during construction, including grading at the tank farm site. Potentially elevated levels of metals associated with burn ash associated with the former National City Dump (also known as Davies Dump), the exact boundaries of which are not clearly defined, may be encountered within the project area. A mitigation measure would be required to ensure that any discovery of burn ash is handled according to existing laws, including CFR 1910.120 and CCR Title 22 and Title 27. With mitigation, Alternative 1's impact associated with hazards and hazardous materials would be less than significant, similar to the proposed project.

### **7.5.1.4 Noise and Vibration**

Unlike the proposed project, Alternative 1 would not generate additional truck trips because there would be an overall reduction in throughput from the short-term permits expiring. Consequently, this alternative decreases the chance compared to baseline conditions that trucks would idle along

streets near sensitive locations such as residents and schools. Alternative 1's impact associated with noise and vibration would be less than significant, and reduced compared to the proposed project.

#### **7.5.1.5 Transportation, Circulation, and Parking**

Alternative 1 would not convert Quay Avenue, 28th Street, and 32nd Street from District roadways to marine related industrial for vehicle storage. Therefore, this alternative would not impact on-street parking. This represents a reduced impact compared to the proposed project; however, as noted in Table 7-2, the proposed project's impact on parking would be reduced to less-than-significant levels by requiring a mitigation measure to ensure sufficient on-terminal parking is provided to account for terminal employees. Parking impacts under Alternative 1 would be reduced when compared to the proposed project, but in either case impacts would be less than significant.

#### **7.5.1.6 Other Impacts**

This alternative would not result in any new or greater impacts than the proposed project. Like the project, impacts related to energy, hydrology and water quality, and land use and planning would be less than significant and would not require mitigation.

#### **7.5.1.7 Relationship to Project Objectives**

This alternative would only meet project Objective #6. It would not meet Objective #1 because Alternative 1 would not allow Pasha to meet future market demands if market demand exceeds the available storage area, which would be likely. It would not meet Objective #2 because it would limit economic benefits by substantially reducing the number of vehicles that can be stored at the areas beyond the NCMT. It would also not meet Objective #3 because if market demand does require vehicles beyond the storage capacity of this alternative, the additional vehicles may be imported to alternative locations or, given there are limited alternatives at the Port of San Diego, Pasha may leave the port altogether for a more accommodating arrangement at a competing port. Alternative 1 would only partially meet project Objective #4 because it would not allow Pasha to continue uses at marine related industrial sites that are consistent with the Public Trust Doctrine and there is no certainty these sites would be used in the near-term if Pasha is unable to use them. This alternative would also not meet Objective #5 because the Marine Related Industrial Overlay, which was proposed to be provided specifically to allow marine related industrial uses for up to 7 years or until a Commercial Recreation development is approved, would not be incorporated into the PMPA as part of this project, so no marine related industrial uses would be allowed on the Overlay parcels under this alternative and less flexibility would be provided. Therefore, this alternative would not meet the project's basic objectives.

### **7.5.2 Analysis of Alternative 2—Short-Term Use Permits Only (No NCMT Tank Farm or Street Closures)**

Alternative 2 would involve approving the short-term use permits only, which would include the former Weyerhaeuser site and the PMPA to include the Marine Related Industrial Overlay. Alternative 2 would result in a net annual throughput increase of 153,065 vehicles (or 73% of the potential throughput of the proposed project).



### **7.5.2.1 Air Quality and Health Risk**

Reduced throughput under Alternative 2 would help to reduce air emissions compared to the proposed project. Alternative 2 was developed to avoid construction impacts resulting from developing the tank farm and street closure sites and keep Quay Avenue, 28th Street, and 32nd Street open. However, no significant air quality impacts were identified with the closure of these District streets.

Impacts from construction would be minimal and less than the proposed project (however, construction impacts under the proposed project would be less than significant). This alternative would still result in a significant air quality impact related to the generation of NO<sub>x</sub>. Mitigation would be required and would reduce NO<sub>x</sub> emissions to less-than-significant levels. Therefore, overall air quality impacts under Alternative 2 would be less than the impacts that would occur under the proposed project and would likely be less than significant after mitigation.

### **7.5.2.2 Greenhouse Gas Emissions and Climate Change**

Reduced throughput under Alternative 2 would help to reduce GHG emissions compared to the proposed project. Alternative 2 was developed to avoid construction impacts resulting from developing the tank farm and street closure sites and keep Quay Avenue, 28th Street, and 32nd Street open, and as a consequence impacts related to GHGs would be reduced, but not to a level considered less than significant. GHG mitigation measures would still be required, but the amount of mitigation would be less. It is also likely that the project would not be able to reduce its post-2020 GHG impacts to less-than-significant levels given there is no specific location and project-type GHG threshold that applies at this time in the post-2020 period. Therefore, GHG impacts under Alternative 2 would be reduced compared to the impacts that would occur under the proposed project, but would still be considered significant and unavoidable.

### **7.5.2.3 Hazards and Hazardous Materials**

Unlike the proposed project, Alternative 2 would avoid any ground-disturbing activities during construction. Potentially elevated levels of metals associated with burn ash associated with the former National City Dump (also known as Davies Dump) would not be a risk under this alternative. Therefore, if Alternative 2 is implemented, no mitigation would be needed and impacts would be less than significant. Because no mitigation is needed, Alternative 2's hazards and hazardous materials impact would be reduced compared with the proposed project's impact.

### **7.5.2.4 Noise and Vibration**

Like the proposed project, because Alternative 2 would generate additional truck trips associated with an increase in cargo, this alternative increases the chance compared to baseline conditions that trucks would idle along streets near sensitive locations such as residents and schools. This activity is already illegal, but this may not be known to all truck drivers in the project area. Therefore, mitigation is required in the form of signage to ensure all drivers are aware that idling near sensitive land uses is illegal and subject to enforcement and fines by the City of National City. With mitigation, Alternative 2's impact associated with noise and vibration would be less than significant, similar to the proposed project.

### **7.5.2.5 Transportation, Circulation, and Parking**

Alternative 2 would not convert Quay Avenue, 28th Street, and 32nd Street from District roadways to marine related industrial uses for vehicle storage. Therefore, this alternative would not affect on-street parking. This represents a reduced impact compared to the proposed project; however, as noted in Table 7-2, the proposed project's impact on parking would be reduced to less-than-significant levels by requiring a mitigation measure to ensure sufficient on-terminal parking is provided to account for terminal employees. Parking impacts under Alternative 2 would be reduced when compared to the proposed project, but in either case impacts would be less than significant.

### **7.5.2.6 Other Impacts**

This alternative would not result in any new or greater impacts than the proposed project. Like the project, impacts related to energy, hydrology and water quality, and land use and planning would be less than significant and would not require mitigation.

### **7.5.2.7 Relationship to Project Objectives**

This alternative would only meet project Objectives #5 and #6 and would partially meet Objectives #1, #2, and #4, while not meeting Objective #3. Alternative 2 would only partially meet Objective #1 because it would provide a significant amount of storage area for Pasha, but the amount may still be unable to meet future market demands if market demand exceeds the available storage area. It would not fully meet Objective #2 because it would limit economic benefits somewhat by reducing the number of vehicles that can be stored at the underutilized tank farm and street closure sites, which would mean a decrease in throughput at the NCMT. It would also not meet Objective #3 because if market demand does require vehicles beyond the storage capacity of this alternative, the additional vehicles may be imported to alternative locations or, given there are limited alternatives at the Port of San Diego, Pasha may leave the port altogether for a more accommodating arrangement at a competing port. This alternative would only partially meet project Objective #4 because it would not allow Pasha to expand terminal uses that are consistent with the Public Trust Doctrine, and the tank farm site would likely remain underutilized. Therefore, this alternative would not meet the project's basic objectives.

## **7.5.3 Analysis of Alternative 3—Remove Port Parcel 028-007 from Project**

Alternative 3 would include all the project components identified with the proposed project except it would not add a Marine Industrial Related Overlay to Port Parcel 028-007 and no renewal of the short-term agreement would occur. The Overlay would still be added to the eastern half of Lot K, and a short-term agreement would be renewed under this alternative. This would result in a throughput reduction of 17,276 vehicles per year, which would equal a throughput of approximately 193,542 vehicles per year (or 92% of the proposed project).

### **7.5.3.1 Air Quality and Health Risk**

Reduced throughput under Alternative 3 would help to reduce air pollutant emissions compared to the proposed project. The proposed project would result in a significant NO<sub>x</sub> impact. This alternative would reduce NO<sub>x</sub> emissions compared to the proposed project by approximately 8%. Like the proposed project, mitigation would be required that would reduce NO<sub>x</sub> emissions to less-than-

significant levels. Therefore, air quality impacts under Alternative 3 would be slightly less than the impacts that would occur under the proposed project and would be less than significant.

### **7.5.3.2 Greenhouse Gas Emissions and Climate Change**

Reduced throughput under Alternative 3 would help to reduce GHG emissions compared to the proposed project. GHG mitigation measures would still be required, but the amount of GHG emissions to mitigate for would be slightly less. Therefore, GHG impacts under Alternative 3 would be slightly reduced compared to the proposed project, but would still require mitigation and would be significant and unavoidable due to a lack of feasible mitigation sufficient to achieve a less-than-significant determination.

### **7.5.3.3 Hazards and Hazardous Materials**

Like the proposed project, Alternative 3 would still have ground-disturbing activities during construction, including grading at the tank farm site, at the street closures sites, and potentially at the former Weyerhaeuser site. Potentially elevated levels of metals associated with burn ash associated with the former National City Dump (also known as Davies Dump), the exact boundaries of which are not clearly defined, may be encountered anywhere in the project area where ground disturbance would occur, and may be hazardous to the health of construction workers that come into contact with these metals. A mitigation measure is required to ensure that any discovery of burn ash is handled according to existing laws, including CFR 1910.120 and CCR Title 22 and Title 27. With mitigation, Alternative 3's impact associated with hazards and hazardous materials would be less than significant, similar to the proposed project.

### **7.5.3.4 Noise and Vibration**

Like the proposed project, because Alternative 3 would generate additional truck trips associated with an increase in cargo, this alternative increases the chance compared to baseline conditions that trucks would idle along streets near sensitive locations such as residents and schools. This activity is already illegal, but this may not be known to all truck drivers in the project area. Therefore, mitigation is required in the form of signage to ensure all drivers are aware that idling near sensitive land uses is illegal and subject to enforcement and fines by the City of National City. With mitigation, Alternative 3's impact associated with noise and vibration would be less than significant, similar to the proposed project.

### **7.5.3.5 Transportation, Circulation, and Parking**

Alternative 3 would convert Quay Avenue, 28th Street, and 32nd Street from District roadways to marine related industrial uses for vehicle storage. Consequently, it would remove the same number of on-street parking spaces as the proposed project. However, with a slight reduction in throughput there would be a slight reduction in the number of parking spaces needed on the terminal. While this is a change from the proposed project, it does not actually reduce the parking impact any more than with the proposed project, which, as noted in Table 7-2, would reduce parking impacts to less-than-significant levels by requiring a mitigation measure to ensure sufficient on-terminal parking is provided to account for terminal employees. Therefore, parking impacts under Alternative 3 would be similar to the proposed project, and would still require mitigation to be reduced to less-than-significant levels.

### **7.5.3.6 Other Impacts**

This alternative would not result in any new or greater impacts than the proposed project. Like the project, impacts related to energy, hydrology and water quality, and land use and planning would be less than significant and would not require mitigation.

### **7.5.3.7 Relationship to Project Objectives**

This alternative would generally meet project Objectives #2, #4, and #6, but only partially meet Objective #1 because Alternative 3 may not allow Pasha to meet future market demands if market demand exceeds the available storage area, which is likely. It would also only partially meet Objective #3 because if market demand does require vehicles beyond the storage capacity of this alternative, the additional vehicles may be imported to alternative locations or, given the limited alternatives at the Port of San Diego, Pasha may leave the port altogether for a more accommodating arrangement at a competing port. Finally, this alternative would only partially meet Objective #5 because it would not provide needed flexibility to keep up with current or future needs. Specifically, it would halt maritime operations on a Port parcel surrounded on several sides by similar marine related industrial land uses and effectively place the Port parcel in a state of non-use until at some unknown future time a development proposal, consistent with the Commercial Recreation land use designation, is submitted to the District, undergoes environmental review to ensure compliance with CEQA, and is approved by BPC. Therefore, this alternative would not achieve the project's basic objectives.

## **7.5.4 Analysis of Alternative 4— No Marine Related Industrial Overlay and No Renewal of Short-term Agreements on Overlay Sites**

Alternative 4 would include all the project components identified with the proposed project except it would not add the Marine Industrial Related Overlay to the PMP. Therefore, under this alternative, the maritime uses would not continue, even on a short-term temporary basis on the eastern half of Lot K or Port Parcel 028-007, and these sites would be placed in a vacant, unused state until an unknown future Commercial Recreation-related project is proposed, approved, and implemented. Under this alternative, throughput would be reduced by 40,379 vehicles (5,157 vehicles per acre x 7.83 acres [4.48 acres + 3.35 acres]) per year, which would equal a total throughput of approximately 170,439 vehicles per year.

### **7.5.4.1 Air Quality and Health Risk**

Reduced throughput under Alternative 4 would help to reduce air pollutant emissions compared to the proposed project. The proposed project would result in a significant NO<sub>x</sub> impact. This alternative would reduce NO<sub>x</sub> emissions compared to the proposed project by approximately 19%. This represents a decrease compared to the proposed project, but mitigation measures similar to the proposed project would still be required for this alternative to achieve a less-than-significant determination. Therefore, NO<sub>x</sub> air quality impacts under Alternative 4 would be slightly less than the impacts that would occur under the proposed project and would be less than significant after mitigation is incorporated.

### **7.5.4.2 Greenhouse Gas Emissions and Climate Change**

Reduced throughput under Alternative 4 would help to reduce GHG emissions compared to the proposed project. GHG mitigation measures would still be required, but the amount of GHG emissions to mitigate for would be slightly less. Therefore, GHG impacts under Alternative 4 would be slightly less than the impacts that would occur under the proposed project, but would still require mitigation. It is also likely that the project would not be able to reduce its post-2020 GHG impacts to less-than-significant levels given there is no specific location and project-type GHG threshold that applies at this time in the post-2020 period. Impacts would be significant and unavoidable.

### **7.5.4.3 Hazards and Hazardous Materials**

Like the proposed project, Alternative 4 would still have ground-disturbing activities during construction, including grading at the tank farm site, at the street closures sites, and potentially at the former Weyerhaeuser site. Potentially elevated levels of metals associated with burn ash associated with the former National City Dump (also known as Davies Dump), the exact boundaries of which are not clearly defined, may be encountered anywhere in the project area where ground disturbance would occur, and may be hazardous to the health of construction workers that come into contact with these metals. A mitigation measure is required to ensure that any discovery of burn ash is handled according to existing laws, including CFR 1910.120 and CCR Title 22 and Title 27. With mitigation, Alternative 4's impact associated with hazards and hazardous materials would be less than significant, similar to the proposed project.

### **7.5.4.4 Noise and Vibration**

Like the proposed project, because Alternative 4 would generate additional truck trips associated with an increase in cargo, this alternative increases the chance compared to baseline conditions that trucks would idle along streets near sensitive locations such as residents and schools. This activity is already illegal, but this may not be known to all truck drivers in the project area. Therefore, mitigation is required in the form of signage to ensure all drivers are aware that idling near sensitive land uses is illegal and subject to enforcement and fines by the City of National City. With mitigation, Alternative 4's impact associated with noise and vibration would be less than significant, similar to the proposed project.

### **7.5.4.5 Transportation, Circulation, and Parking**

Alternative 4 would convert Quay Avenue, 28th Street, and 32nd Street from District roadways to marine related industrial uses for vehicle storage. Consequently, it would remove the same number of on-street parking spaces as the proposed project. However, with a slight reduction in throughput there would be a slight reduction in the number of parking spaces needed on the terminal. While this is a change from the proposed project, it does not actually reduce the parking impact any more than with the proposed project, which, as noted in Table 7-2, would reduce parking impacts to less-than-significant levels by requiring a mitigation measure to ensure sufficient on-terminal parking is provided to account for terminal employees. Therefore, parking impacts under Alternative 4 would be similar to the proposed project, and would still require mitigation to be reduced to less-than-significant levels.

#### **7.5.4.6 Other Impacts**

This alternative would not result in any new or greater impacts than the proposed project. Like the project, impacts related to energy, hydrology and water quality, and land use and planning would be less than significant and would not require mitigation.

#### **7.5.4.7 Relationship to Project Objectives**

This alternative would generally meet project Objectives #2, #4, and #6, but only partially meet Objective #1 because Alternative 4 may not allow Pasha to meet future market demands if market demand exceeds the available storage area, which is likely. It would also only partially meet Objective #3 because if market demand does require vehicles beyond the storage capacity of this alternative, the additional vehicles may be imported to alternative locations or, given the limited alternatives at the Port of San Diego, Pasha may leave the port altogether for a more accommodating arrangement at a competing port. Finally, this alternative would only partially meet Objective #5 because it would not provide needed flexibility to keep up with current or future needs. Specifically, it would halt maritime operations on two properties (eastern half of Lot K and Port Parcel 028-007) surrounded on several sides by similar marine related industrial land uses and effectively place these properties in a state of non-use until at some unknown future time a development proposal, consistent with the Commercial Recreation land use designation, is submitted to the District, undergoes environmental review to ensure compliance with CEQA, and is approved by the BPC. Therefore, this alternative would not achieve the project's basic objectives.

### **7.5.5 Analysis of Alternative 5—No Project**

Alternative 5 would involve no action on the part of the District. The proposed project would not be constructed, the NCMT tank farm would remain vacant land, and the short-term use permits would be allowed to expire. This alternative would also result in a decrease in annual throughput at the Pasha facility of 96,740 vehicles.

#### **7.5.5.1 Air Quality and Health Risk**

Alternative 5 would not require any construction activities that would contribute to temporary air quality impacts. Additionally, Alternative 5 would not generate any new vehicle trips that would result in long-term mobile source emissions. On the contrary, Alternative 5 would reduce the annual throughput at the Pasha facility by 96,740 vehicles, which would reduce existing operational air quality impacts over the existing condition. Therefore, no air quality impacts would occur under Alternative 5, and impacts would be significantly reduced compared to the proposed project.

#### **7.5.5.2 Greenhouse Gas Emissions and Climate Change**

Alternative 5 would not include any construction or operation activities that would result in temporary or long-term GHG emissions. On the contrary, similar to air quality, Alternative 5 would reduce the annual throughput at the Pasha facility by 96,740 vehicles, which would reduce existing operational GHG emissions over the existing condition. Therefore, no GHG or climate change impacts would occur under Alternative 5, and impacts would be significantly reduced compared to the proposed project.

### **7.5.5.3 Hazards and Hazardous Materials**

Alternative 5 would not include any construction activities that would result in the potential discovery of burn ash. Therefore, hazardous materials impacts under Alternative 5 would be reduced when compared to the proposed project, and there would be no impact.

### **7.5.5.4 Noise and Vibration**

Alternative 5 would not include any construction or operation activities that would result in additional truck trips in the project area. Therefore, noise and vibration impacts under Alternative 5 would be reduced when compared to the proposed project, and there would be no impact.

### **7.5.5.5 Transportation, Circulation, and Parking**

Alternative 5 would not include any construction or operation activities that would result in the loss of parking. Therefore, parking impacts under Alternative 5 would be reduced when compared to the proposed project, and there would be no impact.

### **7.5.5.6 Other Impacts**

Alternative 5 would not result in any new or greater impacts than the proposed project. Moreover, Alternative 5 would not result in any impacts related to energy, hydrology and water quality, and land use and planning because it would not result in a physical change on the environment.

### **7.5.5.7 Relationship to Project Objectives**

Alternative 5 would not meet any of the project objectives. Alternative 5 would result in the NCMT tank farm site remaining unused, and allowing the short-term use permits to expire would result in multiple sites within the National City Bayfront planning area being underutilized. This would directly conflict with Objectives #1, #2, #3, #4, and #5.

## **7.5.6 Environmentally Superior Alternative**

Pursuant to CEQA, the EIR is required to identify the environmental superior alternative. Although the No Project Alternative reduces the greatest number of significant impacts, CEQA requires that when the environmentally superior alternative is the No Project Alternative, another alternative should be identified. Therefore, Alternative 1 would be the environmentally superior alternative as it would reduce the most impacts identified. Alternative 1 would reduce impacts on air quality and greenhouse gases by resulting in the lowest vehicle throughput numbers, but does not meet the project's basic objectives. Note all the alternatives would have reduced air quality and GHG impacts as compared to the project because such emissions are linked to increases in throughput, and the project would provide the capacity for the highest vehicle throughput of all the alternatives.

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## Chapter 8

# List of Preparers and Agencies Consulted

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### 8.1 Lead Agency—San Diego Unified Port District

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Aleksandar Jovanovic	GIS/Figures

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Department of the Navy, Naval Base San Diego	Ya-chi Huang, Community Planning & Liaison Officer
State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (SCH)	N/A
California Department of Fish and Wildlife	Paul Schlitt and Sandy Vissman
California Coastal Commission	Kanani Brown, Coastal Program Analyst III
San Diego Association of Governments	Susan B. Baldwin, Senior Regional Planner
County of San Diego, Department of Environmental Health	Rebecca Lafreniere, Chief, Vector Control Program, and Erin McCowen, Environmental Health Specialist
County of San Diego, Department of Environmental Health, Solid Waste Local Enforcement Agency	Karilyn A. Merlos, Supervising Environmental Health Specialist
City of National City, Police Department	Jose Tellez, Captain
City of National City	No contact name provided
National City Chamber of Commerce	Jacqueline Reynoso, President/CEO
Environmental Health Coalition	Kayla Race, Policy Advocate, Joy Williams, Research Director, Carolina Martinez, Policy Advocate
GB Capital Holdings, LLC	John Grimstad, Principal

I hereby certify that the statements furnished above present the data and information required for this report to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signature:  Date: April 28, 2015  
Charlie Richmond, Project Manager, ICF International

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