PORT of SAN DIEGO

Final Environmental Impact Report

San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project

Volume I of III

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May 2017

(UPD #EIR-2015-115; SCH #2015081013)

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Volume I of III

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ICF. 2017. Final Environmental Impact Report, San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project. May. Prepared for: San Diego Unified Port District.

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Acronyms and Abbreviations

µg/L	micrograms per liter
Board	Board of Port Commissioners
BTR	Biological Technical Report
CDFW	California Department of Fish and Wildlife
CEMP	California Eelgrass Mitigation Policy
CEQA	California Environmental Quality Act
CERF	Coastal Environmental Rights Foundation
CFR	Code of Federal Regulations
CTR	California Toxic Rule
District	San Diego Unified Port District
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
HPD	Harbor Police Department
I-5	Interstate 5
MMRP	Mitigation Monitoring and Reporting Program
Monitoring Plan	Avian Species Nesting Colony Monitoring Plan
NASSCO	General Dynamics National Steel and Shipbuilding Company
NFIP	National Flood Insurance Program
NOP	Notice of Preparation
NWR	National Wildlife Refuge
proposed ordinance	San Diego Unified Port District Code section
proposed project	San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project
RWQCB	Regional Water Quality Control Board
U.S.S. Midway Museum	U.S.S. Midway Aircraft Carrier Museum
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled

Chapter 1
Introduction

1.1 Project Overview

The San Diego Unified Port District (District) is proposing (1) to adopt an ordinance establishing a District Code section (proposed ordinance) to govern existing and proposed new fireworks display events that occur within San Diego Bay and the Imperial Beach Oceanfront that require a discretionary action by the District or that are operated by the District's tenants, and (2) four proposed new fireworks display events that would be located adjacent to the National City and Chula Vista Bayfronts. These four proposed new fireworks display events are anticipated to require future discretionary actions by the District. Discretionary actions for fireworks display events that may require District approval include, but are not limited to, the following:

- Sponsorship agreement
- Special event permit
- Lease and lease amendment
- Tideland Use and Occupancy Permit
- Right of Entry Permit
- Coastal Act Categorical Determination of Exclusion
- Coastal Development Permit

Several existing fireworks display events that require a discretionary action by the District or are operated by the District's tenants occur throughout the year in San Diego Bay and the Imperial Beach Oceanfront. Within San Diego Bay, these existing fireworks display events include the annual Fourth of July Big Bay Boom and other fireworks display events associated with the San Diego Symphony's Summer Pops concert series, Our Lady of Rosary Church annual procession, the U.S.S. Midway Aircraft Carrier Museum (U.S.S. Midway Museum), and General Dynamics National Steel and Shipbuilding Company (NASSCO). Also within San Diego Bay, the Fireworks Show Over Glorietta Bay is an existing display whose fireworks organizers may seek to obtain funding from the District in the future, a request that would require a discretionary action by the District. The Fourth of July Imperial Beach Fireworks Show is an existing display that occurs along the Imperial Beach Oceanfront. All of these existing fireworks display events would be governed by the proposed ordinance. Additionally, the four proposed new fireworks display events that would occur adjacent to the National City and Chula Vista Bayfronts would also be governed by the proposed ordinance.

1.2 Certification of the Final EIR

The District is the Lead Agency, as defined under California Environmental Quality Act (CEQA) Guidelines Section 15050, because it has principal responsibility for carrying out and approving the proposed project. As Lead Agency, the District also has primary responsibility for complying with

CEQA. Therefore, the Board of Port Commissioners (Board), as the decision-making body of the District, is required to consider the information contained in the Final Environmental Impact Report (EIR) prior to approving the proposed project. Specifically, the Board must certify that:

- The Final EIR has been completed in compliance with CEQA;
- The Final EIR was presented to the decision-making body of the Lead Agency and the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project; and
- The Final EIR reflects the Lead Agency's independent judgment and analysis.

Other agencies may use the information contained in this Final EIR when considering issuance or authorization of any other approvals for the project. The Final EIR, in compliance with Section 15132 of the State CEQA guidelines, includes Volumes I–III listed under Section 1.3 below.

1.3 Contents and Organization of the Final EIR

The content and format of this Final EIR is designed to meet the requirements of CEQA and the State CEQA Guidelines, Article 9, and specifically State CEQA Guidelines Section 15132. Table 1-1 summarizes the organization and content of the Final EIR.

The Draft EIR that was previously circulated for public review is an integral part of the Final EIR; both documents are intended to be used together. The Draft EIR was not reprinted; however, a CD copy of the Draft EIR is enclosed with this Final EIR and the Final EIR (including the Draft EIR) may also be viewed on the District's website. A paper copy of the Draft EIR, including its appendices, is available at the District Clerk office at 3165 Pacific Highway, San Diego, CA 92101, during regular business hours, which are Monday through (every other) Friday, 8 a.m. to 5 p.m.

Table 1-1. Document Organization and CEQA Requirements

Location	Contents
VOLUME I	
Chapter 1 *Introduction*	Provides background on the proposed project, the requirements for a Final EIR and other related documents, and the organization of the Final EIR.
Chapter 2 *Executive Summary*	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 3 *Revisions to the Draft EIR*	Includes the revisions to the Draft EIR and its technical appendices (where appropriate), which were prepared in response to comments received during the public review period for the Draft EIR (State CEQA Guidelines Section 15132).

Location	Contents
Chapter 4 *Comments Received and District Responses*	Includes a list of agencies, organizations, and individuals that provided comments on the Draft EIR during the public review period as well as the distribution list that was used to circulate the Draft EIR. Each comment is assigned a comment number, which corresponds to a response (State CEQA Guidelines Section 15132).
Chapter MMRP *Mitigation Monitoring and Reporting Program*	The Mitigation Monitoring and Reporting Program (MMRP) for the project is included as a chapter of the Final EIR. The MMRP is presented in table format and identifies mitigation measures for the proposed project, the party responsible for implementing the mitigation measures, the timing of implementing the mitigation measures, and the monitoring and reporting procedures for each mitigation measure (State CEQA Guidelines Section 15097).
VOLUME II	
Draft EIR	Volume II of the Final EIR contains the Draft EIR that was previously circulated for public review. The Draft EIR contains all the contents described within CEQA and the State CEQA Guidelines, Article 9. The Draft EIR is included on the enclosed CD, as Volume II of the Final EIR. A hard copy is available at the District Clerk's office.
VOLUME III	
Draft EIR Technical Appendices	Volume III of the Final EIR consists of Appendices A through K of the Draft EIR. The appendices include additional background information and technical detail for several of the resource areas, as well as the Initial Study/Notice of Preparation and any comments received during the scoping process. The technical appendices to the Draft EIR are included on the enclosed CD, as Volume III of the Final EIR. A hard copy is available at the District Clerk's office.
Under Separate Cover	
Findings of Fact and Statement of Overriding Considerations	Provides findings on each significant impact and alternative, accompanied by a brief explanation of the rationale for each finding. The findings are supported by substantial evidence in the record (State CEQA Guidelines Section 15091). The statement of overriding considerations provides a written statement related to balancing, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (State CEQA Guidelines Section 15093).

Chapter 2
Executive Summary

2.1 Project Overview

The proposed San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (herein referred to as the proposed project) consists of (1) an ordinance establishing a San Diego Unified Port District (District) Code section (proposed ordinance) to govern existing and proposed new fireworks display events that occur throughout the year in and around San Diego Bay and Imperial Beach Oceanfront that require a discretionary action by the District or that are operated by the District's tenants, and (2) four proposed new fireworks display events, which would be located adjacent to the National City and Chula Vista Bayfronts and are anticipated to require a future discretionary action by the District. Discretionary actions for fireworks display events that may require District approval include, but are not limited to, the following:

- Sponsorship agreement
- Special event permit
- Lease and lease amendment
- Tideland Use and Occupancy Permit
- Right of Entry Permit
- Coastal Act Categorical Determination of Exclusion
- Coastal Development Permit

Fireworks display events that require a discretionary action by the District or are operated by the District's tenants have been occurring on the Fourth of July and at other times throughout the year for more than a decade. The most prominent existing fireworks display events are the annual Fourth of July Big Bay Boom in San Diego Bay and the Fourth of July Imperial Beach Fireworks Show. Furthermore, the Fireworks Show Over Glorietta Bay is an existing display whose fireworks organizers may seek to obtain funding from the District in the future, which would require a discretionary action by the District. Existing fireworks display events that occur at other times throughout the year include those associated with the San Diego Symphony's Summer Pops concert series (multiple small displays) and the Our Lady of Rosary Church annual procession, along with the U.S.S. Midway Aircraft Carrier Museum (U.S.S. Midway Museum) (multiple small displays) and General Dynamics National Steel and Shipbuilding Company (NASSCO) displays. A description of the operational characteristics of each of these existing displays is provided in Tables 2-1 and 2-2 respectively, of Chapter 2, *Environmental Setting*, of the Draft Environmental Impact Report (EIR). These fireworks display events would be subject to the proposed ordinance. In addition, the four proposed new fireworks display events adjacent to the National City and Chula Vista Bayfronts are anticipated to require a future discretionary action by the District, as discussed further below.

2.1.1 Fireworks Display Event Locations

Existing Fireworks Display Events

Existing fireworks display events currently occur at several locations within San Diego Bay, a natural harbor and deep-water port in southern San Diego County, and the Imperial Beach Oceanfront. San Diego Bay is an active maritime environment that provides passage and berthing for numerous types of boats and vessels, including small recreational boats that moor at dock marinas and open anchorage marinas within the Bay, mid-sized vessels such as private yachts and harbor cruise boats, and large vessels that consist of naval ships, cruise ships, cargo ships, and shipping barges. Fireworks display events within San Diego Bay take place off Shelter Island, Harbor Island, Centre City Embarcadero (which includes North Embarcadero, Central Embarcadero, and South Embarcadero), and the NASSCO ship repair facility. In addition, fireworks display events take place along the Coronado Bayfront within Glorietta Bay (an inlet of San Diego Bay adjacent to Coronado Island) and the Imperial Beach Oceanfront. A list of existing fireworks display events that occur in and around San Diego Bay and the Pacific Ocean near Imperial Beach annually and a summary of the activity associated with them are provided in Tables 2-1 and 2-2, respectively, of Chapter 2, *Environmental Setting*, of the Draft EIR.

Proposed New Fireworks Display Events

There are currently no fireworks display events along the National City or Chula Vista Bayfronts. Along the National City Bayfront, it is anticipated that future fireworks display events would take place from a barge within view of Pepper Park because Pepper Park is the closest publicly accessible gathering space near the National City Bayfront that could have a partial view of the fireworks display event. Pepper Park is located along Tidelands Avenue in National City. The site is adjacent to the Sweetwater Channel, north of the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge, which includes Paradise Creek to the east and D Street Fill to the south, south of the National City Marine Terminal, east of San Diego Bay, and west of Pier 32 Marina. Interstate 5 (I-5) runs northeasterly approximately 0.4 mile from the park site boundary. Pepper Park site access is provided via Tidelands Avenue, which turns into Goesno Place as it approaches the park. One fireworks display event, likely a Fourth of July event, may occur along the National City Bayfront and is anticipated to involve the placement of a single, temporary barge in the Bay and within view of Pepper Park.

Along the Chula Vista Bayfront, it is anticipated that fireworks display events would take place from a barge within view of both the Chula Vista Bayside Park and the Chula Vista Bayfront Park. Bayside Park is a waterfront park accessed by Bayside Parkway. It is bounded to the north by a boatworks facility, to the south by a man-made inlet that contains marinas, to the east by a recreational vehicle park, and to the west by San Diego Bay. Bayfront Park is on the south side of the man-made inlet and is bounded to the south and west by San Diego Bay and to the east by the marinas of the man-made inlet as well as vacant land. The park is accessed by Marina Way. I-5 is approximately 0.5 mile to the east of the Chula Vista Bayfront. A total of three fireworks display events (including one on the Fourth of July) along the Chula Vista Bayfront area are allowed under the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan and are anticipated to involve the placement of a single, temporary barge in the Bay in the vicinity of the two parks.

Proposed new fireworks display events are described below in more detail in Section 2.1.3, *Project Operations*.

2.1.2 Proposed Ordinance

As stated above, the proposed project consists of an ordinance to govern existing and proposed new fireworks display events that occur within San Diego Bay and the Imperial Beach Oceanfront that require a discretionary action by the District or that are operated by the District's tenants. The proposed draft ordinance that was provided in the Draft EIR is included as Appendix D in Volume III. Revisions to the proposed draft ordinance are included in Chapter 3, *Errata and Revisions*, of the Final EIR. The proposed ordinance addresses the following:

- Permit procedures and requirements for the conduct of fireworks displays
- Compliance with applicable federal, state, and local laws and regulations governing fireworks, including, but not limited to:
  - Code of Federal Regulations
  - Clean Water Act
  - California Health and Safety Code
  - California Code of Regulations
  - California Environmental Quality Act (CEQA)
  - California Coastal Act
- Compliance with applicable federal, state, and local plans and permits governing fireworks, including, but not limited to:
  - San Diego Regional Water Quality Control Board's General Permit for Public Display of Fireworks (Order No. R9-2011-0022)
  - District's Climate Action Plan
  - District's Stormwater Management and Discharge Control Code
  - Integrated Natural Resources Management Plan
  - Chula Vista Bayfront Master Plan Natural Resources Management Plan
- Consistency with the features and characteristics of each individual fireworks display event analyzed in this Draft EIR, including, but not limited to:
  - Allowable launch site locations for individual displays
  - Total pounds of fireworks for individual displays
  - Allowable shell size(s) for individual displays
  - Frequency of individual displays
  - Duration of individual displays

Compliance with the applicable mitigation measures identified in the Mitigation, Monitoring, and Reporting Program for the proposed project.

2.1.3 Project Operations

In addition to the existing fireworks display events, the proposed ordinance would govern four proposed new fireworks display events, including three displays along the Chula Vista Bayfront as allowed under the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan, and one Fourth of July display along the National City Bayfront. The three proposed fireworks display events along the Chula Vista Bayfront include one Fourth of July display and two non-Fourth of July displays. It is anticipated that the District would consider annually whether or not to provide event sponsorship and/or issue a Special Event Permit, Right-of-Entry Permit, Tideland Use and Occupancy Permit, Coastal Development Permit, Coastal Act Categorical Determination of Exclusion, or other similar approval for these proposed new fireworks display events. These proposed new fireworks display events are anticipated to last approximately 3 to 10 minutes for non-Fourth of July displays and 15 to 20 minutes for Fourth of July displays, and the fireworks are anticipated to be launched from barges within San Diego Bay. These proposed new fireworks display events would also be governed by the proposed ordinance. The proposed new fireworks display events are identified in Table 2-1, below.

Table 2-1. Proposed New Fireworks Display Events Requiring a Future Discretionary Action by the District

Time of Year	Approximate Number of Fireworks Display Events	Location(s) of Fireworks Display Event	Approximate Duration of Each Fireworks Display Event	Approximate Shell Size
January–March	1	• Chula Vista[1]	3–10 minutes	2–8 inches
April–June	—	—	—	—
July–September	2	• Chula Vista[2] • National City[2]	15–20 minutes	3–8 inches
October–December	1	• Chula Vista[1]	3–10 minutes	2–8 inches
TOTAL[3]	**4**			

[1] Non-Fourth of July display (smaller display)
[2] Fourth of July display
[3] Total includes three fireworks display events along the Chula Vista Bayfront, as allowed under the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan.

Table 2-2 summarizes the total pounds of fireworks estimated in this Draft EIR for each proposed new fireworks display event. Because the proposed ordinance would require consistency with the features and characteristics of each individual fireworks display event analyzed in this Final EIR, including, but not limited to, the total pounds of fireworks and durations for individual displays, the values provided in Table 2-2 represent the maximum allowable pounds of fireworks and durations for the proposed new displays along the Chula Vista and National City Bayfronts assumed in this Final EIR. If an existing fireworks display event identified in Chapter 2, *Environmental Setting*, of the Draft EIR is proposed to be modified in the future, a new additional fireworks display event is proposed that was not analyzed in this Final EIR, or any of the characteristics provided in Table 2-1 and Table 2-2 (e.g., magnitude and/or duration) of the four proposed new fireworks display events

are proposed to be modified, the fireworks display event will be subject to additional environmental review, pursuant to State CEQA Guidelines Section 15168(c).

Table 2-2. Summary of Activity Associated with the Proposed Fireworks Display Events

Fireworks Display Event	Day of Event	Number of Events	Pounds of Fireworks per Event	Pounds of Fireworks Annually	Number of Barges Used per Event
Chula Vista Bayfront[1]	Fourth of July plus two other shows	3	456[1] 114[2]	684	1
National City Bayfront[1]	Fourth of July	1	456[1]	456	1

Source: District 2016

[1] The total pounds of fireworks display events in the Chula Vista Bayfront and National City Bayfront areas on the Fourth of July is anticipated to be 456 pounds, similar to the Fourth of July Imperial Beach Fireworks Show.

[2] The total pounds of non-Fourth of July fireworks events estimated by scaling the Fourth of July Imperial Beach Fireworks Show (20-minute event) by the number of minutes for each fireworks display event (assumed to average 5 minutes), which equals an estimated 114 pounds each.

Both existing and proposed new fireworks display events involve coordination between several agencies, organizations, and businesses, as detailed below. The definitions below pertain to terminology used in the description of fireworks display events in the following paragraphs and throughout this EIR.

- *Sponsor* generally refers to an individual, association, partnership, nonprofit organization, corporation, limited liability company, trustee, municipality, public agency, or other legal entity, or the agent or employee thereof, that contributes funds, services, or other similar goods to a *fireworks organizer* in support of a fireworks display event. The District has historically been a *sponsor* of several of the fireworks display events described below.
- *Fireworks organizer* generally refers to the individual, association, partnership, nonprofit organization, corporation, limited liability company, trustee, municipality, public agency, or other legal entity, or the agent or employee thereof, proposing to conduct a fireworks display event. The *fireworks organizer* is typically responsible for obtaining all required funding, entitlements, and approvals for a fireworks display event, as well as contracting with a *fireworks operator* to produce the fireworks display event. Historically, the District has entered into agreements with *fireworks organizers* in order to *sponsor* several of the fireworks display events described below.
- *Fireworks operator* generally refers to a State of California–licensed pyrotechnic operator who, by examination, experience, and training, has demonstrated the required skill and ability in the use and discharge of fireworks as authorized by the license granted. A *fireworks operator* is typically responsible for supplying, setting up, and detonating the pyrotechnic devices associated with a fireworks display event. The *fireworks operator* is also typically under contract with the *fireworks organizer* to produce the fireworks display event. Historically, the District has not had a direct relationship with the *fireworks operator*.

All existing and proposed new fireworks display events that either require a discretionary action by the District or that are operated by the District's tenants would be subject to all applicable federal,

state, and local laws and regulations governing fireworks as well as any additional requirements set forth in the proposed ordinance.

2.2 Project Alternatives

Alternatives analyzed in Chapter 7, *Alternatives,* of the Draft EIR include the No Project Alternative, the Quiet Fireworks Display Events Alternative, and the No Salute Fireworks Alternative. Pursuant to CEQA, the EIR is required to identify the environmentally 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, as indicated in Table 7-2 of Chapter 7, *Alternatives to the Proposed Project*, of the Draft EIR, the Quiet Fireworks Display Event Alternative would be the environmentally superior alternative. Because it would involve the use of quieter fireworks, the Quiet Fireworks Display Event Alternative would reduce the amount of noise generated by the proposed new fireworks display events, and therefore would reduce significant and unavoidable noise impacts compared to the proposed project. Therefore, as documented throughout the alternatives section, impacts associated with other resources, such as light and glare, biological resources, and transportation, circulation, and parking, would also be reduced. However, the Quiet Fireworks Display Events Alternative would not meet the fundamental project objectives.

Table 2-3 below presents the impacts associated with the proposed project compared with the alternatives.

Table 2-3. Summary Impacts of Alternatives Relative to the Proposed Project

Environmental Resource	Proposed Project	No Project (Alt 1)	Quiet Fireworks Display Events (Alt 2)	No Salute Fireworks (Alt 3)
Aesthetics and Visual Resources	Less than Significant	-2	-1	0
Air Quality and Health Risk	Less than Significant w/Mitigation	-2	+1	0
Biological Resources	Less than Significant w/Mitigation	-1	-1	-1
Greenhouse Gas Emissions, Climate Change, and Energy Use	Less than Significant	-1	0	0
Hazards and Hazardous Materials	Less than Significant	-1	0	0
Hydrology and Water Quality	Significant and Unavoidable	-1	0	0
Land Use and Planning	Less than Significant	-1	0	0
Noise and Vibration	Significant and Unavoidable	-2	-2	-1
Public Services and Facilities	Less than Significant	-2	0	0
Transportation, Circulation, and Parking	Significant and Unavoidable	-2	-1	0
Other Impacts	Less than Significant/No Impact	0	0	0
Total:[1]		**-15**	**-4**	**-2**

Legend:
-2 = Substantially Reduced
-1 = Reduced
0 = Similar
+1 = Greater
+2 = Substantially Greater
[1] Lowest score is environmentally superior

2.3 Impact Summary

The proposed project would result in significant project impacts related to air quality and health risk, biological resources, hydrology and water quality, noise and vibration, and transportation, circulation and parking. The project would contribute to cumulative impacts related to air quality and health risk, biological resources, and hydrology and water quality. Table 2-4 presents the significant impacts, the proposed mitigation measures, and the level of significance after mitigation.

Table 2-4. Project Impacts and Mitigation Measures

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.1 Aesthetics and Visual Resources				
Project Impacts				
New Source of Substantial Light or Glare	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to cumulative aesthetics and visual resources impacts would not be cumulatively considerable.				
4.2 Air Quality and Health Risk				
Project Impacts				
Conflict with an Air Quality Management Plan	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not conflict with or obstruct implementation of an applicable air quality plan.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with or obstruct	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	implementation of an applicable air quality plan.			
Violate Air Quality Standard	*Proposed New Fireworks Display Events*			
	Impact-AQ-1: Emissions in Excess of PM2.5 Thresholds During Combined National City Bayfront and Chula Vista Bayfront Fourth of July Fireworks Display Events. Project emissions generated when the new National City Bayfront and Chula Vista Bayfront Fourth of July fireworks display events occur at the same time, before mitigation, would exceed the daily San Diego County Significance Level Thresholds (SLTs) for particulate matter 2.5 microns or less in diameter (PM2.5). The contribution of project-related emissions is considered significant because the project emissions would exceed the daily threshold that has been set by the San Diego Air Pollution Control District (SDAPCD) to attain the PM2.5 National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).	PS	**MM-AQ-1: Limit the Size of Overlapping New Fireworks Display Events in Compliance with the Conditions of the Proposed Ordinance.** The fireworks organizer and operator are required to comply with the following air quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (c) Size of Fireworks Display Events. D. National City Fourth of July, not to exceed 400 pounds of fireworks E. Chula Vista Fourth of July, not to exceed 400 pounds of fireworks **MM-AQ-2: Implementation of Air Quality-Related Conditions of the Proposed Ordinance.** The fireworks organizer and operator are required to comply with the following air quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			shall be shut down when not in use. (d) Fireworks Chemical Composition and Packaging. 1. Chemical Composition. B. All fireworks display events shall use alternative fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such alternative fireworks are not commercially available.	
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.	LS	No mitigation is required.	N/A
Cumulatively Considerable Criteria Pollutant Contribution under an Ambient Air Quality Standard	*Proposed New Fireworks Display Events*			
	Impact-AQ-2: Cumulative Emissions in Excess of PM2.5 Thresholds During Combined Fourth of July Fireworks Display Events. Project emissions during new Fourth of July fireworks display events, before mitigation, would exceed the threshold for PM2.5 and, when combined with other nearby past, present, and probable future projects, may result in a cumulatively considerable net increase of a criteria pollutant for	PS	Implement **MM-AQ-1** and **MM-AQ-2**.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	which the region is in nonattainment under an applicable state ambient air quality standard. The contribution of project-related emissions is considered significant because the proposed project would exceed thresholds that have been set by SDAPCD to attain the CAAQS during Fourth of July fireworks display events.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in a cumulatively considerable net increase in a nonattainment pollutant.	LS	No mitigation is required.	N/A
Sensitive Receptors	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not expose sensitive receptors to substantial pollutant concentrations.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not expose sensitive receptors to substantial pollutant concentrations.	LS	No mitigation is required.	N/A
Objectionable Odors	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not create objectionable odors affecting a substantial number of people.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	would not create objectionable odors affecting a substantial number of people.			
Cumulative Impacts				
Criteria Pollutants	*Proposed New Fireworks Display Events*			
	Impact-C-AQ-1: Emissions in Excess of Cumulative PM2.5 Thresholds During Combined National City Bayfront and Chula Vista Bayfront Fourth of July Fireworks Display Events. Project emissions generated when the new National City Bayfront and Chula Vista Bayfront Fourth of July fireworks display events occur at the same time, before mitigation, would exceed the daily San Diego County SLTs for PM2.5. The contribution of project-related emissions is considered significant because the project emissions would exceed the daily threshold that has been set by SDAPCD to attain the PM2.5 NAAQS and CAAQS.	PS	Implement **MM-AQ-1** and **MM-AQ-2**	LS
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not contribute to cumulative air quality and health risk impacts, and would be less than cumulatively considerable.	LS	No mitigation is required	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.3 Biological Resources				
Project Impacts				
Candidate, Sensitive, or Special-Status Species	*Proposed New Fireworks Display Events*			
	Impact-BIO-1: Potential Direct Impact on Marine Reptiles from Fireworks-Generated Trash and Debris. The introduction of fireworks-generated trash and debris could cause injury to green sea turtles because the turtles may mistakenly consume the waste, which could cause suffocation, starvation, or debilitation. Direct impacts on green sea turtles from fireworks-generated trash and debris that enter the water may be significant. **Impact-BIO-2: Potential Indirect Impacts on Marine Reptiles from Increased Human and Boating Activity.** The increase in boat traffic, particularly nighttime and out-of-channel traffic, would increase the potential for propeller strikes, which may cause injury to or death of green sea turtles. Increased boating activities could cause the animals to temporarily depart the project area before, during, and after the time of the proposed new fireworks display events to avoid higher vessel traffic. The increase in activity may also affect the turtles' foraging habits in that individuals may spend more time underwater, swim at greater speeds, and alter other life history traits leading to greater energy expenditure. The introduction of	PS	**MM-BIO-1: Implementation of Biological Resources–Related Conditions of the Proposed Ordinance for Direct Impacts.** The fireworks organizer and operator are required to comply with the following biological resources-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (d) Fireworks Chemical Composition and Packaging. 2. Packaging. A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all fireworks to be used in the event. B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited. (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	human-generated trash could also cause injury to turtles if they mistakenly consume the waste, causing suffocation, starvation, or debilitation. These potential indirect impacts on marine reptiles may be significant. **Impact-BIO-3: Potential Direct Impact on Avian Species from Fireworks-Generated Trash and Debris.** The introduction of fireworks-generated trash and debris could cause injury to avian species because the birds may mistakenly consume the waste, which could cause suffocation, starvation, or debilitation. Direct impacts on avian species from fireworks-generated trash and debris that enter the water may be significant. **Impact-BIO-4: Potential Indirect Impacts on Special-Status Avian Species from Increased Human and Boating Activity.** The proposed new fireworks display events have the potential to result in indirect impacts on special-status avian species, particularly California least tern and western snowy plover, as a result of increased foot traffic on sand dunes and beaches that can cause disturbance to nesting sites during and immediately after the proposed new fireworks display events. Additional indirect impacts potentially include increased trash associated with human use and noise associated with boating activity adjacent to nesting sites. The		issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use. 2. Fireworks shall be brought to the barge and loaded in their U.S. Department of Transportation (DOT)-approved shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other wrapping, shall be properly disposed of in trash receptacles as the fireworks display event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the fireworks display event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the fireworks launch area to contain debris. 3. Wires from the electric match placed in the Fireworks fuse shall be secured to avoid strain (such as wrapped around nails that are on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event. 4. Once the fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	introduction of human-generated trash could also cause injury to special-status birds because the birds may mistakenly consume the waste, which could cause suffocation, starvation, or debilitation. While many nesting sites for California least tern and western snowy plover in San Diego Bay are behind fences or in secured areas, others are not, and even fenced sites are accessible by water. Therefore, indirect impacts related to increased boat traffic, foot traffic, and human-generated trash and debris in the vicinity of nesting and roosting areas may be significant.		No loose material shall be allowed on the barges during the fireworks display event. 5. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the fireworks display event, the fireworks operator shall pick up all loose material on the barge, including all trash and debris resulting from the discharge of the fireworks, to prevent it from being discharged into the water while the barge is underway. 6. Upon return to the loading facility, the fireworks operator shall clean the barge of all fireworks related material and shall photograph and properly dispose of all fireworks trash and debris. Unexploded fireworks and related components shall be collected and disposed of by the fireworks operator in accordance with all applicable regulations. Fireworks operators shall photograph the barge prior to and after cleaning. 7. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the fireworks organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent fireworks using hand held fishnets, pool skimmers, or other similar equipment. 8. The morning after the fireworks display event, the fireworks organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			fireworks detonation zone to remove fireworks trash and debris. The fireworks organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal. 9. The morning after the fireworks display event, the fireworks organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with trash bags and a trash grabber. The fireworks organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal. 10. Within ten (10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the weight of the fireworks trash and debris collected is less than fifty percent (50 percent) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			(i) Compliance with San Diego Water Board General Permit. 1. Prior to the Executive Director's issuance of a permit pursuant to this article, the Applicant shall demonstrate that it has applied for coverage and has been enrolled under the San Diego Water Board General Permit. 2. The Applicant shall comply with all applicable terms, conditions and Best Management Practices required by the San Diego Water Board General Permit, which shall be incorporated into and considered in the terms, conditions and Best Management Practices of any permit issued by the Executive Director pursuant to this article. 3. The Applicant shall submit to the District copies of all applications, plans, reports and other documentation required by the San Diego Water Board General Permit, including without limitation the Notice of Intent, Fireworks Best Management Practices Plan, Public Fireworks Display Log and the Public Display of Fireworks Post Event Report, within the time required for the submission of such reports to the San Diego Water Board. (j) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			Management and Discharge Control), and the fire marshal of any city which has jurisdiction over all or any part of the activity allowed under said Permit. (k) Compliance with Laws: The Applicant shall comply with any and all applicable rules and regulations promulgated by the District, including without limitation the District Code, the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan, and with the laws, rules and regulations of the United States of America and the State of California, and of any department or agency thereof, and with the applicable ordinances, rules and regulations of any city which has jurisdiction over all or any part of the activity allowed under said Permit. The Applicant's failure to comply with any applicable law, ordinance, rule or regulation shall be cause for immediate revocation of said permit and for the denial of applications for future Permits. **MM-BIO-2: Implementation of Biological Resources–Related Conditions of the Proposed Ordinance for Indirect Impacts.** The fireworks organizer and operator are required to comply with the following biological resources–related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (e) Protection of Species and Habitat. The following conditions shall apply to fireworks display events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies: 3. Security. For fireworks display events with public viewing areas (i.e., parks, promenades,	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			publicly accessible piers, and other similar facilities) that occur within one-half mile of unprotected (i.e., unfenced) federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall provide a minimum of two professional security guards to direct persons away from and to discourage trespass into sensitive nesting areas or habitat during such displays. In addition, the fireworks organizer shall provide security patrols of the water area to enforce the existing restrictions on access to unauthorized areas during such fireworks display events in the South Bay. 4. Signage. For fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one half-mile of nesting colonies or habitat areas for federally or state-listed species, the fireworks organizer, in cooperation with the District, shall post temporary signage along primary access points to sensitive nesting colonies and habitat areas to identify safe viewing locations, to educate visitors on locations of sensitive wildlife habitats, to prevent viewers from trespassing into sensitive areas and to encourage appropriate viewing behavior. 5. Education. Beginning not less than seven (7) days before fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) located within one-half mile of federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall implement a public education program using daily announcements on social media, press	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			releases, and information posted at parks, boat launch facilities, marinas, yacht clubs and other viewing locations, to educate potential viewers regarding appropriate viewing and boat docking areas, to discourage trespass into sensitive wildlife habitat, and to remind viewers of appropriate viewing behavior in and near sensitive nesting colonies and habitat areas (e.g., appropriate disposal of trash, prevention of illegal fireworks, and safe boating procedures). (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 11. For all Fourth of July fireworks display events and for Non-Fourth of July fireworks display events which are advertised to the public, the fireworks organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event. **MM-BIO-4: Fireworks Biological Monitoring Plan.** Not less than 30 days before any fireworks display event in the South Bay that would occur within 1 mile of sensitive avian nesting colonies, the fireworks organizer shall submit to the District an Avian Species Nesting Colony Monitoring Plan (Monitoring Plan). The Monitoring Plan shall be prepared by a qualified biologist and approved by the District in coordination with USFWS and CDFW. A qualified biologist is a person who, by reason of his or her knowledge of the natural sciences and the principles of wildlife biology,	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			acquired by education and experience. The Monitoring Plan shall identify the monitoring protocol that will be used to assess the effectiveness of mitigation measures **MM-BIO-1** and **MM-BIO-2** and shall, at a minimum, include the following: 1. A literature review which refines the proposed methodology. 2. A list of target species identified for each individual event based on the season of the event, proximity of the event to nesting colonies, sensitivity of species, and capacity for the fireworks display event to cause species disturbance/effects. 3. Species behavior and noise data shall be collected at least 1 hour prior to, during, and 1 hour after the fireworks display event. 4. Documentation of the following data: a. Site location, name of monitor, date and time of observations b. Number of adults, nests, and chicks observed within one-half mile of spectator viewing areas c. Sources of stressors (e.g., light, noise, trespass, debris) d. Unauthorized access within nesting colonies e. Counts of illegal pyrotechnics Within 30 days following the completion of the fireworks display event, the qualified biologist shall prepare a Monitoring Report for submittal to the District that details the findings of the monitoring results. This report shall include background/ introduction, methods, results, discussion, and recommendations sections. The District shall provide a copy of the report to the USFWS and CDFW and shall coordinate with these agencies regarding the results	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			and recommendations of the report. Based on the review of the reports for two consecutive years of monitoring, the District, in coordination with these agencies, shall determine whether continued monitoring is required.	
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not have an adverse effect on candidate, sensitive, or special-status species.	LS	No mitigation is required.	N/A
Sensitive Natural Community/ Federally Protected Wetlands	*Proposed New Fireworks Display Events*			
	Impact-BIO-5: Potential Direct Impact on Sensitive Habitat and Wetlands from Fireworks-Generated Trash and Debris. The waste resulting from exploded fireworks shells could fall primarily into the waters of San Diego Bay. It is anticipated that some of this debris could sink to the bottom, and a smaller amount could wash onto adjacent beaches and shorelines. Direct impacts on sensitive habitats and federally protected wetlands of south San Diego Bay from fireworks-generated trash and debris that enter the water are considered significant. **Impact-BIO-6: Potential Direct Impact on Eelgrass Habitat from Fireworks Barges and Tugboat Activity.** The positioning of fireworks barges along the Chula Vista Bayfront over the shallow flats could result in direct impacts on eelgrass habitat and	PS	Implement **MM-BIO-1**, **MM-BIO-2**, and **MM-BIO-4.** **MM-BIO-3: Implementation of the Biological Resources-Related Conditions of the Proposed Ordinance for Direct Eelgrass Impacts.** The fireworks organizer and operator are required to comply with the following biological resources-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (g) Eelgrass Avoidance and Mitigation. For fireworks display events with launching sites located in shallow water with the potential for eelgrass to occur, fireworks barges shall be held in place by tugboats and shall not require temporary moorings. To the extent practicable, barges shall be located in unvegetated deep water channels outside of eelgrass beds. Pre-event and post-event eelgrass surveys shall be completed to identify the distribution of eelgrass to assist tug operators and to assess any impacts to eelgrass that may occur. Through a pre-event training, tug operators shall be made aware of shallow eelgrass and instructed	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	its nursery habitat functions, particularly at low tides. Impacts could occur as a result of temporary grounding or settling of barges and tugboats on the bottom at low tide. Additional impacts could occur from propeller wash or propeller drag from tugboats during barge maneuvering. Tugboats have large propellers and high thrust capacity that could dredge up eelgrass in shallow waters, even if grounding does not occur. Potential direct impacts on eelgrass habitat are considered significant.		not to use high thrust in the vicinity of eelgrass beds. If an unanticipated impact to eelgrass occurs, this impact shall be mitigated by replacing the eelgrass at a ratio determined by the California Eelgrass Mitigation Policy.	
	Impact-BIO-7: Potential Indirect Impact on Sensitive Habitat and Wetlands from Increased Human and Boating Activity. Increased boat traffic could result in minor damage to eelgrass beds through unauthorized anchoring and/or propeller dragging. Additionally, visitors that view the proposed new fireworks display events from kayaks or personal watercraft could drag these watercraft onto shorelines adjacent to coastal salt marshes and inadvertently damage eelgrass or marsh habitat. The proposed new fireworks display events could attract crowds to the Silver Strand State Beach, some of whom may trespass into restricted beach areas that are utilized by sensitive avian species. Potential impacts on habitats include trampling of vegetation and an increase of human-generated trash and			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	litter. Indirect impacts on sensitive habitat and wetlands of south San Diego Bay would be significant.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not have a substantial adverse effect on riparian habitat and/or other sensitive natural communities or wetlands.	LS	No mitigation is required.	N/A
Interference with Wildlife Movement	*Proposed New Fireworks Display Events*			
	Impact-BIO-8: Potential Indirect Impact on Usage of Nursery Sites from Increased Human Activity. Indirect impacts on protected avian species from proposed new fireworks display events, such as increased foot traffic in or adjacent to nesting sites, increased human-generated trash, and noise associated with boating activity, are potentially a greater threat than direct impacts. While many nesting sites for California least tern and western snowy plover in San Diego Bay are located behind fences or in secured areas, others are not, and even fenced sites are accessible by water. Therefore, indirect impacts of proposed new fireworks display events on usage of nursery sites are considered potentially significant due to disturbance noted in nesting birds.	PS	Implement **MM-BIO-2** and **MM-BIO-4**	LS
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	on existing fireworks display events would not interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.			
Conflicts with Local Policies or Ordinances Protecting Biological Resources/ Conflicts with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan.	*Proposed New Fireworks Display Events*			
	Impact-BIO-9: Potential Conflict with the City of San Diego and Chula Vista MSCP Subarea Plans. The proposed new fireworks display events have the potential to result in significant direct and indirect impacts on habitat within the City of San Diego Multi-Habitat Planning Area and City of Chula Vista Multiple Species Conservation Program (MSCP) Preserve. Any impacts, whether direct or indirect, would be significant. Consequently, the proposed project would have the potential to conflict with the City of San Diego and City of Chula Vista MSCP Subarea Plans.	PS	Implement **MM-BIO-1**, **MM-BIO-2**, and **MM-BIO-4**	LS
	Impact-BIO-10: Potential Conflict with the San Diego Bay National Wildlife Refuge Comprehensive Conservation Plan. The proposed new fireworks display events have the potential to result in direct and indirect impacts on sensitive habitat and green sea turtles present within the San Diego Bay National Wildlife Refuge, which would be considered significant. Consequently, the proposed project would have the potential to conflict			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	with the San Diego Bay National Wildlife Refuge Comprehensive Conservation Plan.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with applicable local policies or ordinances protecting biological resources, or with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.	LS	No mitigation is required.	N/A
Cumulative Impacts				
Sensitive Habitat	*Proposed New Fireworks Display Events*			
	Impact-C-BIO-1: Cumulatively Considerable Accumulation of Trash and Debris in Upland and Marine Habitats. The proposed new fireworks display events have the potential to directly and indirectly contribute to a cumulatively considerable accumulation of trash and debris in upland and marine habitats when combined with past, present, and reasonably foreseeable future projects.	PS	Implement mitigation measures **MM-BIO-1, MM-BIO-2**, and **MM-BIO-4**.	LS
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not incrementally contribute to cumulative biological resources impacts, and therefore would not be cumulatively considerable.			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.4 Greenhouse Gas Emissions, Climate Change, and Energy				
Project Impacts				
Direct and Indirect Generation of GHGs by 2020	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in direct or indirect impacts related to the generation of greenhouse gases (GHGs) by 2020.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in direct or indirect impacts related to the generation of GHGs by 2020.	LS	No mitigation is required.	N/A
Effects from Climate Change on Project	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events 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
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events 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
Energy	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in the wasteful, inefficient, or	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	unnecessary use of energy and would not require construction of new energy system infrastructure.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in the wasteful, inefficient, or unnecessary use of energy and would not require construction of new energy system infrastructure.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to cumulative GHG and energy impacts would not be cumulatively considerable.				
4.5 Hazards and Hazardous Materials				
Project Impacts				
Routine Transport, Use, or Disposal of Hazardous Materials	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Accidental Release of Hazardous Materials	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not create a significant hazard to the public or the environment through the release of hazardous materials associated with fireworks.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not create a significant hazard to the public or the environment through the release of hazardous materials associated with fireworks.	LS	No mitigation is required.	N/A
Emergency Plans	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display event and the proposed ordinance to cumulative hazard and hazardous materials impacts would not be cumulatively considerable.				

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.6 Hydrology and Water Quality				
Project Impacts				
Water Quality Standards and Requirements	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not violate any water quality standards or waste discharge requirements.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not violate any water quality standards or waste discharge requirements.	LS	No mitigation is required.	N/A
Otherwise degrade water quality.	*Proposed New Fireworks Display Events*			
	Impact-WQ-1: Surface Water Pollutant Related to Fireworks Debris. There is a potential for the proposed fireworks display events to pollute surface waters if fireworks debris is not properly recovered, which would be considered a significant impact. **Impact-WQ-2: Surface Water Pollutant Related to Increased Human-Generated Trash and Litter.** There is a potential for publicly advertised fireworks display events to pollute surface waters if increased human-generated trash and litter within the major public viewing areas is not properly disposed of and cleaned up, which would be considered a significant impact.	PS	**MM-WQ-1: Implementation of Water Quality–Related Conditions of the Proposed Ordinance for Fireworks Debris.** The fireworks organizer and operator are required to comply with the following water quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (d) Fireworks Chemical Composition and Packaging. 1. Chemical Composition. B. All fireworks display events shall use alternative fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such alternative fireworks are not	**Impact-WQ-1:** SU **Impact-WQ-2:** LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			commercially available. 2. Packaging. A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all fireworks to be used in the event. B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited. (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use. 2. Fireworks shall be brought to the barge and loaded in their U.S. Department of Transportation (DOT)-approved shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			wrapping, shall be properly disposed of in trash receptacles as the fireworks display event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the fireworks display event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the Fireworks launch area to contain debris. 3. Wires from the electric match placed in the fireworks fuse shall be secured to avoid strain (such as wrapped around nails that are on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event. 4. Once the fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position. No loose material shall be allowed on the barges during the fireworks display event. 5. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the fireworks display event, the fireworks operator shall pick up all loose material on the barge, including all trash and debris resulting from the discharge of the fireworks, to prevent it from being discharged into the water while the barge is underway.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			6. Upon return to the loading facility, the fireworks operator shall clean the barge of all fireworks related material and shall photograph and properly dispose of all fireworks trash and debris. Unexploded fireworks and related components shall be collected and disposed of by the fireworks operator in accordance with all applicable regulations. Fireworks operators shall photograph the barge prior to and after cleaning. 7. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the fireworks organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent fireworks using hand held fishnets, pool skimmers, or other similar equipment. 8. The morning after the fireworks display event, the fireworks organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the fireworks detonation zone to remove fireworks trash and debris. The fireworks organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal. 9. The morning after the fireworks display event, the fireworks organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			trash bags and a trash grabber. The fireworks organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal. 10. Within ten (10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the Fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the dry weight of the fireworks trash and debris collected is less than fifty percent (50 percent) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront. (i) Compliance with San Diego Water Board General Permit. 1. Prior to the Executive Director's issuance of a permit pursuant to this article, the Applicant shall demonstrate that it has applied for coverage and has been enrolled under the San Diego Water Board General Permit. 2. The Applicant shall comply with all applicable terms, conditions and Best Management Practices required by the San Diego Water Board General Permit, which shall be	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			incorporated into and considered in the terms, conditions and Best Management Practices of any permit issued by the Executive Director pursuant to this article. 3. The Applicant shall submit to the District copies of all applications, plans, reports and other documentation required by the San Diego Water Board General Permit, including without limitation the Notice of Intent, Fireworks Best Management Practices Plan, Public Fireworks Display Log and the Public Display of Fireworks Post Event Report, within the time required for the submission of such reports to the San Diego Water Board. (i) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater Management and Discharge Control), and the fire marshal of any city which has jurisdiction over all or any part of the activity allowed under said Permit. (j) Compliance with Laws: The Applicant shall comply with any and all applicable rules and regulations promulgated by the District, including without limitation the District Code, the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan, and with the laws, rules and regulations of the United States of	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			America and the State of California, and of any department or agency thereof, and with the applicable ordinances, rules and regulations of any city which has jurisdiction over all or any part of the activity allowed under said Permit. The Applicant's failure to comply with any applicable law, ordinance, rule or regulation shall be cause for immediate revocation of said permit and for the denial of applications for future Permits. **MM-WQ-2: Implementation of Water Quality–Related Conditions of the Proposed Ordinance for Human-Generated Trash and Litter.** The fireworks organizer and operator are required to comply with the following water quality–related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (f) Best Management Practices. Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 11. For all Fourth of July fireworks display events and for Non-Fourth of July fireworks display events which are advertised to the public, the fireworks organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event.	
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not degrade water quality	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Create or Contribute Runoff Water	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not 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.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not 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.	LS	No mitigation is required.	N/A
Cumulative Impacts				
Water Quality Standards and Requirements/ Stormwater Runoff/Water Quality	**Impact-C-WQ-1: Contribute to a Cumulatively Considerable Water Quality Impact from an Accumulation of Debris**. There is a potential that the proposed new fireworks display events could contribute to an accumulation of fireworks debris when combined with multiple past, present, and foreseeable future fireworks display events that occur in San Diego Bay throughout the year, which could degrade surface water quality if fireworks debris is not properly recovered. Potential impacts on water quality would be cumulatively considerable.	PS	Implement **MM-WQ-1** and **MM-WQ-2**.	**Impact-C-WQ-1:** SU **Impact-C-WQ-2:** LS
	Impact-C-WQ-2: Contribute to a			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Cumulatively Considerable Water Quality Impact from an Accumulation of Trash and Litter. There is a potential that the proposed new fireworks display events could contribute to an accumulation of trash and litter in San Diego Bay when combined with multiple past, present, and foreseeable future fireworks display events that occur in San Diego Bay throughout the year, which could degrade water quality. Potential impacts on water quality would be cumulatively considerable.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not incrementally contribute to cumulative impacts related to hydrology and water quality, and therefore would not be cumulatively considerable.	LS	No mitigation is required.	N/A
4.7 Land Use and Planning				
Project Impacts				
Land Use Plans, Policies, or Regulations	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events 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

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events 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
Habitat Conservation Plan or Natural Community Conservation Plan	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not conflict with an applicable habitat conservation plan or natural community conservation plan.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with an applicable habitat conservation plan or natural community conservation plan.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to land use impacts would not be cumulatively considerable.				
4.8 Noise and Vibration				
Project Impacts				
Generate noise levels in excess of established standards	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not expose persons to or generate noise levels in excess of standards established in the applicable city of Imperial Beach, Chula Vista, and National City municipal codes.	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not expose persons to or generate noise levels in excess of standards established in the applicable city of Imperial Beach, Chula Vista, and National City municipal codes.	LS	No mitigation is required.	N/A
Temporary Increase in Ambient Noise Levels	*Proposed New Fireworks Display Events*			
	Impact NOI-1: Substantial Periodic or Temporary Increase in Ambient Noise Levels of the Proposed New Fireworks Display Events. For proposed new fireworks display events (both Fourth of July and non–Fourth of July events), these noise increases would occur at homes and the Grand Caribe Shoreline Park in the City of Coronado, west of the proposed National City and Chula Vista launch locations. Depending on the precise location of the proposed Chula Vista launch barge, substantial noise increases due to the proposed new Fourth of July fireworks display events may also occur at Loews Coronado Bay Resort. If the ultimate location of the launch barge for the proposed Chula Vista fireworks display event is closer to the Chula Vista Bayfront than was assumed in the analysis, then it is possible some significant impacts could also occur within the City of Chula Vista. Because the proposed new fireworks display events would occur at locations	PS	**MM-NOI-1: Implementation of Noise-Related Conditions of the Proposed Ordinance.** The fireworks organizer and operator are required to comply with the following noise related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (e) Protection of Sensitive Species and Habitat. The following conditions shall apply to Fireworks Display Events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies: 1. Location. Fireworks display events shall be located not less than one (1) mile from any federally or state-listed avian species nesting colony unless the maximum size of shells used in the event is limited to eight (8) inches. 2. Salutes. Fireworks display events shall not use concussion type, non-color shells such as “salutes” or “reports” during the initial twenty-five percent (25 percent) of the duration of any display (e.g., within the first 5 minutes of a 20-minute display).	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	that do not currently have similar fireworks displays, the affected noise-sensitive receptors are not currently exposed to similar levels of fireworks noise and the impacts would be significant. However, it is also noted that the impacts would be very infrequent (approximately three times per year) and would include the Fourth of July, which is a traditional nationwide event during which most people have a reasonable expectation and understanding that fireworks will occur.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not cause or contribute to any increase in ambient noise levels.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to noise impacts would not be cumulatively considerable.				
4.9 Public Services and Facilities				
Project Impacts				
Fire Protection and Emergency Services	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	ratios, response times or other performance objectives for fire protection and emergency services.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services.	LS	No mitigation is required.	N/A
Police Protection	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in substantial adverse physical impacts associated with the	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.			
Other Public Facilities	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for U.S. Coast Guard (USCG) protection services.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for USCG protection services.	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to cumulative public services and facilities impacts would not be cumulatively considerable.				
4.10 Transportation, Circulation, and Parking				
Project Impacts				
Performance of the Circulation System	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not conflict with an applicable plan, ordinance, or policy establishing measures of performance of the circulation system.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with an applicable plan, ordinance, or policy establishing measures of performance of the circulation system.	LS	No mitigation is required.	N/A
Conflict with an applicable congestion management program	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not conflict with an applicable congestion management program including, but not limited to, level of service (LOS) standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. Impacts would be less than significant.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	would not conflict with an applicable congestion management program including, but not limited to, LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. Impacts would be less than significant.			
Inadequate emergency access	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in inadequate emergency access.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in inadequate emergency access.	LS	No mitigation is required.	N/A
Conflict with Alternative Transportation	*Proposed New Fireworks Display Events*			
	Impact-TRA-1: Decrease in the Performance of Roadway, Pedestrian, and Bicycle Facilities from Proposed New Fireworks Display Events. The proposed new fireworks display events have the potential to temporarily decrease the performance of roadway, pedestrian, and bicycle facilities as a result of increased levels of vehicular, pedestrian, and bicycle activity. Potential impacts would be significant.	PS	**MM-TRA-1: Implementation of the Transportation-Related Conditions of the Proposed Ordinance.** The fireworks organizer is required to comply with the following transportation-related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (h) Event Transportation and Parking Management Plans. For all Fourth of July fireworks display events and for non-Fourth of July fireworks display events that are advertised to the public, the fireworks organizer shall prepare and submit an event transportation and parking management plan to the Executive Director for approval as part of the Application, which shall be designed to ensure safe and convenient access to public viewing areas while limiting conflicts between	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			transportation modes and reducing impacts on surrounding transportation facilities to the maximum extent feasible. The Event Transportation and Parking Management Plan shall take into account anticipated attendance, existing transportation and parking facilities, and other concurrent public events in the surrounding areas, and shall include but is not limited to the following: 1. Transportation management strategies, including but not limited to a public awareness program, traffic management and enforcement, incident management, and public transit and alternative modes of transportation management, which shall be implemented for the fireworks display event; and 2. Parking management strategies, including but not limited to a public awareness program, coordination with parking vendors, offsite parking arrangements, designated areas for taxi and rideshare pick-up/drop-off, promotional programs with rideshare vendors, joint event ticketing programs with public transit agencies, and expanded shuttle operations. (i) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state, and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			Code, including Article 10 (Stormwater Management and Discharge Control), and the fire marshal of any city that has jurisdiction over all or any part of the activity allowed under said Permit.	
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events 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 is required.	N/A
Insufficient Parking	*Proposed New Fireworks Display Events*			
	Impact-TRA-2: Inadequate Parking Supply During Proposed New Fireworks Display Events. The proposed new fireworks display events have the potential to result in a temporary inadequate supply during the displays due to an increased demand on parking facilities serving the viewing locations. Potential impacts would be temporary, but are considered significant.	PS	Implement **MM-TRA-1**.	SU
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in an inadequate supply of parking.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display event and the proposed ordinance to cumulative transportation, circulation, and parking impacts would not be cumulatively considerable.				
Notes: PS = Potentially significant; LS = Less than significant; SU = Significant and Unavoidable; N/A = Not applicable				

2.4 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 a Notice of Preparation (NOP) to solicit agency and public comments on the scope and content of the environmental analysis to be included in the Draft EIR beginning on August 7, 2015, and ending on September 8, 2015. The Initial Study/Environmental Checklist and NOP are included as Appendix A of the Draft EIR.

A total of seven comment letters were received during the NOP public review period. Comments received on the NOP primarily included concerns related air quality, biological resources, greenhouse gas emissions, hydrology and water quality, noise, and transportation and traffic. A summary of all comments received is included in Table 1-2 of Chapter 1, *Introduction*, of the Draft EIR, and all NOP comment letters are included in Appendix B of the Draft EIR.

A total of 10 comment letters were received during the Draft EIR public review period. Comments received on the Draft EIR included many similar concerns to those received during the NOP public review period. They included comments on air quality, biological resources, greenhouse gas emissions, hydrology and water quality, noise, and transportation and traffic. The comment letters and the District's responses are provided in Chapter 4, *Comments Received and District Responses*, of this Final EIR.

The Board of Port Commissioners will determine whether or not to adopt a Statement of Overriding Considerations for approval of the project identifying the benefits of the project that outweigh the significant and unavoidable impacts.

Chapter 3
Errata and Revisions

3.1 Introduction

This chapter reflects the modifications to the Draft EIR that may have resulted from comments received during the 45-day public review of the Draft EIR or that were required for purposes of clarification. These modifications do not alter the conclusions of the environmental analysis such that new significant environmental impacts have been identified, nor do they constitute significant new information. The modifications are provided by chapter and indicated with the page number from the Draft EIR. This chapter is intended to be used in conjunction with the analysis contained within the Draft EIR.

Additional text is shown as underlined and deleted text is shown in ~~strikethrough~~.

Volumes II and III of this Final EIR include the Draft EIR and appendices, respectively.

3.2 EIR Chapter/Section Changes

3.2.1 Changes to *Executive Summary*

Page ES-2 and ES-3

There are currently no fireworks display events along the National City or Chula Vista Bayfronts. Along the National City Bayfront, it is anticipated that any future fireworks display events would take place within view of Pepper Park because Pepper Park is the closest publicly accessible gathering space near the National City Bayfront that would have a partial view of the fireworks. Pepper Park is located along Tidelands Avenue in National City. The site is adjacent to the Sweetwater Channel, north of the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge, which includes Paradise Creek to the east and D Street Fill to the south, south of the National City Marine Terminal, east of San Diego Bay, and west of Pier 32 Marina. Interstate 5 (I-5) runs northeasterly approximately 0.4 mile from the park site boundary. Pepper Park site access is provided via Tidelands Avenue, which turns into Goesno Place as it approaches the park. One fireworks display event, likely a Fourth of July event, may occur along the National City Bayfront and is anticipated to involve the placement of a single, temporary barge in the Bay and within view ~~vicinity~~ of Pepper Park.

ES-8 to ES-9

Alternative 2 – Quiet Fireworks Display Events Alternative

The Quiet Fireworks Display Events Alternative would require the proposed new fireworks display events along the National City and Chula Vista Bayfronts to be quiet fireworks display events that

would not exceed a noise limit of 120 A-weighted decibels (dBA).[2] For this type of fireworks display event, the pyrotechnicians design a fireworks package that relies on the quieter types of fireworks. These fireworks display events would eliminate the use of "salute~~,~~" ~~rocket, and mine~~ fireworks altogether (*salute* fireworks, also known as maroon fireworks, are fireworks designed to make a very loud bang, or "report," and an intense flash of light), as well as any other fireworks that generate a loud report, and instead focus on rich color effects and tight visual choreography in order to garner similar entertainment value out of the display. Generally, fireworks used in quiet fireworks display events would include fountains, wheels, cakes (such as crossettes, comets, spinners or turbillions, colored stars, fish or bees, and falling leaves), Chinese lanterns, and lanceworks (United Kingdom Fireworks Review 2016). It is important to note that the use of these fireworks would create a quieter, but not a silent, fireworks display event. In addition, quiet fireworks display events would involve fireworks that are concentrated closer to the ground with fewer aerial shells being employed due to the loud noise that can occur during propulsion of an aerial shell. Therefore, while these fireworks display events would be in the same locations as those specified for the proposed project (as detailed in Chapter 3, *Project Description*), i.e., on barges, because quiet fireworks display events would rely on fireworks that cannot achieve the same heights or the same magnitude as traditional fireworks displays, they would not be as prominently visible and the viewing area would be smaller than that which exists for the proposed project. The Quiet Fireworks Display Events Alternative is intended to avoid or substantially lessen the significant noise impacts of the proposed project on nearby sensitive receptors.

Alternative 3 – No Salute Fireworks Alternative

Salute fireworks, which are fireworks specifically designed to create a loud bang and intense flash of light, are the loudest type of firework. The primary purpose of salute shells is to announce the beginning and end of the display and produce a loud, percussive effect. From a distance, these shells sound similar to cannon fire when detonated (NMFS 2006). While the noise level of these fireworks varies by type, a typical linear (unweighted) peak noise level directly below a 3-inch salute exploding at its normal altitude is 140 decibels (dB) (Journal of Pyrotechnics, Inc. 2012). The No Salute Fireworks Alternative would have the same characteristics as all of the fireworks display events that compose the proposed project, including the same total pounds of fireworks per event (as outlined in Table 3-2 in Chapter 3, *Project Description*), but would prohibit the use of salute fireworks (also known as maroon fireworks) and limit the noise produced by all fireworks during fireworks display events to a maximum of ~~140~~130 dB.[3] ~~Rockets, mines, and a~~ All other firework types, including those described above under the Section 7.4.2.2, *Quiet Fireworks Display Event Alternative*, would be allowed as long as they do not exceed the ~~140~~130 dB noise limit. The No Salute Fireworks Alternative is intended to avoid or substantially lessen the significant noise impacts of the proposed project on sensitive receptors.

[2] 120 dBA maximum impulse sound pressure level due to the firework break(s), as measured at a horizontal distance of 15 meters from the launch ~~testing~~ point at a height of 1 meter above the ground, using a Type 1 sound measuring device with a free-field microphone.

[3] ~~140~~130 dB linear (unweighted) peak sound pressure level due to the firework break(s), as measured at a horizontal distance of 15 meters from the launch point at a height of 1 meter above the ground,~~directly under the shell burst (break) occurring at its normal altitude,~~ using a Type 1 sound measuring device with a free-field microphone~~ at a height of 1 meter above the ground~~.

Page ES-11 to ES-48

Table ES-3. Project Impacts and Mitigation Measures

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.1 Aesthetics and Visual Resources				
Project Impacts				
New Source of Substantial Light or Glare	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to cumulative aesthetics and visual resources impacts would not be cumulatively considerable.				
4.2 Air Quality and Health Risk				
Project Impacts				
Conflict with an Air Quality Management Plan	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not conflict with or obstruct implementation of an applicable air quality plan.	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with or obstruct implementation of an applicable air quality plan.	LS	No mitigation is required.	N/A
Violate Air Quality Standard	*Proposed New Fireworks Display Events*			
	Impact-AQ-1: Emissions in Excess of PM2.5 Thresholds During Combined National City Bayfront and Chula Vista Bayfront Fourth of July Fireworks Display Events. Project emissions generated when the new National City Bayfront and Chula Vista Bayfront Fourth of July fireworks display events occur at the same time, before mitigation, would exceed the daily San Diego County Significance Level Thresholds (SLTs) for particulate matter 2.5 microns or less in diameter (PM2.5). The contribution of project-related emissions is considered significant because the project emissions would exceed the daily threshold that has been set by the San Diego Air Pollution Control District (SDAPCD) to attain the PM2.5 National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).	PS	**MM-AQ-1: Limit the Size of Overlapping New Fireworks Display Events in Compliance with the Conditions of the Proposed Ordinance.** The fireworks organizer and operator are required to comply with the following air quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (c) Size of Fireworks Display Events. D. National City Fourth of July, not to exceed 400 pounds of fireworks E. Chula Vista Fourth of July, not to exceed 400 pounds of fireworks **MM-AQ-2: Implementation of Air Quality-Related Conditions of the Proposed Ordinance.** The fireworks organizer and operator are required to comply with the following air quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use. (d) Fireworks Chemical Composition and Packaging. 1. Chemical Composition. B. All fireworks display events shall use alternative fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such alternative fireworks are not commercially available.	
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.	LS	No mitigation is required.	N/A
Cumulatively Considerable Criteria Pollutant Contribution under an Ambient Air Quality Standard	*Proposed New Fireworks Display Events*			
	Impact-AQ-2: Cumulative Emissions in Excess of PM2.5 Thresholds During Combined Fourth of July Fireworks Display Events. Project emissions during new Fourth of July fireworks display events, before mitigation, would exceed the threshold for PM2.5 and, when combined with	PS	Implement **MM-AQ-1** and **MM-AQ-2**.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	other nearby past, present, and probable future projects, may result in a cumulatively considerable net increase of a criteria pollutant for which the region is in nonattainment under an applicable state ambient air quality standard. The contribution of project-related emissions is considered significant because the proposed project would exceed thresholds that have been set by SDAPCD to attain the CAAQS during Fourth of July fireworks display events.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in a cumulatively considerable net increase in a nonattainment pollutant.	LS	No mitigation is required.	N/A
Sensitive Receptors	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not expose sensitive receptors to substantial pollutant concentrations.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not expose sensitive receptors to substantial pollutant concentrations.	LS	No mitigation is required.	N/A
Objectionable Odors	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not create objectionable odors affecting a	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	substantial number of people.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not create objectionable odors affecting a substantial number of people.	LS	No mitigation is required.	N/A
Cumulative Impacts				
Criteria Pollutants	*Proposed New Fireworks Display Events*			
	Impact-C-AQ-1: Emissions in Excess of Cumulative PM2.5 Thresholds During Combined National City Bayfront and Chula Vista Bayfront Fourth of July Fireworks Display Events. Project emissions generated when the new National City Bayfront and Chula Vista Bayfront Fourth of July fireworks display events occur at the same time, before mitigation, would exceed the daily San Diego County SLTs for PM2.5. The contribution of project-related emissions is considered significant because the project emissions would exceed the daily threshold that has been set by SDAPCD to attain the PM2.5 NAAQS and CAAQS.	PS	Implement **MM-AQ-1** and **MM-AQ-2**	LS
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not contribute to cumulative air quality and health risk impacts, and would be less than cumulatively considerable.	LS	No mitigation is required	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.3 Biological Resources				
Project Impacts				
Candidate, Sensitive, or Special-Status Species	*Proposed New Fireworks Display Events*			
	Impact-BIO-1: Potential Direct Impact on Marine Reptiles from Fireworks-Generated Trash and Debris. The introduction of fireworks-generated trash and debris could cause injury to green sea turtles because the turtles may mistakenly consume the waste, which could cause suffocation, starvation, or debilitation. Direct impacts on green sea turtles from fireworks-generated trash and debris that enter the water may be significant. **Impact-BIO-2: Potential Indirect Impacts on Marine Reptiles from Increased Human and Boating Activity.** The increase in boat traffic, particularly nighttime and out-of-channel traffic, would increase the potential for propeller strikes, which may cause injury to or death of green sea turtles. Increased boating activities could cause the animals to temporarily depart the project area before, during, and after the time of the proposed new fireworks display events to avoid higher vessel traffic. The increase in activity may also affect the turtles' foraging habits in that individuals may spend more time underwater, swim at greater speeds, and alter other life history traits leading to greater energy expenditure. The introduction of	PS	**MM-BIO-1: Implementation of Biological Resources–Related Conditions of the Proposed Ordinance for Direct Impacts.** The fireworks organizer and operator are required to comply with the following biological resources-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (d) Fireworks Chemical Composition and Packaging. 2. Packaging. A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels <u>(excluding labels mandated by State or Federal laws)</u> from all fireworks to be used in the event. B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited. (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	human-generated trash could also cause injury to turtles if they mistakenly consume the waste, causing suffocation, starvation, or debilitation. These potential indirect impacts on marine reptiles may be significant. **Impact-BIO-3: Potential Direct Impact on Avian Species from Fireworks-Generated Trash and Debris.** The introduction of fireworks-generated trash and debris could cause injury to avian species because the birds may mistakenly consume the waste, which could cause suffocation, starvation, or debilitation. Direct impacts on avian species from fireworks-generated trash and debris that enter the water may be significant. **Impact-BIO-4: Potential Indirect Impacts on Special-Status Avian Species from Increased Human and Boating Activity.** The proposed new fireworks display events have the potential to result in indirect impacts on special-status avian species, particularly California least tern and western snowy plover, as a result of increased foot traffic on sand dunes and beaches that can cause disturbance to nesting sites during and immediately after the proposed new fireworks display events. Additional indirect impacts potentially include increased trash associated with human use and noise associated with boating activity adjacent to nesting sites. The		issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use. 2. Fireworks shall be brought to the barge and loaded in their ~~California~~ U.S. Department of Transportation (DOT)-approved shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other wrapping, shall be properly disposed of in trash receptacles as the fireworks display event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the fireworks display event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the fireworks launch area to contain debris. 3. Wires from the electric match placed in the fireworks fuse shall be secured to avoid strain (such as wrapped around nails that are ~~installed~~ on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event. 4. Once the fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position. No loose material shall be allowed on the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	introduction of human-generated trash could also cause injury to special-status birds because the birds may mistakenly consume the waste, which could cause suffocation, starvation, or debilitation. While many nesting sites for California least tern and western snowy plover in San Diego Bay are behind fences or in secured areas, others are not, and even fenced sites are accessible by water. Therefore, indirect impacts related to increased boat traffic, foot traffic, and human-generated trash and debris in the vicinity of nesting and roosting areas may be significant.		barges during the fireworks display event. 5. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the fireworks display event, the fireworks operator shall pick up all loose material on the barge, including all trash and debris resulting from the discharge of the fireworks, to prevent it from being discharged into the water while the barge is underway. 6. Upon return to the loading facility, the fireworks operator shall clean the barge of all fireworks related material and shall photograph and properly dispose of all fireworks trash and debris. Unexploded fireworks and related components shall be collected and disposed of by the fireworks operator in accordance with all applicable regulations. Fireworks operators shall photograph the barge prior to and after cleaning. 7. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the fireworks organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent fireworks using hand held fishnets, pool skimmers, or other similar equipment. 8. The morning after the fireworks display event, the fireworks organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the fireworks detonation zone to remove	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			fireworks trash and debris. The fireworks organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal. 9. The morning after the fireworks display event, the fireworks organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with trash bags and a trash grabber. The fireworks organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal. 10. Within ~~five~~ ten (~~5~~10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the dry weight of the fireworks trash and debris collected is less than fifty percent (50 percent) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront. (i) Compliance with San Diego Water Board General	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			Permit. 1. Prior to the Executive Director's issuance of a permit pursuant to this article, the Applicant shall demonstrate that it has applied for coverage and has been enrolled under the San Diego Water Board General Permit. 2. The Applicant shall comply with all applicable terms, conditions and Best Management Practices required by the San Diego Water Board General Permit, which shall be incorporated into and considered in the terms, conditions and Best Management Practices of any permit issued by the Executive Director pursuant to this article. 3. The Applicant shall submit to the District copies of all applications, plans, reports and other documentation required by the San Diego Water Board General Permit, including without limitation the Notice of Intent, Fireworks Best Management Practices Plan, Public Fireworks Display Log and the Public Display of Fireworks Post Event Report, within the time required for the submission of such reports to the San Diego Water Board. (j) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater Management and Discharge Control), and the fire	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			marshal of any city which has jurisdiction over all or any part of the activity allowed under said Permit. (k) Compliance with Laws: The Applicant shall comply with any and all applicable rules and regulations promulgated by the District, including without limitation the District Code, the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan, and with the laws, rules and regulations of the United States of America and the State of California, and of any department or agency thereof, and with the applicable ordinances, rules and regulations of any city which has jurisdiction over all or any part of the activity allowed under said Permit. The Applicant's failure to comply with any applicable law, ordinance, rule or regulation shall be cause for immediate revocation of said permit and for the denial of applications for future Permits. **MM-BIO-2: Implementation of Biological Resources–Related Conditions of the Proposed Ordinance for Indirect Impacts.** The fireworks organizer and operator are required to comply with the following biological resources–related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (e) Protection of Species and Habitat. The following conditions shall apply to fireworks display events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies: 3. Security. For fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			facilities) that occur within one-half mile of unprotected (i.e., unfenced) federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall provide a minimum of two professional security guards to direct persons away from and to discourage trespass into sensitive nesting areas or habitat during such displays. In addition, the fireworks organizer shall provide security patrols of the water area to enforce the existing restrictions on access to unauthorized areas during such fireworks display events in the South Bay. 4. Signage. For fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one half-mile of nesting colonies or habitat areas for federally or state-listed species, the fireworks organizer, in cooperation with the District, shall post temporary signage along primary access points to sensitive nesting colonies and habitat areas to identify safe viewing locations, to educate visitors on locations of sensitive wildlife habitats, to prevent viewers from trespassing into sensitive areas and to encourage appropriate viewing behavior. 5. Education. Beginning not less than seven (7) days before fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) located within one-half mile of federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall implement a public education program using daily announcements on social media, press releases, and information posted at parks,	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			boat launch facilities, marinas, yacht clubs and other viewing locations, to educate potential viewers regarding appropriate viewing and boat docking areas, to discourage trespass into sensitive wildlife habitat, and to remind viewers of appropriate viewing behavior in and near sensitive nesting colonies and habitat areas (e.g., appropriate disposal of trash, prevention of illegal fireworks, and safe boating procedures). (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 11. For all Fourth of July fireworks display events and for Non-Fourth of July fireworks display events which are advertised to the public, the fireworks ~~operator~~ organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event. **MM-BIO-4: Fireworks Biological Monitoring Plan.** Not less than 30 days before any fireworks display event in the South Bay that would occur within 1 mile of sensitive avian nesting colonies, the fireworks organizer shall submit to the District an Avian Species Nesting Colony Monitoring Plan (Monitoring Plan). The Monitoring Plan shall be prepared by a qualified biologist and approved by the District in coordination with USFWS and CDFW. A qualified biologist is a person who, by reason of his or her knowledge of the natural sciences and the principles of wildlife biology, acquired by education and experience. The Monitoring Plan shall identify the monitoring protocol that will be	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			used to assess the effectiveness of mitigation measures **MM-BIO-1** and **MM-BIO-2** and shall, at a minimum, include the following: 1. A literature review which refines the proposed methodology. 2. A list of target species identified for each individual event based on the season of the event, proximity of the event to nesting colonies, sensitivity of species, and capacity for the fireworks display event to cause species disturbance/effects. 3. Species behavior and noise data shall be collected at least 1 hour prior to, during, and 1 hour after the fireworks display event. 4. Documentation of the following data: a. Site location, name of monitor, date and time of observations b. Number of adults, nests, and chicks observed within one-half mile of spectator viewing areas c. Sources of stressors (e.g., light, noise, trespass, debris) d. Unauthorized access within nesting colonies e. Counts of illegal pyrotechnics Within 30 days following the completion of the fireworks display event, the qualified biologist shall prepare a Monitoring Report for submittal to the District that details the findings of the monitoring results. This report shall include background/ introduction, methods, results, discussion, and recommendations sections. The District shall provide a copy of the report to the USFWS and CDFW and shall coordinate with these agencies regarding the results and recommendations of the report. Based on the review of the reports for two consecutive years of	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			monitoring, the District, in coordination with these agencies, shall determine whether continued monitoring is required.	
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not have an adverse effect on candidate, sensitive, or special-status species.	LS	No mitigation is required.	N/A
Sensitive Natural Community/ Federally Protected Wetlands	*Proposed New Fireworks Display Events*			
	Impact-BIO-5: Potential Direct Impact on Sensitive Habitat and Wetlands from Fireworks-Generated Trash and Debris. The waste resulting from exploded fireworks shells could fall primarily into the waters of San Diego Bay. It is anticipated that some of this debris could sink to the bottom, and a smaller amount could wash onto adjacent beaches and shorelines. Direct impacts on sensitive habitats and federally protected wetlands of south San Diego Bay from fireworks-generated trash and debris that enter the water are considered significant. **Impact-BIO-6: Potential Direct Impact on Eelgrass Habitat from Fireworks Barges and Tugboat Activity.** The positioning of fireworks barges along the Chula Vista Bayfront over the shallow flats could result in direct impacts on eelgrass habitat and its nursery habitat functions, particularly at low tides. Impacts could occur as a result of temporary	PS	Implement **MM-BIO-1**, ~~and~~ **MM-BIO-2**, and **MM-BIO-4** **MM-BIO-3: Implementation of the Biological Resources-Related Conditions of the Proposed Ordinance for Direct Eelgrass Impacts.** The fireworks organizer and operator are required to comply with the following biological resources-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (g) Eelgrass Avoidance and Mitigation. For fireworks display events with launching sites located in shallow water with the potential for eelgrass to occur, fireworks barges shall be held in place by tugboats and shall not require temporary moorings. To the extent practicable, barges shall be located in unvegetated deep water channels outside of eelgrass beds. Pre-event and post-event eelgrass surveys shall be completed to identify the distribution of eelgrass to assist tug operators and to assess any impacts to eelgrass that may occur. Through a pre-event training, tug operators shall be made aware of shallow eelgrass and instructed not to use high thrust in the vicinity of eelgrass beds. If an unanticipated impact to eelgrass occurs,	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	grounding or settling of barges and tugboats on the bottom at low tide. Additional impacts could occur from propeller wash or propeller drag from tugboats during barge maneuvering. Tugboats have large propellers and high thrust capacity that could dredge up eelgrass in shallow waters, even if grounding does not occur. Potential direct impacts on eelgrass habitat are considered significant.		this impact shall be mitigated by replacing the eelgrass at a ratio determined by the California Eelgrass Mitigation Policy.	
	Impact-BIO-7: Potential Indirect Impact on Sensitive Habitat and Wetlands from Increased Human and Boating Activity. Increased boat traffic could result in minor damage to eelgrass beds through unauthorized anchoring and/or propeller dragging. Additionally, visitors that view the proposed new fireworks display events from kayaks or personal watercraft could drag these watercraft onto shorelines adjacent to coastal salt marshes and inadvertently damage eelgrass or marsh habitat. The proposed new fireworks display events could attract crowds to the Silver Strand State Beach, some of whom may trespass into restricted beach areas that are utilized by sensitive avian species. Potential impacts on habitats include trampling of vegetation and an increase of human-generated trash and litter. Indirect impacts on sensitive habitat and wetlands of south San Diego Bay would be significant.			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not have a substantial adverse effect on riparian habitat and/or other sensitive natural communities or wetlands.	LS	No mitigation is required.	N/A
Interference with Wildlife Movement	*Proposed New Fireworks Display Events*			
	Impact-BIO-8: Potential Indirect Impact on Usage of Nursery Sites from Increased Human Activity. Indirect impacts on protected avian species from proposed new fireworks display events, such as increased foot traffic in or adjacent to nesting sites, increased human-generated trash, and noise associated with boating activity, are potentially a greater threat than direct impacts. While many nesting sites for California least tern and western snowy plover in San Diego Bay are located behind fences or in secured areas, others are not, and even fenced sites are accessible by water. Therefore, indirect impacts of proposed new fireworks display events on usage of nursery sites are considered potentially significant due to disturbance noted in nesting birds.	PS	Implement ~~**MM-BIO-1,** and~~ **MM-BIO-2**~~,~~ and **MM-BIO-4**~~.~~	LS
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not interfere substantially with the movement of native resident or	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.			
Conflicts with Local Policies or Ordinances Protecting Biological Resources/ Conflicts with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan.	*Proposed New Fireworks Display Events*			
	Impact-BIO-9: Potential Conflict with the City of San Diego and Chula Vista MSCP Subarea Plans. The proposed new fireworks display events have the potential to result in significant direct and indirect impacts on habitat within the City of San Diego Multi-Habitat Planning Area and City of Chula Vista Multiple Species Conservation Program (MSCP) Preserve. Any impacts, whether direct or indirect, would be significant. Consequently, the proposed project would have the potential to conflict with the City of San Diego and City of Chula Vista MSCP Subarea Plans.	PS	Implement **MM-BIO-1**, ~~and~~ **MM-BIO-2**, and **MM-BIO-4**	LS
	Impact-BIO-10: Potential Conflict with the San Diego Bay National Wildlife Refuge Comprehensive Conservation Plan. The proposed new fireworks display events have the potential to result in direct and indirect impacts on sensitive habitat and green sea turtles present within the San Diego Bay National Wildlife Refuge, which would be considered significant. Consequently, the proposed project would have the potential to conflict with the San Diego Bay National Wildlife Refuge Comprehensive Conservation Plan.			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with applicable local policies or ordinances protecting biological resources, or with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.	LS	No mitigation is required.	N/A
Cumulative Impacts				
Sensitive Habitat	*Proposed New Fireworks Display Events*			
	Impact-C-BIO-1: Cumulatively Considerable Accumulation of Trash and Debris in Upland and Marine Habitats. The proposed new fireworks display events have the potential to directly and indirectly contribute to a cumulatively considerable accumulation of trash and debris in upland and marine habitats when combined with past, present, and reasonably foreseeable future projects.	PS	Implement **MM-BIO-1**, ~~and~~ **MM-BIO-2**, and **MM-BIO-4**	LS
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not incrementally contribute to cumulative biological resources impacts, and therefore would not be cumulatively considerable.			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.4 Greenhouse Gas Emissions, Climate Change, and Energy				
Project Impacts				
Direct and Indirect Generation of GHGs by 2020	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in direct or indirect impacts related to the generation of greenhouse gases (GHGs) by 2020.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in direct or indirect impacts related to the generation of GHGs by 2020.	LS	No mitigation is required.	N/A
Effects from Climate Change on Project	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events 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
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events 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
Energy	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in the wasteful, inefficient, or	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	unnecessary use of energy and would not require construction of new energy system infrastructure.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in the wasteful, inefficient, or unnecessary use of energy and would not require construction of new energy system infrastructure.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to cumulative GHG and energy impacts would not be cumulatively considerable.				
4.5 Hazards and Hazardous Materials				
Project Impacts				
Routine Transport, Use, or Disposal of Hazardous Materials	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Accidental Release of Hazardous Materials	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not create a significant hazard to the public or the environment through the release of hazardous materials associated with fireworks.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not create a significant hazard to the public or the environment through the release of hazardous materials associated with fireworks.	LS	No mitigation is required.	N/A
Emergency Plans	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display event and the proposed ordinance to cumulative hazard and hazardous materials impacts would not be cumulatively considerable.				

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.6 Hydrology and Water Quality				
Project Impacts				
Water Quality Standards and Requirements	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not violate any water quality standards or waste discharge requirements.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not violate any water quality standards or waste discharge requirements.	LS	No mitigation is required.	N/A
Otherwise degrade water quality.	*Proposed New Fireworks Display Events*			
	Impact-WQ-1: Surface Water Pollutant Related to Fireworks Debris. There is a potential for the proposed fireworks display events to pollute surface waters if fireworks debris is not properly recovered, which would be considered a significant impact. **Impact-WQ-2: Surface Water Pollutant Related to Increased Human-Generated Trash and Litter.** There is a potential for publicly advertised fireworks display events to pollute surface waters if increased human-generated trash and litter within the major public viewing areas is not properly disposed of and cleaned up, which would be considered a significant impact.	PS	**MM-WQ-1: Implementation of Water Quality–Related Conditions of the Proposed Ordinance for Fireworks Debris.** The fireworks organizer and operator are required to comply with the following water quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (d) Fireworks Chemical Composition and Packaging. 1. Chemical Composition. B. All fireworks display events shall use alternative fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such alternative fireworks are not	**Impact-WQ-1:** SU **Impact-WQ-2:** LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			commercially available. 2. Packaging. A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all fireworks to be used in the event. B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited. (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use. 2. Fireworks shall be brought to the barge and loaded in their ~~California~~ U.S. Department of Transportation (DOT)-approved shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			wrapping, shall be properly disposed of in trash receptacles as the fireworks display event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the fireworks display event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the Fireworks launch area to contain debris. 3. Wires from the electric match placed in the fireworks fuse shall be secured to avoid strain (such as wrapped around nails that are ~~installed~~ on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event. 4. Once the fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position. No loose material shall be allowed on the barges during the fireworks display event. 5. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the fireworks display event, the fireworks operator shall pick up all loose material on the barge, including all trash and debris resulting from the discharge of the fireworks, to prevent it from being discharged into the water while the barge is underway.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			6. Upon return to the loading facility, the fireworks operator shall clean the barge of all fireworks related material and shall photograph and properly dispose of all fireworks trash and debris. Unexploded fireworks and related components shall be collected and disposed of by the fireworks operator in accordance with all applicable regulations. Fireworks operators shall photograph the barge prior to and after cleaning. 7. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the fireworks organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent fireworks using hand held fishnets, pool skimmers, or other similar equipment. 8. The morning after the fireworks display event, the fireworks organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the fireworks detonation zone to remove fireworks trash and debris. The fireworks organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal. 9. The morning after the fireworks display event, the fireworks organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with trash bags and a trash grabber. The fireworks	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal. 10. Within ~~five~~ ten (~~5~~10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the Fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the dry weight of the fireworks trash and debris collected is less than fifty percent (50 percent) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront. (i) Compliance with San Diego Water Board General Permit. 1. Prior to the Executive Director's issuance of a permit pursuant to this article, the Applicant shall demonstrate that it has applied for coverage and has been enrolled under the San Diego Water Board General Permit. 2. The Applicant shall comply with all applicable terms, conditions and Best Management Practices required by the San Diego Water Board General Permit, which shall be incorporated into and considered in the terms,	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			conditions and Best Management Practices of any permit issued by the Executive Director pursuant to this article. 3. The Applicant shall submit to the District copies of all applications, plans, reports and other documentation required by the San Diego Water Board General Permit, including without limitation the Notice of Intent, Fireworks Best Management Practices Plan, Public Fireworks Display Log and the Public Display of Fireworks Post Event Report, within the time required for the submission of such reports to the San Diego Water Board. (i) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater Management and Discharge Control), and the fire marshal of any city which has jurisdiction over all or any part of the activity allowed under said Permit. (j) Compliance with Laws: The Applicant shall comply with any and all applicable rules and regulations promulgated by the District, including without limitation the District Code, the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan, and with the laws, rules and regulations of the United States of America and the State of California, and of any department or agency thereof, and with the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			applicable ordinances, rules and regulations of any city which has jurisdiction over all or any part of the activity allowed under said Permit. The Applicant's failure to comply with any applicable law, ordinance, rule or regulation shall be cause for immediate revocation of said permit and for the denial of applications for future Permits. **MM-WQ-2: Implementation of Water Quality–Related Conditions of the Proposed Ordinance for Human-Generated Trash and Litter.** The fireworks organizer and operator are required to comply with the following water quality–related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (f) Best Management Practices. Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 11. For all Fourth of July fireworks display events and for Non-Fourth of July fireworks display events which are advertised to the public, the fireworks ~~operator~~ organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event.	
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not degrade water quality	LS	No mitigation is required.	N/A
Create or Contribute Runoff Water	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not create or contribute	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not 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.	LS	No mitigation is required.	N/A
Cumulative Impacts				
Water Quality Standards and Requirements/ Stormwater Runoff/Water Quality	**Impact-C-WQ-1: Contribute to a Cumulatively Considerable Water Quality Impact from an Accumulation of Debris**. There is a potential that the proposed new fireworks display events could contribute to an accumulation of fireworks debris when combined with multiple past, present, and foreseeable future fireworks display events that occur in San Diego Bay throughout the year, which could degrade surface water quality if fireworks debris is not properly recovered. Potential impacts on water quality would be cumulatively considerable. **Impact-C-WQ-2: Contribute to a Cumulatively Considerable Water Quality Impact from an Accumulation of Trash and Litter.** There is a potential that the proposed	PS	Implement **MM-WQ-1** and **MM-WQ-2**.	**Impact-C-WQ-1:** SU **Impact-C-WQ-2:** LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	new fireworks display events could contribute to an accumulation of trash and litter in San Diego Bay when combined with multiple past, present, and foreseeable future fireworks display events that occur in San Diego Bay throughout the year, which could degrade water quality. Potential impacts on water quality would be cumulatively considerable.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not incrementally contribute to cumulative impacts related to hydrology and water quality, and therefore would not be cumulatively considerable.	LS	No mitigation is required.	N/A
4.7 Land Use and Planning				
Project Impacts				
Land Use Plans, Policies, or Regulations	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events 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
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with an applicable land use plan, policy, or regulation of an	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.			
Habitat Conservation Plan or Natural Community Conservation Plan	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not conflict with an applicable habitat conservation plan or natural community conservation plan.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with an applicable habitat conservation plan or natural community conservation plan.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to land use impacts would not be cumulatively considerable.				
4.8 Noise and Vibration				
Project Impacts				
Generate noise levels in excess of established standards	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not expose persons to or generate noise levels in excess of standards established in the applicable city of Imperial Beach, Chula Vista, and National City municipal codes.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not expose persons to or generate noise levels in excess of	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	standards established in the applicable city of Imperial Beach, Chula Vista, and National City municipal codes.			
Temporary Increase in Ambient Noise Levels	*Proposed New Fireworks Display Events*			
	Impact NOI-1: Substantial Periodic or Temporary Increase in Ambient Noise Levels of the Proposed New Fireworks Display Events. For proposed new fireworks display events (both Fourth of July and non–Fourth of July events), these noise increases would occur at homes and the Grand Caribe Shoreline Park in the City of Coronado, west of the proposed National City and Chula Vista launch locations. Depending on the precise location of the proposed Chula Vista launch barge, substantial noise increases due to the proposed new Fourth of July fireworks display events may also occur at Loews Coronado Bay Resort. If the ultimate location of the launch barge for the proposed Chula Vista fireworks display event is closer to the Chula Vista Bayfront than was assumed in the analysis, then it is possible some significant impacts could also occur within the City of Chula Vista. Because the proposed new fireworks display events would occur at locations that do not currently have similar fireworks displays, the affected noise-sensitive receptors are not currently exposed to similar levels of fireworks noise and the impacts would be	PS	**MM-NOI-1: Implementation of Noise-Related Conditions of the Proposed Ordinance.** The fireworks organizer and operator are required to comply with the following noise related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (e) Protection of Sensitive Species and Habitat. The following conditions shall apply to Fireworks Display Events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies: 1. Location. Fireworks display events shall be located not less than one (1) mile from any federally or state-listed avian species nesting colony unless the maximum size of shells used in the event is limited to eight (8) inches. 2. Salutes. Fireworks display events shall not use concussion type, non-color shells such as “salutes” or “reports” during the initial twenty-five percent (25 percent) of the duration of any display (e.g., within the first 5 minutes of a 20-minute display).	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	significant. However, it is also noted that the impacts would be very infrequent (approximately three times per year) and would include the Fourth of July, which is a traditional nationwide event during which most people have a reasonable expectation and understanding that fireworks will occur.			
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not cause or contribute to any increase in ambient noise levels.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to noise impacts would not be cumulatively considerable.				
4.9 Public Services and Facilities				
Project Impacts				
Fire Protection and Emergency Services	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection and emergency services.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	on existing fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services.			
Police Protection	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	performance objectives for police protection.			
Other Public Facilities	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for U.S. Coast Guard (USCG) protection services.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for USCG protection services.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display events and the proposed ordinance to cumulative public services and facilities impacts would not be cumulatively considerable.				

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.10 Transportation, Circulation, and Parking				
Project Impacts				
Performance of the Circulation System	*Proposed New Fireworks Display Events*			
	The proposed new fireworks display events would not conflict with an applicable plan, ordinance, or policy establishing measures of performance of the circulation system.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with an applicable plan, ordinance, or policy establishing measures of performance of the circulation system.	LS	No mitigation is required.	N/A
Conflict with an applicable congestion management program	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not conflict with an applicable congestion management program including, but not limited to, level of service (LOS) standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. Impacts would be less than significant.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not conflict with an applicable congestion management program including, but not limited to, LOS standards and travel demand measures,	LS	No mitigation is required.	N/A

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	or other standards established by the county congestion management agency for designated roads or highways. Impacts would be less than significant.			
Inadequate emergency access	*Proposed New Fireworks Display Events*			
	Implementation of the proposed new fireworks display events would not result in inadequate emergency access.	LS	No mitigation is required.	N/A
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in inadequate emergency access.	LS	No mitigation is required.	N/A
Conflict with Alternative Transportation	*Proposed New Fireworks Display Events*			
	Impact-TRA-1: Decrease in the Performance of Roadway, Pedestrian, and Bicycle Facilities from Proposed New Fireworks Display Events. The proposed new fireworks display events have the potential to temporarily decrease the performance of roadway, pedestrian, and bicycle facilities as a result of increased levels of vehicular, pedestrian, and bicycle activity. Potential impacts would be significant.	PS	**MM-TRA-1: Implementation of the Transportation-Related Conditions of the Proposed Ordinance.** The fireworks organizer is required to comply with the following transportation-related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (h) Event Transportation and Parking Management Plans. For all Fourth of July fireworks display events and for non-Fourth of July fireworks display events that are advertised to the public, the fireworks organizer shall prepare and submit an event transportation and parking management plan to the Executive Director for approval as part of the Application, which shall be designed to ensure safe and convenient access to public viewing areas while limiting conflicts between transportation modes and reducing impacts on surrounding transportation facilities to the maximum extent feasible. The Event Transportation and Parking Management Plan	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			shall take into account anticipated attendance, existing transportation and parking facilities, and other concurrent public events in the surrounding areas, and shall include but is not limited to the following: 1. Transportation management strategies, including but not limited to a public awareness program, traffic management and enforcement, incident management, and public transit and alternative modes of transportation management, which shall be implemented for the fireworks display event; and 2. Parking management strategies, including but not limited to a public awareness program, coordination with parking vendors, offsite parking arrangements, designated areas for taxi and rideshare pick-up/drop-off, promotional programs with rideshare vendors, joint event ticketing programs with public transit agencies, and expanded shuttle operations. (i) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state, and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater Management and Discharge Control), and the fire marshal of any city that has jurisdiction over all or any part of the activity allowed under said Permit.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events 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 is required.	N/A
Insufficient Parking	*Proposed New Fireworks Display Events*			
	Impact-TRA-2: Inadequate Parking Supply During Proposed New Fireworks Display Events. The proposed new fireworks display events have the potential to result in a temporary inadequate supply during the displays due to an increased demand on parking facilities serving the viewing locations. Potential impacts would be temporary, but are considered significant.	PS	Implement **MM-TRA-1**.	SU
	Effects of Proposed Ordinance on Existing Fireworks Display Events			
	The effects of the proposed ordinance on existing fireworks display events would not result in an inadequate supply of parking.	LS	No mitigation is required.	N/A
Cumulative Impacts				
The contribution of the proposed new fireworks display event and the proposed ordinance to cumulative transportation, circulation, and parking impacts would not be cumulatively considerable.				
Notes: PS = Potentially significant; LS = Less than significant; SU = Significant and Unavoidable; N/A = Not applicable				

3.2.2 Changes to Chapter 2, *Environmental Setting*

Page 2-12 to 2-13

National City Bayfront

While there are currently no existing fireworks display events along the National City Bayfront, it is anticipated that any future fireworks display events would take place within view of Pepper Park because Pepper Park is the closest publicly accessible gathering space near the National City Bayfront that would have a partial view of the fireworks. Pepper Park is located along Tidelands Avenue in National City. The site is adjacent to the Sweetwater Channel, north of the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge, which includes Paradise Creek to the east and D Street Fill to the south, south of the National City Marine Terminal, east of San Diego Bay, and west of Pier 32 Marina. Interstate 5 (I-5) runs northeasterly approximately 0.4 mile from the park site boundary. Pepper Park site access is provided via Tidelands Avenue, which turns into Goesno Place as it approaches the park. One fireworks display event, likely a Fourth of July event, may occur along the National City Bayfront and is anticipated to involve the placement of a single, temporary barge in the Bay and within view ~~vicinity~~ of Pepper Park.

3.2.3 Changes to Chapter 4, Section 4.3, *Biological Resources*

Page 4.3-4 to 4.3-5

Existing fireworks display events that require a discretionary action by the District or that are operated by the District's tenants occur within and/or adjacent to the District's jurisdiction, particularly in and around the waters of San Diego Bay and the Pacific Ocean near Imperial Beach. Within San Diego Bay, these displays generally occur on barges, flight decks, and/or piers off of Shelter Island, Harbor Island, North Embarcadero, Central Embarcadero, South Embarcadero, within the Glorietta Bay inlet, and within the NASSCO ship repair facility. Within the Pacific Ocean, an existing fireworks display event occurs on the Imperial Beach Pier just off the coast of Imperial Beach. The environmental setting for the entire San Diego Bay and coastal Imperial Beach has been included in the existing conditions to provide context for the following impact analysis. The impact analysis then focuses on the portions of the Bay (e.g., the south Bay) likely to be affected by the proposed new fireworks displays.

The sites for the proposed new fireworks display events are within and/or adjacent to the District's jurisdiction within San Diego Bay along the National City and Chula Vista Bayfronts. These proposed new displays are anticipated to occur on barges ~~and/or piers~~ within these locations. The biological impact analysis focuses on the various habitats, wildlife corridors, and wildlife present within San Diego Bay adjacent to and in the vicinity of the National City and Chula Vista Bayfront areas.

Page 4.3-7

Subtidal Vegetated Habitat

The vegetated, shallow subtidal habitat of San Diego Bay is dominated by eelgrass. Additionally, small amounts of widgeon grass (*Ruppia maritima*) occur in the warmer, shallow flats of south San

Diego Bay. The baywide survey completed in 2014 indicated 1,996 acres of eelgrass is present within the Bay (Merkel & Associates, Inc. 2014c). Vegetated subtidal habitats are an essential component of Southern California's coastal marine environment. Eelgrass beds function as important habitat for a variety of invertebrate, fish, and avian species. For many species, eelgrass beds are an essential biological habitat component for at least a portion of their life cycles, providing resting and feeding sites along the Pacific Flyway for avian species, and nursery sites for numerous species of fish. Seagrass beds may be interspersed with red algae such as *Gracilaria verrucosa* and green algae, such as *Ulva* spp. Typical fish species associated with seagrass include pipefish (*Syngnathus* spp.), kelpfish (Family Clinidae), and surfperch (Family Embiotocidae) as well as schooling fish such as topsmelt (*Atherinops affinis*) and anchovy (*Anchoa* spp.). In addition, eelgrass beds are considered to be an important foraging resource for the resident population of eastern Pacific green sea turtles, a threatened species under the Endangered Species Act.

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Upland Transition and Upland Areas

As mentioned previously, the majority of shoreline within San Diego Bay is armored. However, upland transition areas, particularly along unarmored shorelines, provide important foraging, roosting, and nesting habitat for birds. Among the most important upland transition areas are supratidal sand dunes and beaches adjacent to, and protected by, intertidal flats, ponds, and marshes. These areas provide nesting habitat for additional sensitive avian species. Among these are tens of thousands of nesting waterbirds that make use of isolated uplands along the Bay margin between March and September each year. Nesting predominantly occurs on the levees within the South Bay Salt Works, on the D Street Fill, and on portions of the Chula Vista Wildlife Reserve Island. As an indication of scale of the shorebird and seabird use, the San Diego Bay Refuge is estimated by the USFWS to have supported over 60,000 waterbird nests for 16 species during 2016. Other transitional habitats adjacent to baylands include coastal scrub (maritime succulent scrub and sage scrub), created bay fills, and river mouths (where coastal salt marsh transitions to brackish, and riparian habitats). Ruderal lands supporting grasslands and saline flats are also present along the coastal strand environment. This is particularly true in the area of the Naval Outlying Field antenna array north of Imperial Beach Pier.

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Wildlife Corridors

The study area does not provide any terrestrial movement corridors, and no marine mammal, reptile, or fish migratory corridors occur within it. However, some marine fish species, such as anchovy, sardine, and topsmelt, likely move into and out of the Bay for spawning, nursery, and foraging. The southern portions of the Bay, including the South San Diego Bay Unit of the San Diego Bay NWR, which includes the ~~and~~ South Bay Salt Ponds, provide stopover habitat for migrating waterfowl and shorebirds. San Diego Bay and the Imperial Beach shoreline, like all of California, is located within the Pacific Flyway. Several whale species migrate along the coast of California, including the California gray whale (*Eschrichtius robustus*). The peak northward migration of male gray whales occurs in mid-March, followed 2 months later by the second migration wave, which is composed of cows and calves. Whales typically do not occur within the immediate nearshore coastal waters of Imperial Beach or the adjacent Bay environment.

Page 4.3-11

Birds

Four avian species listed by USFWS and/or CDFW as federally or state-listed as endangered or threatened have a high potential to occur within San Diego Bay and the Imperial Beach Oceanfront. These include California least tern (*Sternula antillarum browni*), western snowy plover (*Charadrius alexandrinus nivosus*), light-footed Ridgway's rail, and Belding's Savannah sparrow.

The California least terns nests along the west coast of North America, from Baja California, Mexico, north to the San Francisco Bay area. California least terns are seasonal residents of San Diego Bay, typically arriving in mid- to late-April to nest at several colonies adjacent to San Diego Bay, and are generally present through August with September 15 marking the end of the season. California least terns can have two waves of nesting during this time period (CDFW 2016). California least terns establish nesting colonies on sandy soils with little vegetation. Along the shores of San Diego Bay and south of the Imperial Beach Oceanfront, California least terns nest at multiple sites (Figure 4.3-2), including the runway ovals at San Diego International Airport; the airfield tarmac at Naval Air Station (NAS) North Island; on Delta and Echo Beaches at Naval Amphibious Base Coronado (NAB Coronado), which are managed by the U.S. Navy; ~~on the D Street Fill;~~ at the Chula Vista Wildlife Reserve, managed by the San Diego Regional Airport Authority and District; on the D Street Fill, jointly managed by the District and USFWS; along the South Bay Salt Works levees and in Pond 11, ~~which are~~ managed by the ~~District and~~ USFWS; and along the beach of the Tijuana River National Estuarine Research Reserve south of the Imperial Beach Oceanfront.

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Nesting by avian species occurs in many segments of San Diego Bay, from the urbanized North Bay to the less developed South Bay. However, the ambient nighttime environments vary substantially across the north to south gradient. This is best illustrated by considering the sensitive avian nesting areas (Figure 4.3-2). Within the North Bay, California least terns nest within active airfield colonies in highly urbanized settings. These areas are exposed to nighttime safety lighting, active flashing airport lighting, automobile headlights and security patrol lighting, as well as substantial skyglow from the adjacent downtown area. Conversely, at the far southern end of the Bay, nesting areas are generally separated from intensive light- and activity-producing land uses by large expanses of undeveloped lands. These include the salt works, Navy lands, and open Bay waters. Adjacent developed land uses in the area of the South Bay are principally residential, daytime industrial, and single-story commercial that does not face the Bay. As a result, nesting areas in this environment experience less overall illumination, including both direct illumination and indirect skyglow, than areas in the North Bay. These areas are also subject to lower overall nighttime disturbance by human activities.

Within nesting habitats, the physical characteristics of the habitat can further alter the light and disturbance levels that birds are subjected to under ambient conditions. Ground-nesting birds that nest on open terrain such as least terns and snowy plovers and several other seabirds and shorebirds are more directly exposed to light environments and other disturbances than are birds that nest within or under cover of vegetation that reduces the overall illumination at nesting sites and reduces risk of disturbance by activities in the area. As a result, differences in ambient nighttime conditions of lighting and disturbance, as well as the extent of nest site cover, both affect the

potential extent of disturbance nesting birds may experience from additional activities such as fireworks display events.

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Table 4.3-2. Sensitive Wildlife Species with Potential to Occur within San Diego Bay and Imperial Beach Oceanfront

Common Name (*Scientific Name*)	Sensitivity Code & Status	Potential to Occur
Marine Reptiles		
Green Sea Turtle (*Chelonia mydas*)	FT	~~Low Potential~~ High Potential: Green sea turtles are year-round residents of San Diego Bay with the greatest occurrence being in the South Bay
Birds		
Brant (*Branta bernicla*)	CDFW SSC	High Potential: Winters in south Bay along Chula Vista Bayfront
California Brown Pelican (*Pelecanus occidentalis californicus*)	CDFW FP	Moderate Potential: No nesting, roosts on rip rap, docks, pilings, etc.
Double-crested Cormorant (*Phalacrocorax auritus*)	CDFW WL	High Potential: Nests in South Bay Salt Works
Northern harrier (*Circus cyaneus*)	CDFW SSC	~~Moderate~~ High Potential: Nests in marshes in south Bay
Osprey (*Pandion haliaetus*)	CDFW WL	High Potential: Nests at NAS North Island and the Chula Vista Wildlife Reserve
American peregrine falcon (*Falco peregrinus anatum*)	CDFW FP, FWS BCC	Low Potential: May nest along Bayfront
Light-footed Ridgway's rail (*Rallus obsoletus levipes*)	CDFW FP, FWS BCC, FE, SE	High Potential: Nests in marshes of south Bay
Western snowy plover (*Charadrius alexandrinus nivosus*)	FT	High Potential: Nests on sand flats of Bay
California Least tern (*Sternula antillarum browni*)*	FE, SE	High Potential: Nests on sand flats of Bay
Caspian tern (*Hydroprogne caspia*)	FWS BCC	High Potential: Nests in South Bay Salt Works
Black skimmer (*Rynchops niger*)	CDFW SSC	High Potential: Nests in South Bay Salt Works
Elegant tern (*Thalasseus elegans*)	CDFW WL	High Potential: Nests in South Bay Salt Works
Belding's Savannah sparrow (*Passerculus sandwichensis beldingi*)	SE	High Potential: Nests in marshes of south Bay and Tijuana Estuary
Mammals		
Pacific harbor seal (*Phoca vitulina richardsi*)	MMPA	Moderate Potential: Forages in north Bay and is uncommon in the south Bay
California sea lion (*Zalophus californianus californianus*)	MMPA	High Potential: Forages and loafs in the north Bay with uncommon occurrences in the south Bay
Coastal bottlenose dolphin (*Tursiops truncatus*)	MMPA	Moderate Potential: Uncommon forager in deep channels of the north Bay

Common Name (*Scientific Name*)	Sensitivity Code & Status	Potential to Occur
California gray whale (*Eschrichtius robustus*)	MMPA	Very Low Potential: Regular migrant in offshore waters, but uncommon in Bay and nearshore waters

Source: Appendix F
SE = state-listed as endangered; **FE** = federally listed as endangered; **FT** = federally listed as threatened; **CDFW SSC** = CDFW Species of Special Concern; **CDFW-FP** = CDFW Fully Protected Species; **CDFW-WL** = CDFW Watch List; FWS-BCC = USFWS Bird of Conservation Concern; **MMPA** = species protected by the Marine Mammal Protection Act
*Least terns are a migratory species found in the area from approximately April 1 through September 15 of each year.

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National Wildlife Refuge System Improvements Act of 1997

The National Wildlife Refuge System Improvements Act of 1997 amended the National Wildlife Refuge System Administration Act of 1966, and provides clear standards for management, use, planning, and growth of the National Wildlife Refuge System. The Improvement Act requires that each refuge be managed to fulfill the "wildlife first" mission of the National Wildlife Refuge System, as well as the specific purposes for which a refuge was established. In accordance with the Improvement Act, uses permitted on a National Wildlife Refuge must be determined to be an appropriate use and compatible with the mission of the National Wildlife Refuge System and Refuge purposes.

National Environmental Policy Act

The National Environmental Policy Act (NEPA) was enacted to: declare a national policy that will encourage productive and enjoyable harmony between man and his environment; to promote efforts that will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality (CEQ) (42 U.S. Code § 4321). NEPA established the CEQ within the Executive Office of the President to ensure that federal agencies meet their obligations under NEPA. CEQ oversees NEPA implementation, principally through issuing guidance and interpreting regulations that implement NEPA's procedural requirements. CEQ also reviews and approves federal agency NEPA procedures, approves alternative arrangements for compliance with NEPA for emergencies, and helps to resolve disputes between federal agencies and with other governmental entities and members of the public.

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Birds

Several studies have observed the behavioral changes of sensitive avian species during fireworks display events. A literature review of these existing studies and research was conducted, with the results summarized below. Four avian species that are federally or state-listed as endangered or threatened by USFWS and/or CDFW have a high potential to occur within and adjacent to San Diego Bay. These include California least tern, western snowy plover, light-footed Ridgway's rail, and Belding's Savannah sparrow. The nesting ~~sites~~ habitat of these four species are within audible and visual range of the proposed new fireworks display events and have the potential to be affected.

Nesting areas for listed species are illustrated in Figure 4.3-2. Other avian species that are potentially affected include California brown pelican and double-crested cormorant, as these species nest and/or roost in the Bay. Several additional species of seabirds including terns and black skimmer nest at sites that also support California least tern. As such, these species may be similarly affected by the proposed new fireworks display events.

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Indirect impacts on sensitive avian species can include disturbance associated with increased boat and foot traffic in the vicinity of nesting and roosting locations, as well as human-generated trash. Fireworks spectators may trespass onto closed avian nest sites or roosting areas in order to obtain private viewing locations. This presently occurs at a low level during intensive Bay use periods such as summer holidays and weekends. However, under typical evenings, the trespass onto colony nesting sites by the public is low, particularly at night and the extent of vessel traffic in some areas of the Bay where birds tend to raft is generally low and substantially reduced at night when rafting by birds is most common. During the proposed new fireworks display events, however, the likelihood of trespass into colony sites would increase and vessel traffic after dark and out of established channels would be expected to increase.

The study on NAB Coronado (Boylan and Nordstrom 2014) suggests that increased boat and foot traffic, trespass, and human-generated trash and debris during fireworks display events were possibly a greater threat to sensitive avian species than those associated with temporary noise and light disturbances from the fireworks themselves. Boylan and Nordstrom noted that illegal fireworks ignited immediately adjacent to nesting colonies, as well as increased foot traffic on sand dunes and beaches, caused the majority of disturbance to nesting California least tern during and immediately after fireworks display events. Additional indirect impacts could include increased trash associated with human use and noise associated with boating activity adjacent to nesting sites. The introduction of human-generated trash could also cause injury to sensitive birds because the birds may mistakenly consume the waste, which could cause suffocation, starvation, or debilitation. While many nesting sites for California least tern and western snowy plover in and around San Diego Bay are behind fences or in secured areas, others are not, and even fenced sites are accessible by water. Therefore, indirect impacts related to increased boat traffic, foot traffic, and human-generated trash and debris in the vicinity of nesting and roosting areas may be significant (**Impact-BIO-4**). During fireworks display events, the Harbor Police Department currently assigns units to major patrol areas and deploys additional units on tidelands including bicycle and vessel units (Brick pers. comm.). The landside patrols provide law enforcement within the landside viewing areas, while the special patrol vessels provide law enforcement on the water. Consistent with its current operational practices, the Harbor Police Department would continue to deploy special patrol vessels and conduct in-water law enforcement during fireworks display events. These existing procedures ensure that boating laws are properly enforced in the Bay. In addition, the proposed ordinance contains several requirements that would reduce potential impacts on the biological resources of San Diego Bay. Implementation of **MM-BIO-2** requires implementation of the biological resources-related conditions of the proposed ordinance for indirect impacts, which include the implementation of cleanup, security, signage, and education measures. Implementation of **MM-BIO-2** would reduce potentially significant indirect impacts on avian species from human trespass, increased boat traffic, and human-generated trash and debris to less-than-significant levels.

Concerns for disturbance associated with vessel traffic extend beyond just nesting sites, but also extend to disruption of nighttime rafting activities of birds. Rafting birds may be displaced

temporarily by either increased vessel traffic in the vicinity of launch barges, or by the noise and light of the fireworks themselves. Increased boat traffic and fireworks displays would be expected to cause temporary displacement over short periods of time within areas that are centered on launch barges. This effect is substantially curtailed outside of the winter migratory period (November–February) due to an overall reduction in the number of birds rafting on the waters. Furthermore, rafting tends to be highest in waters of protected leeward environments or extreme shallows. Because vessel traffic and fireworks display event activities would be expected to be aggregated around launch barges that are proposed to be located further from shore as a result of nesting colony buffering distances, there is an expectation that the highest-density loafing areas would see little increase in vessel traffic disturbance. Any disturbance that is noted would be expected to result in birds on the water taking flight and moving away from the event areas. However, the extent of disturbance is expected to be relatively low, leading only to temporary, less-than-significant impacts on rafting birds.

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MM-BIO-1: **Implementation of Biological Resources–Related Conditions of the Proposed Ordinance for Direct Impacts.** The fireworks organizer and operator are required to comply with the following biological resources-related conditions of the proposed ordinance.

Section X.07 – Permits – Conditions of Approval

(d) Fireworks Chemical Composition and Packaging.

2. Packaging.

A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all fireworks to be used in the event.

B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited.

(f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up:

1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use.

2. Fireworks shall be brought to the barge and loaded in their ~~California~~ U.S. Department of Transportation (DOT)-approved shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other wrapping, shall be properly disposed of in trash receptacles as the fireworks display event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the fireworks display event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with

openings no larger than ¼ inch, around the perimeter of the Fireworks launch area to contain debris.

3. Wires from the electric match placed in the fireworks fuse shall be secured to avoid strain (such as wrapped around nails that are ~~installed~~ on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event.

4. Once the fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position. No loose material shall be allowed on the barges during the fireworks display event.

5. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the fireworks display event, the fireworks operator shall pick up all loose material on the barge, including all trash and debris resulting from the discharge of the fireworks, to prevent it from being discharged into the water while the barge is underway.

6. Upon return to the loading facility, the fireworks operator shall clean the barge of all fireworks related material and shall photograph and properly dispose of all fireworks trash and debris. Unexploded fireworks and related components shall be collected and disposed of by the fireworks operator in accordance with all applicable regulations. fireworks operators shall photograph the barge prior to and after cleaning.

7. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the fireworks organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent fireworks using hand held fishnets, pool skimmers, or other similar equipment.

8. The morning after the fireworks display event, the fireworks organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the fireworks detonation zone to remove fireworks trash and debris. The fireworks organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal.

9. The morning after the fireworks display event, the fireworks organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with trash bags and a trash grabber. The fireworks organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal.

10. Within ~~five~~ ten (~~5~~10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the dry weight of the fireworks trash and debris collected is less than fifty percent (50%) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch

site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront.

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MM-BIO-2: **Implementation of Biological Resources–Related Conditions of the Proposed Ordinance for Indirect Impacts.** The fireworks organizer and operator are required to comply with the following biological resources–related condition of the proposed ordinance.

Section X.07 – Permits – Conditions of Approval

(e) Protection of Species and Habitat. The following conditions shall apply to fireworks display events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies:

3. **Security.** For fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one-half mile of unprotected (i.e., unfenced) federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall provide a minimum of two professional security guards to direct persons away from and to discourage trespass into sensitive nesting areas or habitat during such displays. <u>In addition, the fireworks organizer shall provide security patrols of the water area to enforce the existing restrictions on access to unauthorized areas during such fireworks display events in the South Bay.</u>

4. **Signage.** For fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one half-mile of nesting colonies or habitat areas for federally or state-listed species, the fireworks organizer, in cooperation with the District, shall post temporary signage along primary access points to sensitive nesting colonies and habitat areas to identify safe viewing locations, to educate visitors on locations of sensitive wildlife habitats, to prevent viewers from trespassing into sensitive areas and to encourage appropriate viewing behavior.

5. **Education.** Beginning not less than seven (7) days before fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) located within one-half mile of federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall implement a public education program using <u>daily announcements on</u> social media, press releases, and information posted at parks, boat launch facilities, marinas, yacht clubs and other viewing locations, to educate potential viewers regarding appropriate viewing and boat docking areas, to discourage trespass into sensitive wildlife habitat, and to reminds viewers of appropriate viewing behavior in and near sensitive nesting colonies and habitat areas (e.g., appropriate disposal of trash, prevention of illegal fireworks, and safe boating procedures).

(f) Best Management Practices. Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up:

11. For all Fourth of July fireworks display events and for Non-Fourth of July fireworks display events which are advertised to the public, the fireworks ~~operator~~ organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event.

MM-BIO-4: Fireworks Biological Monitoring Plan. Not less than 30 days before any fireworks display event in the South Bay that would occur within 1 mile of sensitive avian nesting colonies, the fireworks organizer shall submit to the District an Avian Species Nesting Colony Monitoring Plan (Monitoring Plan). The Monitoring Plan shall be prepared by a qualified biologist and approved by the District in coordination with USFWS and CDFW. A qualified biologist is a person who, by reason of his or her knowledge of the natural sciences and the principles of wildlife biology, acquired by education and experience. The Monitoring Plan shall identify the monitoring protocol that will be used to assess the effectiveness of mitigation measures **MM-BIO-1** and **MM-BIO-2** and shall, at a minimum, include the following:

1. A literature review which refines the proposed methodology.
2. A list of target species identified for each individual event based on the season of the event, proximity of the event to nesting colonies, sensitivity of species, and capacity for the fireworks display event to cause species disturbance/effects.
3. Species behavior and noise data shall be collected at least 1 hour prior to, during, and 1 hour after the fireworks display event.
4. Documentation of the following data:
    a. Site location, name of monitor, date and time of observations
    b. Number of adults, nests, and chicks observed within one-half mile of spectator viewing areas
    c. Sources of stressors (e.g., light, noise, trespass, debris)
    d. Unauthorized access within nesting colonies
    e. Counts of illegal pyrotechnics

Within 30 days following the completion of the fireworks display event, the qualified biologist shall prepare a Monitoring Report for submittal to the District that details the findings of the monitoring results. This report shall include background/introduction, methods, results, discussion, and recommendations sections. The District shall provide a copy of the report to the USFWS and CDFW and shall coordinate with these agencies regarding the results and recommendations of the report. Based on the review of the reports for two consecutive years of monitoring, the District, in coordination with these agencies, shall determine whether continued monitoring is required.

3.2.4 Changes to Chapter 4, Section 4.6, *Hydrology and Water Quality*

Page 4.6-33 to 4.6-34

MM-WQ-1: **Implementation of Water Quality–Related Conditions of the Proposed Ordinance for Fireworks Debris.** The fireworks organizer and operator are required to comply with the following water quality-related conditions of the proposed ordinance.

Section X.07 – Permits – Conditions of Approval

(d) Fireworks Chemical Composition and Packaging.

1. Chemical Composition.

B. All fireworks display events shall use alternative fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such alternative fireworks are not commercially available.

2. Packaging.

A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all fireworks to be used in the event.

B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited.

(f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up:

1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use.

2. Fireworks shall be brought to the barge and loaded in their ~~California~~ U.S. Department of Transportation (DOT)-approved shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other wrapping, shall be properly disposed of in trash receptacles as the fireworks display event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the fireworks display event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the fireworks launch area to contain debris.

3. Wires from the electric match placed in the fireworks fuse shall be secured to avoid strain (such as wrapped around nails that are ~~installed~~ on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event.

4. Once the fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position. No loose material shall be allowed on the barges during the fireworks display event.

5. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the fireworks display event, the fireworks operator shall pick up all loose material on the barge, including all trash and debris resulting from the discharge of the fireworks, to prevent it from being discharged into the water while the barge is underway.

6. Upon return to the loading facility, the fireworks operator shall clean the barge of all fireworks related material and shall photograph and properly dispose of all fireworks trash and debris. Unexploded fireworks and related components shall be collected and disposed of by the fireworks operator in accordance with all applicable regulations. Fireworks operators shall photograph the barge prior to and after cleaning.

7. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the fireworks organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent Fireworks using hand held fishnets, pool skimmers, or other similar equipment.

8. The morning after the fireworks display event, the fireworks organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the fireworks detonation zone to remove fireworks trash and debris. The fireworks organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal.

9. The morning after the fireworks display event, the fireworks organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with trash bags and a trash grabber. The fireworks organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal.

10. Within ~~five~~ ten (~~5~~10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the dry weight of the fireworks trash and debris collected is less than fifty percent (50%) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar

year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront.

MM-WQ-2: **Implementation of Water Quality–Related Conditions of the Proposed Ordinance for Human-Generated Trash and Litter.** The fireworks organizer and operator are required to comply with the following water quality–related condition of the proposed ordinance.

Section X.07 – Permits – Conditions of Approval

(f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up:

11. For all Fourth of July fireworks display events and for Non-Fourth of July fireworks display events which are advertised to the public, the fireworks ~~operator~~ organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event.

3.2.5 Changes to Chapter 4, Section 4.8, *Noise and Vibration*

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Based on the assumed ambient noise levels in Table 4.8-13, for receptors within National City and Chula Vista (which both have the same assumed ambient noise levels), proposed new Fourth of July fireworks display events in National City and Chula Vista Bayfronts would generate a significant impact at any single-family homes (a 1-hour L_{eq} of 65 dBA or more) within 4,255 feet, a significant impact at any multi-family homes (a 1-hour L_{eq} of 70 dBA or more) within 2,765 feet, and a significant impact at any noise-sensitive commercial uses (a 1-hour L_{eq} of 75 dBA or more) within 1,730 feet (see Table 4.8-12). ~~Because~~ Based on the proposed launch barge location for the National City ~~these~~ Fourth of July fireworks display event~~s would be required to maintain a minimum buffer distance of 1 mile from nesting habitat for sensitive bird species as a condition of the proposed ordinance and required with the implementation of mitigation measure **MM-NOI-1**~~, there would be no noise-sensitive receptors in National City or Chula Vista within 4,255 feet of ~~either~~ the launch location, and impacts from the National City display would be less than significant in ~~these~~ both National City and Chula Vista ~~cities~~. The proposed location of the Chula Vista launch barge is more than 2,765 feet from both the National City and Chula Vista shorelines, so there would be no significant impacts at multifamily homes or noise-sensitive commercial uses in these cities. Furthermore, there are no single-family homes within 4,255 feet of the proposed Chula Vista launch location. Therefore, impacts from the Chula Vista display would be less than significant in both National City and Chula Vista.

For receptors within the City of Coronado, the proposed new Fourth of July fireworks display events would generate a significant impact at any single-family homes (a 1-hour L_{eq} of 55 dBA or more) within 8,695 feet, a significant impact at any multi-family homes (a 1-hour L_{eq} of 60 dBA or more) within 6,230 feet, and a significant impact at any noise-sensitive commercial uses (a 1-hour L_{eq} of 70 dBA or more) within 2,765 feet (see Table 4.8-12). For both the National City and Chula Vista Fourth of July fireworks display events, these impact distances include many homes to the west in the City of Coronado. ~~For the Chula Vista Fourth of July fireworks display event, the impact distances would also include Grand Caribe Shoreline Park in the City of Coronado and, depending on the precise~~

~~location of the launch barge, could also include a hotel (Loews Coronado Bay Resort).~~ Impacts at these receptors would be significant (**Impact-NOI-1**).

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For receptors within the City of Coronado, these fireworks display events would generate a significant impact at any single-family homes (a 1-hour L_{eq} of 55 dBA or more) within 5,640 feet, a significant impact at any multi-family homes (a 1-hour L_{eq} of 60 dBA or more) within 3,800 feet, and a significant impact at any noise-sensitive commercial uses (a 1-hour L_{eq} of 70 dBA or more) within 1,510 feet (see Table 4.8-12). Based on the assumed location of the launch barge, these impact distances include the Coronado Cays homes ~~and Grand Caribe Shoreline Park~~ to the west in the City of Coronado. Impacts at these receptors would be significant (**Impact-NOI-1**).

Significant impacts are not anticipated to extend to any other noise-sensitive land uses within Coronado or any other city~~ies~~. It is noted, however, that if the ultimate location of the launch barge for the proposed fireworks display events is closer to the Chula Vista Bayfront than was assumed in the analysis (i.e., less than 1 mile from nesting ~~habitat~~ colonies for sensitive bird species) then it is possible some significant impacts could occur within the City of Chula Vista; these impacts would occur at any single-family homes, multi-family homes, or noise-sensitive commercial uses located within 2,440 feet, 1,510 feet, or 895 feet, respectively, of the launch barge location (**Impact-NOI-1**).

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Level of Significance Prior to Mitigation

Proposed New Fireworks Display Events

The proposed new fireworks display events would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the proposed project (**Impact-NOI-1**). Potentially significant impact(s) include the following.

Impact NOI-1: Substantial Periodic or Temporary Increase in Ambient Noise Levels of the Proposed New Fireworks Display Events. For proposed new fireworks display events (both Fourth of July and non–Fourth of July events), these noise increases would occur at homes ~~and the Grand Caribe Shoreline Park~~ in the City of Coronado, west of the proposed National City and Chula Vista launch locations. ~~Depending on the precise location of the proposed Chula Vista launch barge, substantial noise increases due to the proposed new Fourth of July fireworks display events may also occur at Loews Coronado Bay Resort.~~ If the ultimate location of the launch barge for the proposed Chula Vista fireworks display event is closer to the Chula Vista Bayfront than was assumed in the analysis then it is possible some significant impacts could also occur within the City of Chula Vista. Because the proposed new fireworks display events would occur at locations that do not currently have similar fireworks displays, the affected noise-sensitive receptors are not currently exposed to similar levels of fireworks noise and the impacts would be significant. However, it is also noted that the impacts would be very infrequent (approximately three times per year) and would include the Fourth of July, which is a traditional nationwide event during which most people have a reasonable expectation and understanding that fireworks will occur.

3.2.6 Changes to Chapter 7, *Alternatives to the Proposed Project*

Page 7-6 to 7-7

Alternative 2 – Quiet Fireworks Display Events Alternative

The Quiet Fireworks Display Events Alternative would require the proposed new fireworks display events along the National City and Chula Vista Bayfronts to be quiet fireworks display events that would not exceed a noise limit of 120 A-weighted decibels (dBA).[1] For this type of fireworks display event, the pyrotechnicians design a fireworks package that relies on the quieter types of fireworks. These fireworks display events would eliminate the use of "salute~~,~~" ~~rocket, and mine~~ fireworks altogether (*salute* fireworks, also known as maroon fireworks, are fireworks designed to make a very loud bang, or "report," and an intense flash of light), as well as any other fireworks that generate a loud report, and instead focus on rich color effects and tight visual choreography in order to garner similar entertainment value out of the display. Generally, fireworks used in quiet fireworks display events would include fountains, wheels, cakes (such as crossettes, comets, spinners or turbillions, colored stars, fish or bees, and falling leaves), Chinese lanterns, and lanceworks (United Kingdom Fireworks Review 2016). It is important to note that the use of these fireworks would create a quieter, but not a silent, fireworks display event. In addition, quiet fireworks display events would involve fireworks that are concentrated closer to the ground with fewer aerial shells being employed due to the loud noise that can occur during propulsion of an aerial shell. Therefore, while these fireworks display events would be in the same locations as those specified for the proposed project (as detailed in Chapter 3, *Project Description*), i.e., on barges, because quiet fireworks display events would rely on fireworks that cannot achieve the same heights or the same magnitude as traditional fireworks displays, they would not be as prominently visible and the viewing area would be smaller than that which exists for the proposed project. The Quiet Fireworks Display Events Alternative is intended to avoid or substantially lessen the significant noise impacts of the proposed project on nearby sensitive receptors.

Alternative 3 – No Salute Fireworks Alternative

Salute fireworks, which are fireworks specifically designed to create a loud bang and intense flash of light, are the loudest type of firework. The primary purpose of salute shells is to announce the beginning and end of the display and produce a loud, percussive effect. From a distance, these shells sound similar to cannon fire when detonated (NMFS 2006). While the noise level of these fireworks varies by type, a typical linear (unweighted) peak noise level directly below a 3-inch salute exploding at its normal altitude is 140 decibels (dB) (Journal of Pyrotechnics, Inc. 2012). The No Salute Fireworks Alternative would have the same characteristics as all of the fireworks display events that compose the proposed project, including the same total pounds of fireworks per event (as outlined in Table 3-2 in Chapter 3, *Project Description*), but would prohibit the use of salute fireworks (also known as maroon fireworks) and limit the noise produced by all fireworks during

[1] 120 dBA maximum impulse sound pressure level due to the firework break(s), as measured at a horizontal distance of 15 meters from the launch ~~testing~~ point at a height of 1 meter above the ground, using a Type 1 sound measuring device with a free-field microphone.

fireworks display events to a maximum of ~~140~~130 dB.[2] ~~Rockets, mines, and a~~ All other firework types, including those described above under the Section 7.4.2.2, *Quiet Fireworks Display Event Alternative*, would be allowed as long as they do not exceed the ~~140~~130 dB noise limit. The No Salute Fireworks Alternative is intended to avoid or substantially lessen the significant noise impacts of the proposed project on sensitive receptors.

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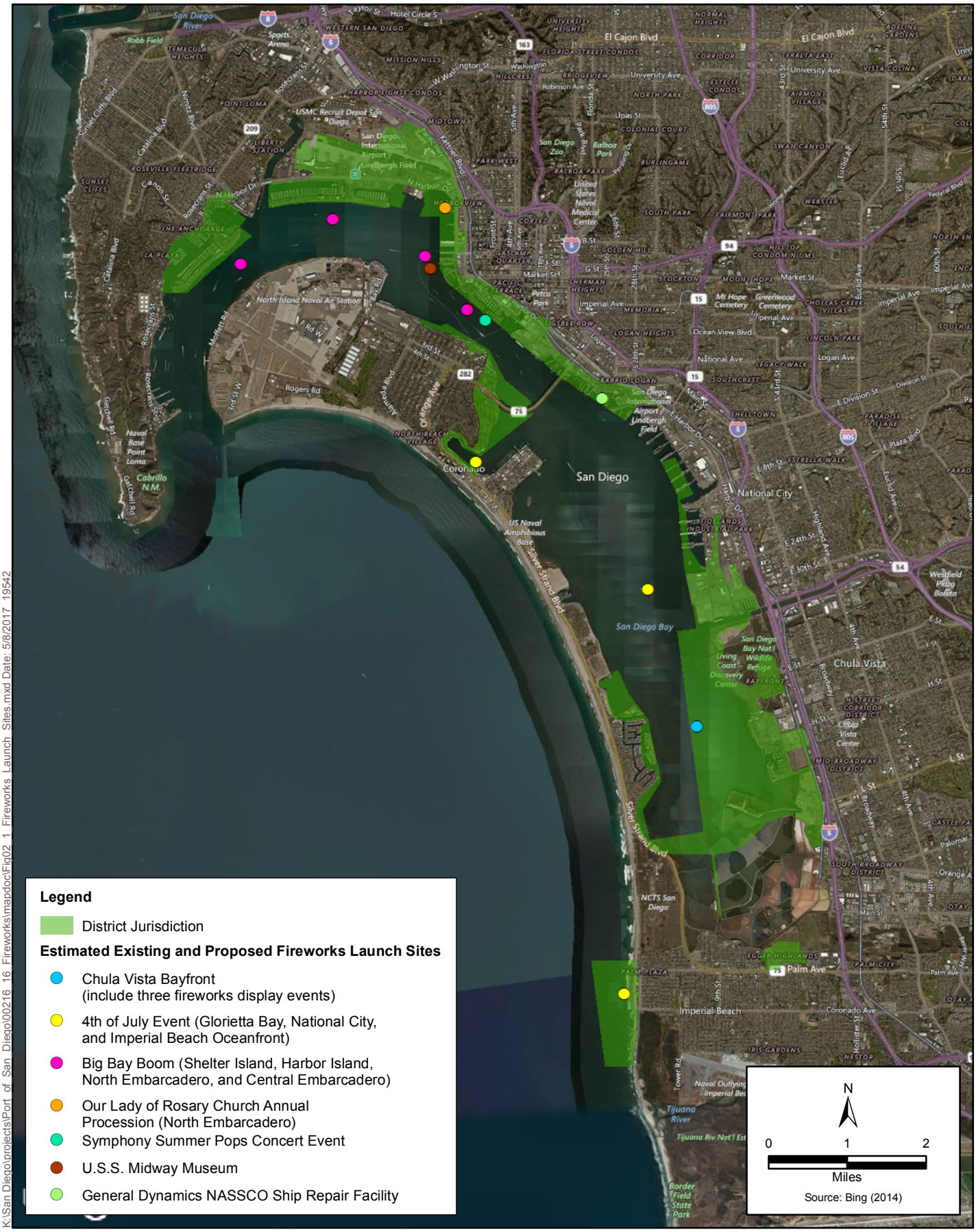
Biological Resources

Under the Quiet Fireworks Display Events Alternative, the proposed new fireworks display events would make use of quieter types of fireworks, which would be closer to ground level and involve smaller viewing areas. However, these displays would still take place on barges within San Diego Bay near the National City and Chula Vista Bayfronts. While viewership may be slightly decreased, this alternative would likely still result in a substantial number of visitors both at the landside and waterside viewing areas. Direct and indirect impacts on green sea turtles and avian species related to increased boating activity, eelgrass beds from barges and tugs, foot traffic on sensitive habitat areas, and generation of trash and debris by fireworks and visitors could still occur. This alternative would include adoption of an ordinance that includes post-show debris cleanup requirements and security, signage, and education measures, best management practices, eelgrass protection requirements, removal of fireworks packaging, and requirements for reducing the use of non-biodegradable fireworks components that would reduce impacts on these biological resources to less-than-significant levels. Furthermore, the proposed ordinance for this alternative would also include light and noise reduction measures for fireworks display events, which would further reduce disturbances to sensitive avian species from firework-generated light and noise by eliminating the use of salutes and other loud~~, rocket, and mine~~ fireworks altogether. Therefore, similar to the proposed project but at a reduced level, this alternative would result in less-than-significant impacts on nesting species. As such, impacts on biological resources under the Quiet Fireworks Display Event Alternative would be less than the proposed project.

[2] ~~140~~130 dB linear (unweighted) peak sound pressure level due to the firework break(s), as measured at a horizontal distance of 15 meters from the launch point at a height of 1 meter above the ground,~~directly under the shell burst (break) occurring at its normal altitude,~~ using a Type 1 sound measuring device with a free-field microphone~~ at a height of 1 meter above the ground~~.

3.2.7 Figure Revisions

The figures on the following pages have been revised as a result of the relocation of the Chula Vista Bayfront launch site.


Legend
District Jurisdiction
Estimated Existing and Proposed Fireworks Launch Sites
Chula Vista Bayfront
(include three fireworks display events)
4th of July Event (Glorietta Bay, National City,
and Imperial Beach Oceanfront)
Big Bay Boom (Shelter Island, Harbor Island,
North Embarcadero, and Central Embarcadero)
Our Lady of Rosary Church Annual
Procession (North Embarcadero)
Symphony Summer Pops Concert Event
U.S.S. Midway Museum
General Dynamics NASSCO Ship Repair Facility
N
0
1
2
Miles
Source: Bing (2014)
San Diego
Coronado
National City
Chula Vista
Imperial Beach
San Diego Bay
San Diego Bay Nat'l Wildlife Refuge
North Island Naval Air Station
US Naval Amphibious Base
NCTS San Diego
San Diego International Airport / Lindbergh Field
Naval Base Point Loma
Cabrillo N.M.
Tijuana River
Tijuana Riv Nat'l Est
Border Field State Park
Silver Strand Blvd
Palm Ave
Coronado Ave
Imperial Ave
Market St
Logan Ave
National Ave
Ocean View Blvd
El Cajon Blvd
University Ave
Rosecrans St
Harbor Dr
Pacific Hwy
Orange Ave
Rogers Rd
Nimitz Blvd
Catalina Blvd
Sunset Cliffs Blvd
Garnet Rd
Mt Hope Cemetery
Greenwood Cemetery
Balboa Park
San Diego Zoo
Petco Park
Sports Arena
Robb Field
Liberty Station
Hotel Circle S
Washington St
Mission Bay
Ocean Beach
Point Loma
Coronado
Tijuana River
Imperial Beach
Palm Ave
Chula Vista
National City
San Diego Bay
Silver Strand Blvd

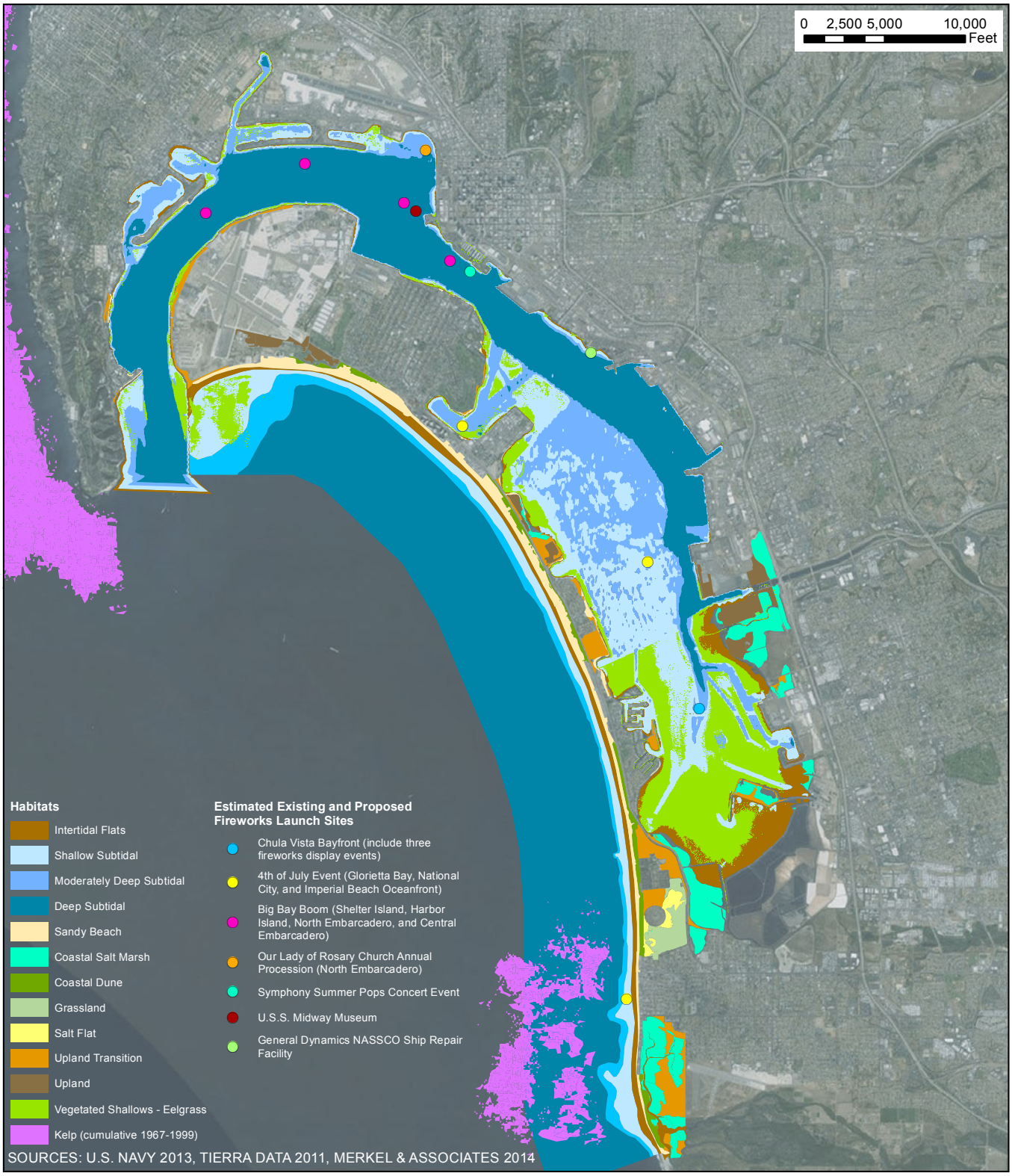


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Figure 4.3-1
Biological Habitats of San Diego Bay
Fireworks EIR Alternatives

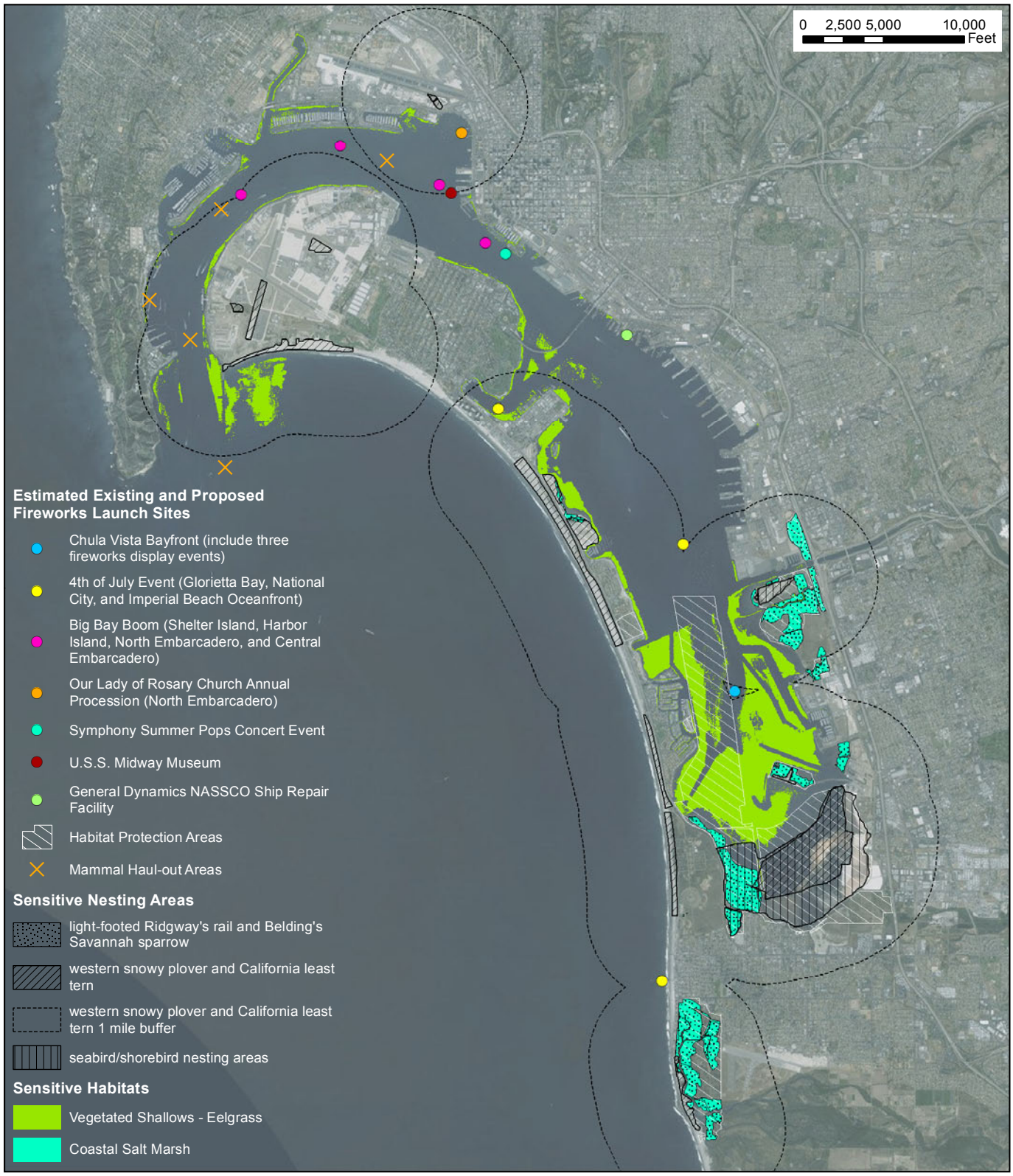

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Figure 4.3-2
Sensitive Habitats, Wetlands, and Sensitive Species within the Project Area
Fireworks EIR Alternatives

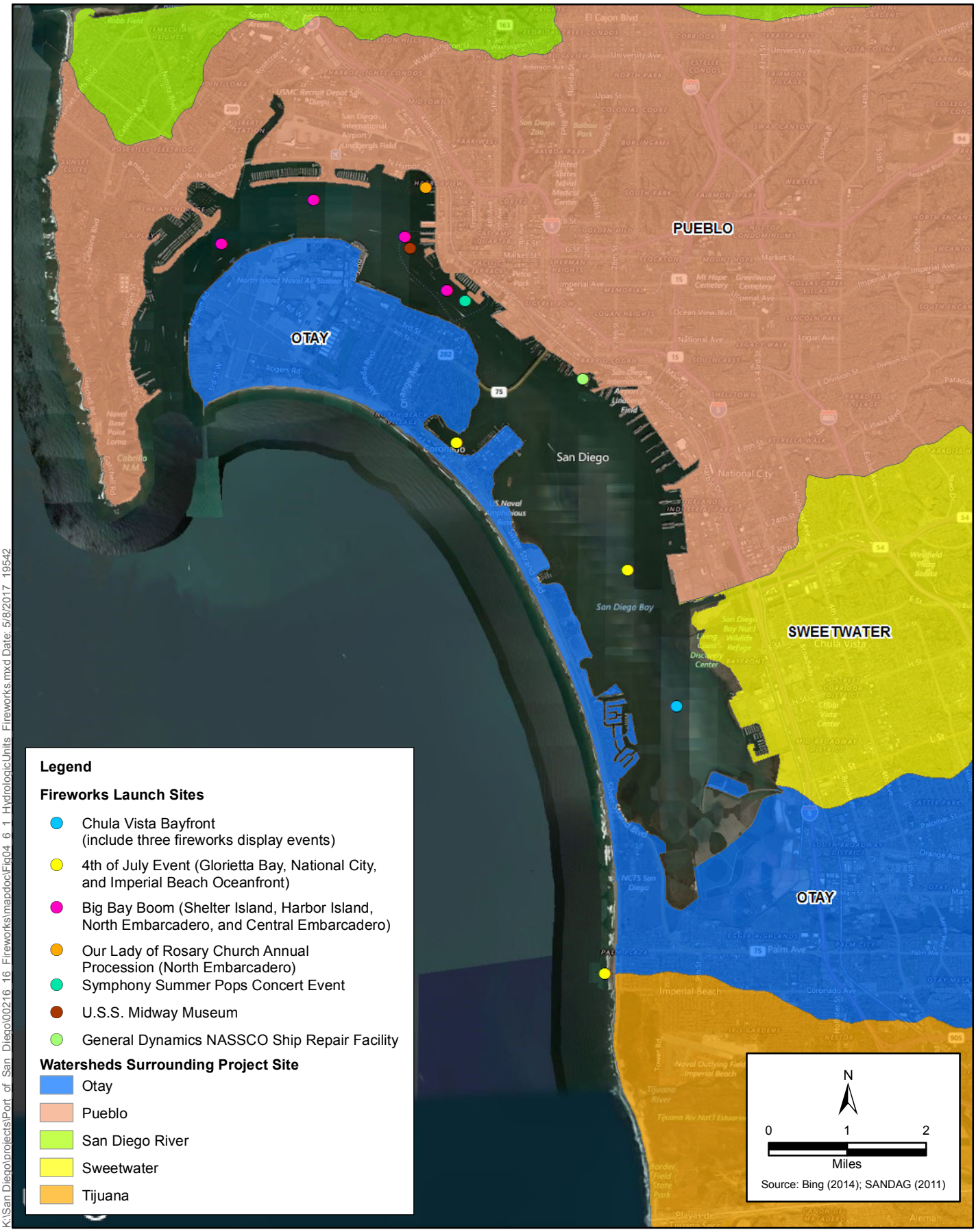

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Figure 4.6-2
Hydrologic Units in the Project Area
Fireworks EIR Alternatives

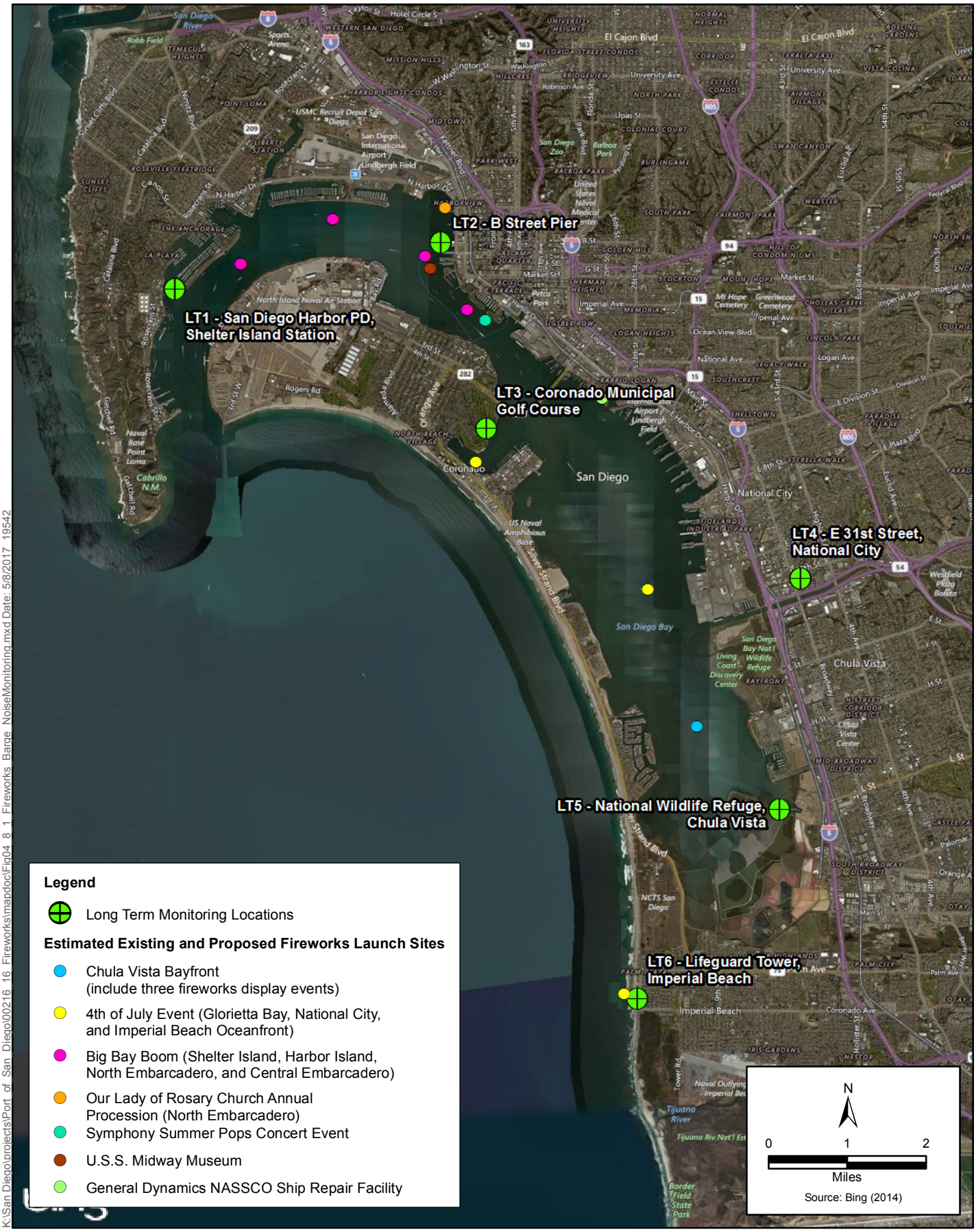

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Figure 4.8-1
Noise Monitoring Locations
San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events EIR

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Figure 4.10-2
Chula Vista Bayfront Traffic Study Area
San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events EIR

3.2.8 Changes to Appendix D, *Proposed Ordinance*

Revisions made to the proposed ordinance since public review of the Draft EIR are provided below.

ARTICLE __

FIREWORKS DISPLAY ORDINANCE

Section __.01 - TITLE

The title of this article shall be known as the "San Diego Unified Port District Fireworks Display Event Ordinance."

Section __.02 - PURPOSE

The purpose of this article is to establish a defined set of requirements and procedures by which the District and users of the District tidelands may continue to enjoy fireworks displays in and around San Diego Bay and the Pacific Ocean near Imperial Beach. Further, it is the intent of this article to protect the health, safety and welfare of persons, property and the environment within the District's jurisdiction and to comply with federal, state and local laws and regulations governing the handling, possession, storage, loading, staging, launching and detonating of fireworks.

Section __.03 - DEFINITIONS

For purposes of this article, certain words and phrases not otherwise defined in District Code section 0.03 shall be defined as follows, unless the context requires a different meaning:

"Alternative fireworks" means fireworks produced with new pyrotechnic formulas that replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters.

"Applicant" means a person who submits an application to the District for a permit pursuant to this article.

"Application" means the District's written form to be submitted by a person requesting a permit pursuant to this article.

"Barge" means a water vessel from which fireworks are launched or detonated.

"Best Management Practices" or "BMPs" means schedules of activities, prohibitions of practices, pollution prevention and educational practices, maintenance procedures, tools and other management practices used to prevent or reduce the discharge of pollutants directly to receiving waters to the maximum extent practicable. BMPs may include any type of pollution prevention and pollution control measure that can help to achieve compliance with this article.

"District" means the San Diego Unified Port District.

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“District General Counsel” means the General Counsel of the District or her/his designee.

“Executive Director” means the Executive Director (President/CEO) of the District or her/his designee.

“Fireworks” means any device containing chemical elements and chemical compounds capable of burning independently of the oxygen of the atmosphere and producing audible, visual, mechanical, or thermal effects which are useful as pyrotechnic devices or for entertainment, including aerial shells, low-level comet or multi-shot devices or ground-level displays. The term "fireworks" includes, but is not limited to, devices designated by the manufacturer as fireworks, torpedoes, skyrockets, roman candles, rockets, sparklers, party poppers, paper caps, chasers, fountains, smoke sparks, aerial bombs, and fireworks kits.

“Fireworks Display Event” means the handling, possession, storage, loading, staging, launching or detonating of fireworks on the land or waters within the District’s jurisdiction for viewing by the public or any group of persons exceeding twenty-five (25) in number.

“Fireworks Operator” means a pyrotechnic operator licensed by the State of California, who by examination, experience and training has demonstrated the required skill and ability in the use and discharge of fireworks as authorized by the license granted, and who is responsible for supplying, staging, launching or detonating the fireworks used in a fireworks display event.

“Fireworks Organizer” means a person who proposes to conduct a fireworks display event and who is responsible for obtaining the funding and approvals for a fireworks display event and for contracting with a fireworks operator to produce a fireworks display event.

“Fourth of July Fireworks Display Event” means a fireworks display event that occurs annually on the Fourth of July to express patriotism and civic pride and to celebrate the signing of the Declaration of Independence of the United States of America.

“Non-Fourth of July Fireworks Display Event” means a fireworks display event that occurs on a date other than the Fourth of July.

“Operation Clean Sweep” means the annual cleanup event sponsored by the San Diego Port Tenants Association and District, among others, where volunteers remove trash and debris from San Diego Bay.

“Permit” means the District-issued authorization for an applicant to conduct a fireworks display event pursuant to this article.

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“Person” means an individual, association, partnership, nonprofit organization, corporation, limited liability company, trustee, municipality, public agency or other legal entity, or the agent or employee thereof.

“Pounds” means the net explosive weight of fireworks.

“Salute” means an aerial shell as well as other pyrotechnic items whose primary effects are loud noise generated by detonation and flash of light.

“San Diego Bay Fourth of July Fireworks Display Event” means the annual fireworks display event which occurs on the Fourth of July at up to four (4) locations in northern San Diego Bay and is currently known as the “Big Bay Boom.” The San Diego Bay Fourth of July Fireworks Display Event will be referred to in this article as the Big Bay Boom.

"San Diego Water Board" means the California Regional Water Quality Control Board for the San Diego Region.

"San Diego Water Board General Permit" means California Regional Water Quality Control Board for the San Diego Region Order No. R9-2011-0022/NPDES No. CAG999002, General National Pollutant Discharge Elimination System (NPDES) Permit for Residual Firework Pollutant Waste Discharges to Waters of the United States, including any updates and amendments thereto.

“Sponsor” means a person who contributes funds, services, or other forms of assistance to a fireworks organizer in support of a fireworks display event.

Section __.04 - PROHIBITIONS

(a) It shall be unlawful for any Person to handle, possess, store, load, stage, launch or detonate Fireworks on land or water within District jurisdiction without first having obtained a Permit from the Executive Director as provided in this section. By signing said Permit, each Permit recipient acknowledges and agrees to comply with all of the applicable terms and conditions that may be specified in such Permit and this article.

(b) Any Person who receives a discretionary lease, permit, license or other entitlement for use or a contract, grant, subsidy, loan or other form of financial assistance from the District in connection with a Fireworks Display Event shall also obtain a Permit from the Executive Director as provided in this article. By signing said Permit, each Permit recipient acknowledges and agrees to comply with all of the applicable terms and conditions that may be specified in such Permit and this article.

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Section __.05 - PERMITS - APPLICATION

Whenever the privilege of doing any of the acts hereinbefore enumerated in this article requires obtaining a Permit from the Executive Director, the following procedure shall be followed:

(a) An application for a Permit shall be filed with the District not less than sixty (60) days before the date on which the Fireworks Display Event is proposed to occur.

(b) The application shall be in writing, in a form approved by the District, and shall include, at minimum, the following information: the Person who proposes to handle, possess, store, load, stage, launch or detonate Fireworks, including if applicable the Fireworks Organizer, Fireworks Operator and Sponsor of the Fireworks Display Event; the date, time and duration of the proposed Fireworks Display Event; the location(s) of the proposed Fireworks Display Event, including the loading, staging and launching sites; the total number of pounds, shell sizes and types of Fireworks to be used; and the proposed event transportation and parking management plan for the Fireworks Display Event.

(c) The application shall include copies of the Applicant's Notice of Intent for coverage under the San Diego Water Board General Permit, the San Diego Water Board's Notice of Enrollment of the proposed Fireworks Display Event under said General Permit, and the Best Management Practices Plan approved by the San Diego Water Board for the proposed Fireworks Display Event.

(d) When the application is deemed complete, the Executive Director shall review the application and determine whether the proposed Fireworks Display Event complies with all of the requirements of section __ (Permit – Conditions of Approval) of this article. If the proposed Fireworks Display Event complies with all of the requirements of section __ (Permit – Conditions of Approval) of this article, the Executive Director shall issue a Permit.

(e) Each Permit issued shall state the date, time and location of the Fireworks Display Event for which it is issued, the name of the Person to whom it is issued and all mandatory conditions upon which the Permit is given.

(f) An application for a permit for a Fireworks Display Event at a location not identified in Section _.7(a) of this article may be granted by the Executive Director provided that (i) environmental review for the proposed Fireworks Display Event has been completed and approved or certified by the District as required by the California Environmental Quality Act, Public Resources Code § 21000, et seq. prior to issuance of a permit and (ii) the applicant has obtained all other permits and approvals as required by law, including without limitation approvals and permits required under the California Coastal Act, Public Resources Code § 30000, et seq.

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Section __.06 - PERMITS – PUBLIC NOTICE

(a) Within five (5) business days after the issuance of a Permit pursuant to this article, the Executive Director shall give public notice of the issuance of such Permit by posting a copy of the Permit on the District's website.

Section __.07 - PERMITS - CONDITIONS OF APPROVAL

All permits issued by the Executive Director shall be subject to the following terms and conditions:

(a) Location of Fireworks Display Events.

1. Fourth of July Fireworks Display Events shall occur only at the following locations:

A. Big Bay Boom, at up to four (4) locations in northern San Diego Bay;

B. Fourth of July Imperial Beach Fireworks, at one (1) location along the Imperial Beach Pier;

C. Fireworks Over Glorietta Bay, at one (1) location in Glorietta Bay;

D. Chula Vista Fourth of July, at one (1) location adjacent to the Chula Vista Bayfront; and

E. National City Fourth of July, at one (1) location adjacent to the National City Bayfront.

2. Non-Fourth of July Fireworks Display Events shall occur only at the following locations:

A. National Steel and Shipbuilding Company (NASSCO) shipyard, not to exceed two (2) displays per year along NASSCO Pier 12;

B. U.S.S. Midway Museum, not to exceed twenty-three (23) displays per year on or adjacent to the U.S.S. Midway Museum;

C. San Diego Symphony Summer Pops Concerts, not to exceed twenty (20) displays per year adjacent to Embarcadero Marina Park South;

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D. Our Lady of Rosary Church Annual procession, not to exceed one (1) display per year along Harbor Drive and at end of Grape Street Pier; and

E. Chula Vista Bayfront, not to exceed two (2) displays per year adjacent to the Chula Vista Bayfront.

(b) Duration of Fireworks Display Events.

1. Fourth of July Fireworks Display Events shall not exceed twenty (20) minutes in duration.

2. Non-Fourth of July Fireworks Display Events shall not exceed ten (10) minutes in duration.

(c) Size of Fireworks Display Events.

1. Fourth of July Fireworks Display Events:

A. Big Bay Boom, not to exceed a cumulative 5,342 pounds of fireworks with shell sizes not to exceed 10 inches;

B. Fourth of July Imperial Beach Fireworks, not to exceed 456 pounds of fireworks with shell sizes not to exceed 10 inches;

C. Fireworks Over Glorietta Bay, not to exceed 397 pounds of fireworks with shell sizes not to exceed 10 inches;

D. National City Fourth of July, not to exceed 400 pounds of fireworks with shell sizes not to exceed 8 inches; and

E. Chula Vista Fourth of July, not to exceed 400 pounds of fireworks with shell sizes not to exceed 8 inches.

2. Non-Fourth of July Fireworks Display Events:

A. NASSCO shipyard, not to exceed 281 pounds of fireworks per display with shell sizes not to exceed 6 inches, or a cumulative total of 439 pounds of fireworks per year;

B. U.S.S. Midway Museum, not to exceed 235 pounds of fireworks per display with shell sizes not to exceed 6 inches, or a cumulative total of 1,759 pounds of fireworks per year;

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C. San Diego Symphony Summer Pops Concerts, not to exceed 95 pounds of fireworks per display with shell sizes not to exceed 6 inches, or a cumulative total of 1,498 pounds of fireworks per year;

D. Our Lady of Rosary Church Annual procession, not to exceed 18 pounds of fireworks with shell sizes not to exceed 6 inches; and

E. Chula Vista Bayfront, not to exceed 114 pounds of fireworks per display with shell sizes not to exceed 8 inches, or a cumulative total of 228 pounds of fireworks per year.

(d) Fireworks Chemical Composition and Packaging.

1. Chemical Composition.

A. The Big Bay Boom Fourth of July Fireworks Display Event shall use Fireworks which contain no more than 0.32% copper (Cu) per pound of explosive firework material, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that the total copper emissions from the proposed Big Bay Boom Fireworks Display Event will not exceed seventeen (17) pounds. Fireworks which do not conform to the foregoing requirement, but were lawfully purchased prior to the effective date of this article, may be used for a period of six months after the effective date of this article.

B. All Fireworks Display Events shall use Alternative Fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such Alternative Fireworks are not commercially available.

2. Packaging.

A. Prior to commencement of a Fireworks Display Event, the Fireworks Operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all Fireworks to be used in the event.

B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited.

(e) Protection of Sensitive Species and Habitat. The following conditions shall apply to Fireworks Display Events that occur between February 15 and September 15 (i.e., avian

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breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies:

1. Location. Fireworks Display Events shall be located not less than one (1) mile from any federally or state-listed avian species nesting colony unless the maximum size of shells used in the event is limited to eight (8) inches.

2. Salutes. Fireworks Display Events shall not use concussion type, non-color shells such as "salutes" or "reports" during the initial twenty-five percent (25%) of the duration of any display (e.g., within the first 5 minutes of a 20-minute display).

3. Security. For Fireworks Display Events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one-half mile of unprotected (i.e., unfenced) federally or state-listed nesting colonies or habitat areas, the Fireworks Organizer shall provide a minimum of two professional security guards to direct persons away from and to discourage trespass into sensitive nesting areas or habitat during such displays. In addition, the fireworks organizer shall provide security patrols of the water area to enforce the existing restrictions on access to unauthorized areas during such fireworks display events in the South Bay.

4. Signage. For Fireworks Display Events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one half-mile of nesting colonies or habitat areas for federally or state-listed species, the Fireworks Organizer, in cooperation with the District, shall post temporary signage along primary access points to sensitive nesting colonies and habitat areas to identify safe viewing locations, to educate visitors on locations of sensitive wildlife habitats, to prevent viewers from trespassing into sensitive areas and to encourage appropriate viewing behavior.

5. Education. Beginning not less than seven (7) days before Fireworks Display Events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) located within one-half mile of federally or state-listed nesting colonies or habitat areas, the Fireworks Organizer shall implement a public education program using daily announcements on social media, press releases, and information posted at parks, boat launch facilities, marinas, yacht clubs and other viewing locations, to educate potential viewers regarding appropriate viewing and boat docking areas, to discourage trespass into sensitive wildlife habitat, and to reminds viewers of appropriate viewing behavior in and near sensitive nesting colonies and habitat areas (e.g., appropriate disposal of trash, prevention of illegal fireworks, and safe boating procedures).

(f) Best Management Practices. Fireworks Display Events shall implement the following BMPs for Fireworks Display Event preparation, discharge and clean-up:

1. Fireworks Display Events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use.

2. Fireworks shall be brought to the barge and loaded in their ~~California~~ U.S. Department of Transportation (DOT)-approved shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other wrapping, shall be properly disposed of in trash receptacles as the Fireworks Display Event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the Fireworks Display Event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the Fireworks launch area to contain debris.

3. Wires from the electric match placed in the Fireworks fuse shall be ~~wrapped around nails that are installed~~ secured to avoid strain (such as wrapped around nails that are on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the Fireworks Display Event.

4. Once the Fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position. No loose material shall be allowed on the barges during the Fireworks Display Event.

5. Following the Fireworks Display Event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the Fireworks Display Event, the Fireworks Operator shall pick up all loose material on the barge, including all trash and debris resulting from the discharge of the Fireworks, to prevent it from being discharged into the water while the barge is underway.

6. Upon return to the loading facility, the Fireworks Operator shall clean the barge of all Fireworks related material and shall photograph and properly dispose of all Fireworks trash and debris. Unexploded Fireworks and related components shall be collected and disposed of by the Fireworks Operator in accordance with all applicable regulations. Fireworks Operators shall photograph the barge prior to and after cleaning.

7. Following the Fireworks Display Event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the Fireworks

Organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent Fireworks using hand held fishnets, pool skimmers, or other similar equipment.

8. The morning after the Fireworks Display Event, the Fireworks Organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the fireworks detonation zone to remove Fireworks trash and debris. The Fireworks Organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal.

9. The morning after the Fireworks Display Event, the Fireworks Organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with trash bags and a trash grabber. The Fireworks Organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal.

10. Within ~~five~~ ten (~~5~~10) business days after a Fireworks Display Event, the Fireworks Organizer shall provide the Executive Director with the photographs and written evidence of the weight of the Fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the dry weight of the Fireworks trash and debris collected is less than fifty percent (50%) of the net weight of fireworks launched during the Fireworks Display Event, the Fireworks Organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the Fireworks Display Event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront.

11. For all Fourth of July Fireworks Display Events and for Non-Fourth of July Fireworks Display Events which are advertised to the public, the Fireworks ~~Operator~~ Organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event.

(g) Eelgrass Avoidance and Mitigation. For Fireworks Display Events with launching sites located in shallow water with the potential for eelgrass to occur, fireworks barges shall be held in place by tugboats and shall not require temporary moorings. To the extent practicable, barges shall be located in unvegetated deep water channels outside of eelgrass beds. Pre-event and post-event eelgrass surveys shall be completed to identify the distribution of eelgrass to assist tug operators and to assess any impacts to eelgrass that may occur. Through a pre-event training, tug operators shall be made aware of shallow eelgrass and instructed not to use

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high thrust in the vicinity of eelgrass beds. If an unanticipated impact to eelgrass occurs, this impact shall be mitigated by replacing the eelgrass at a ratio determined by the California Eelgrass Mitigation Policy.

(h) Event Transportation and Parking Management Plans. For all Fourth of July Fireworks Display Events and for Non-Fourth of July Fireworks Display Events which are advertised to the public, the Fireworks Organizer shall prepare and submit an event transportation and parking management plan (ETPMP) to the Executive Director for approval as part of the Application, which shall be designed to ensure safe and convenient access to public viewing areas while limiting conflicts between transportation modes and reducing impacts on surrounding transportation facilities to the maximum extent feasible. The ETPMP shall take into account anticipated attendance, existing transportation and parking facilities, and other concurrent public events in the surrounding areas, and shall include but is not limited to the following:

1. Transportation management strategies, including but not limited to, a public awareness program, traffic management and enforcement, incident management, and public transit and alternative modes of transportation management, which shall be implemented for the Fireworks Display Event; and

2. Parking management strategies, including but not limited to a public awareness program, coordination with parking vendors, off-site parking arrangements, designated areas for taxi and rideshare pick up/drop off, promotional programs with rideshare vendors, joint event ticketing programs with public transit agencies, and expanded shuttle operations.

(i) Compliance with San Diego Water Board General Permit.

1. Prior to the Executive Director's issuance of a permit pursuant to this article, the Applicant shall demonstrate that it has applied for coverage and has been enrolled under the San Diego Water Board General Permit.

2. The Applicant shall comply with all applicable terms, conditions and Best Management Practices required by the San Diego Water Board General Permit, which shall be incorporated into and considered in the terms, conditions and Best Management Practices of any permit issued by the Executive Director pursuant to this article.

3. The Applicant shall submit to the District copies of all applications, plans, reports and other documentation required by the San Diego Water Board General Permit, including without limitation the Notice of Intent, Fireworks Best Management Practices Plan, Public Fireworks Display Log and the Public Display of Fireworks Post Event Report, within the time required for the submission of such reports to the San Diego Water Board.

(j) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater Management and Discharge Control), and the fire marshal of any city which has jurisdiction over all or any part of the activity allowed under said Permit.

(k) Compliance with Laws: The Applicant shall comply with any and all applicable rules and regulations promulgated by the District, including without limitation the District Code, the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan, and with the laws, rules and regulations of the United States of America and the State of California, and of any department or agency thereof, and with the applicable ordinances, rules and regulations of any city which has jurisdiction over all or any part of the activity allowed under said Permit. The Applicant's failure to comply with any applicable law, ordinance, rule or regulation shall be cause for immediate revocation of said permit and for the denial of applications for future Permits.

(l) Indemnity: The Applicant shall indemnify and hold harmless the District, its board, officers and employees, from any and all claim of loss, liability or damage arising out of the Fireworks Display Event, including but not limited to the issuance of the District Permit, or in connection with the handling, possession, storage, loading, staging, launching or detonating of Fireworks by the Applicant, its officers, employees, contractors, agents or other representatives, howsoever caused, whether such loss, liability or damage results, either directly or indirectly, from the acts, omissions or negligence of the Applicant, its officers, employees, contractors, agents or other representatives, in connection with the handling, possession, storage, loading, staging, launching or detonation of Fireworks pursuant to said Permit.

(m) Insurance: The Applicant shall file with the Executive Director, in a form approved by the District General Counsel, a policy of public liability and property damage insurance, in such amounts and form as the Executive Director may specify, indemnifying the District, its boards, officers and employees, as their interest may appear under the terms and conditions of said Permit. The Permit shall not become effective until after such policy of insurance has been received by the District.

(n) Performance Bond: ~~The Executive Director may require~~For public Fireworks Display Events with over 500 spectators the Applicant ~~to~~ shall post a faithful performance bond, in a form approved by the District General Counsel, or in lieu thereof the equivalent in cash, in an amount sufficient in the opinion of the Executive Director to cover costs associated with the

Fireworks Display Event allowed under the permit, including without limitation the costs of providing security for the protection of sensitive species and habitat, and cleaning up and removing debris, rubbish and trash. The permit shall not become effective until after such faithful performance bond, or cash in lieu thereof, has been posted with and received by the District.

(o) Mitigation Measures: All permit applications shall be reviewed by the District for consistency with the Mitigation Monitoring and Reporting Program (MMRP) from the Final Environmental Impact Report for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project, as certified by the Board of Port Commissioners, and all applicable mitigation measures from the MMRP shall be identified as required conditions of the approved permit issued by the District.

Section __.8 – GENERAL PROVISIONS

(a) Preemption. The provisions of this article do not apply where any federal or state law regulates the handling, possession, storage, loading, staging, launching or detonating of Fireworks if the federal or state law preempts local regulation or the federal or state law is more restrictive.

(b) Severability. If any provision of this article or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of this article which can be given effect without the invalid provisions or application, and to this end the provisions of this section are severable.

(c) Cost Recovery. ~~Pursuant to Article 2, Cost Recovery, of the District Code, the~~ The Applicant shall pay a fee to the District for the cost of services and administrative acts of the District incurred in processing a permit application ~~pursuant to the article~~.

Section __.9 - ENFORCEMENT

Any person who violates this article or who fails to comply with the terms and conditions of a permit issued pursuant to this article shall be subject to punishment in accordance with District Code section 0.11, General Penalty, and section 0.13, Permit Violations.

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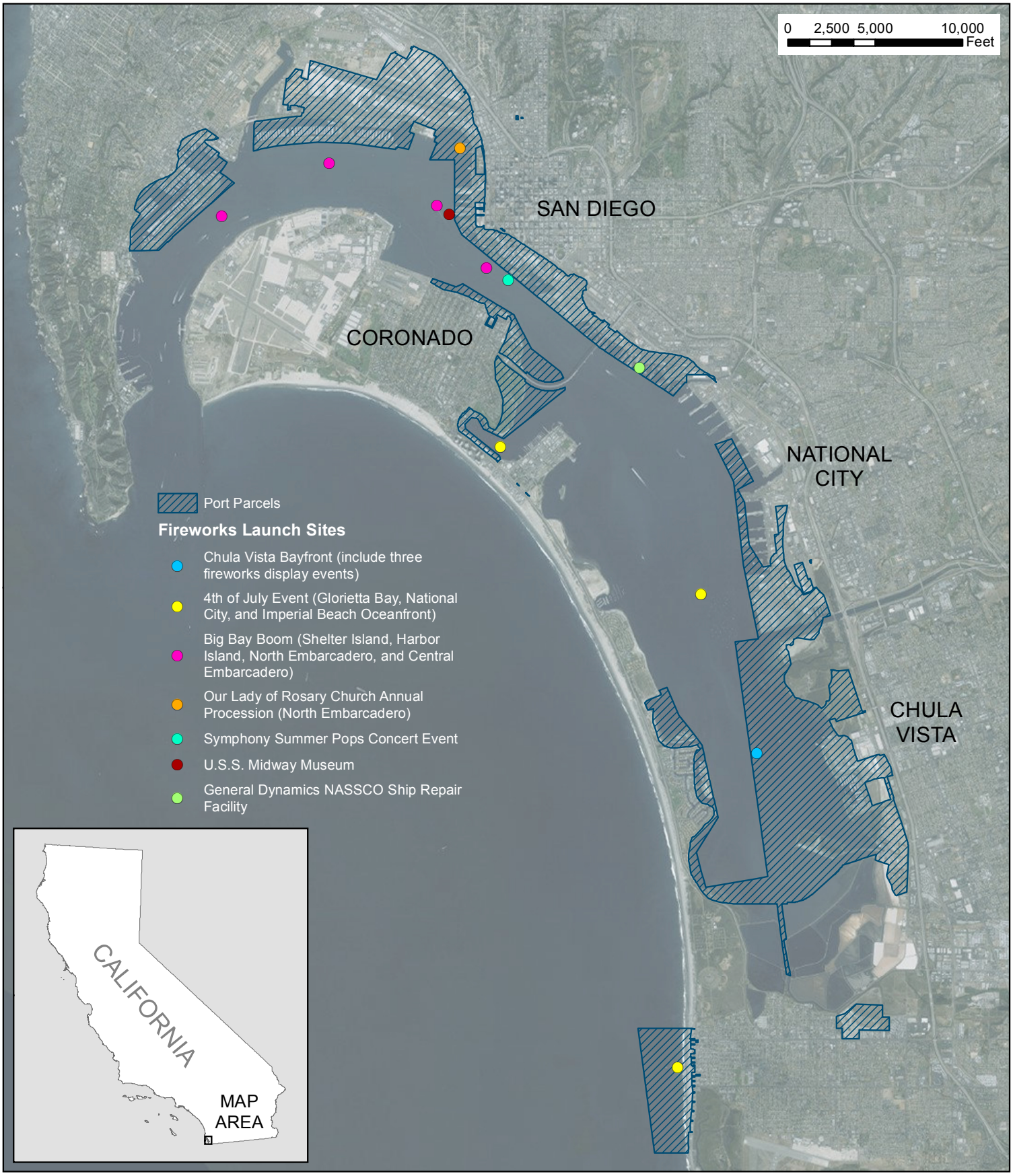
3.2.9 Changes to Appendix F, *Biological Technical Report*

The figures on the following pages have been added to or revised in Appendix F, *Biological Technical Report*.



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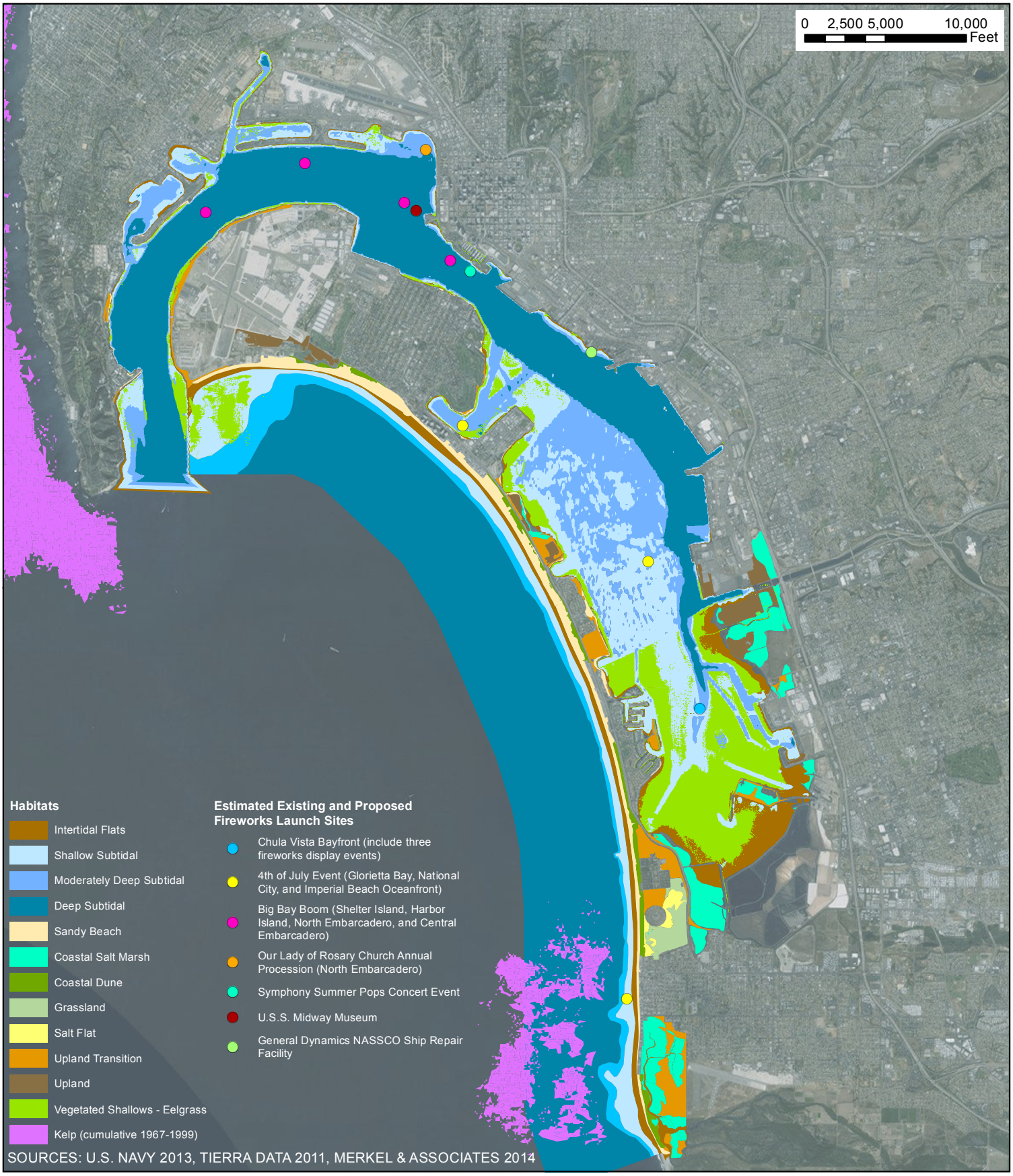
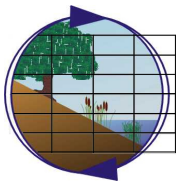
San Diego Bay Vicinity Map and Launch Sites

Biological Technical Study

San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events

Figure 1



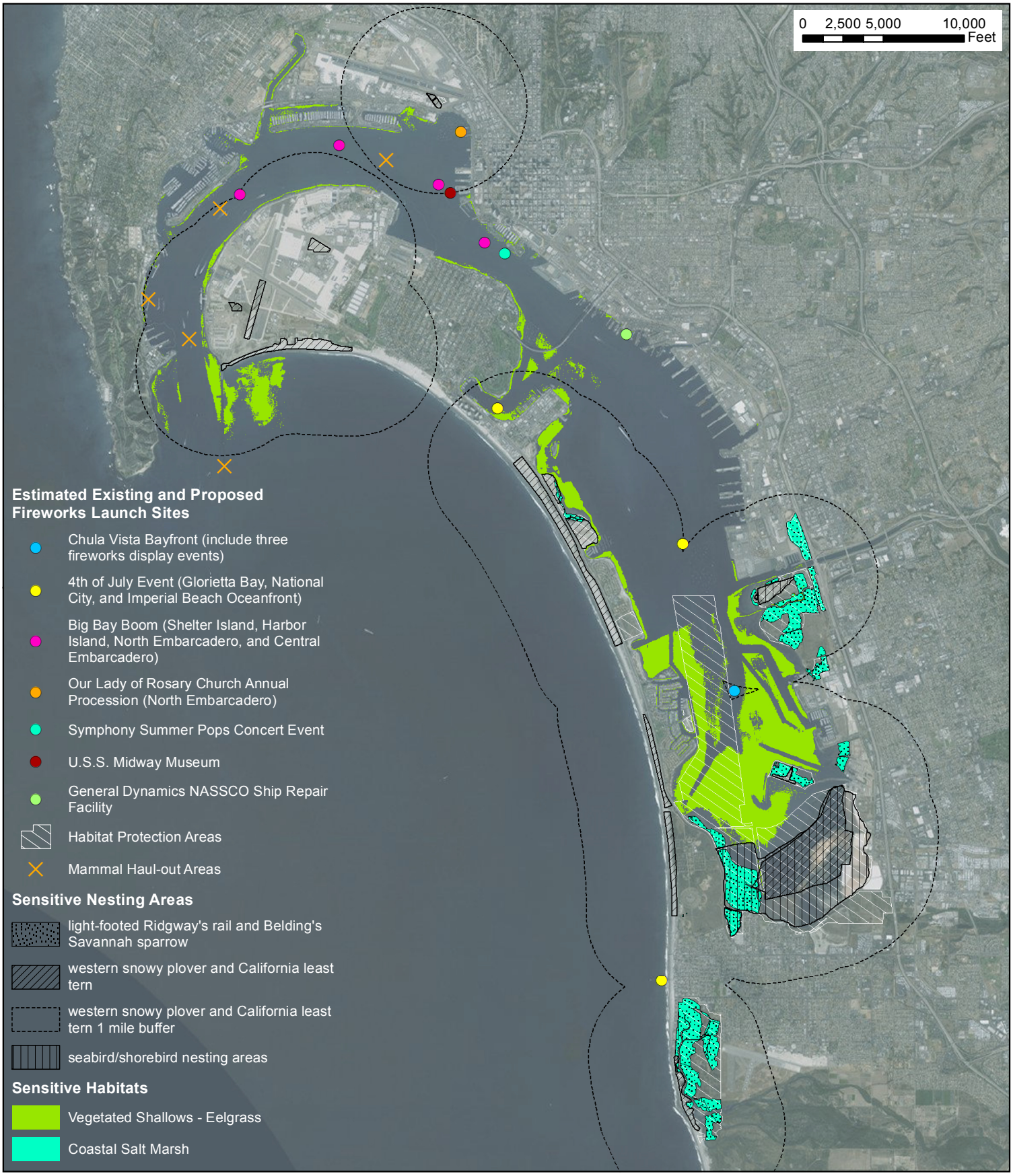


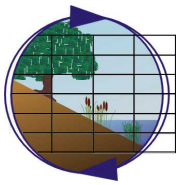
Biological Habitats of San Diego Bay

Biological Technical Study

San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events

Figure 2





Sensitive Habitats, Wetlands, and Sensitive Species within the Project Area

Biological Technical Study

San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events

Figure 3

Chapter 4
Comments Received and District Responses

4.1 Introduction

The Draft Environmental Impact Report (EIR) was available for public review for 45 days beginning on March 17, 2017 and ending on May 2, 2017. The District posted an electronic version on the District website, hard copies were sent to the City of San Diego Central Library, City of National City Public Library, City of Chula Vista Public Library, City of Imperial Beach Branch Library, and City of Coronado Public Library, and a copy was available for review at the District's Administration Building at 3165 Pacific Hwy, San Diego, CA 92101. A Notice of Availability was posted with the County Clerk on March 17, 2017. All requisite documents, including the Notice of Completion form, were sent to the State Clearinghouse on March 17, 2017. Below is a listing of those agencies and organizations that received a copy of the Draft EIR or a postcard noticing the availability of the Draft EIR.

4.2 Public Draft EIR Distribution List

4.2.1 Federal Agencies

Federal Aviation Administration: Air Traffic Airspace Branch; San Diego Flight Standards District Office; Southwest Region; Western-Pacific Region

Federal Emergency Management Agency: Floodplain Management and Insurance Branch

U.S. Army Corps of Engineers: Los Angeles District; San Diego Field Office; Regulatory Division

U.S. Coast Guard: San Diego Marine Safety Office; Department of Homeland Security

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service: West Coast Regional Office

U.S. Department of the Navy, Southwest Division: Naval Facilities Engineering Command Southwest Office, Public Affairs Department, Naval Air Station North Island, Naval Base Coronado, Naval Base San Diego, Community Planning Liaison Officer

U.S. Environmental Protection Agency: Pacific Southwest, Region 9

U.S. Fish & Wildlife Service: Carlsbad Office

U.S. Department of Homeland Security: U.S. Customs & Border Protection

4.2.2 State Agencies

California Air Resources Board

California Air Resources Board: Freight Transport Branch

California Coastal Commission: San Diego Coast District Office

California Department of Boating and Waterways

California Department of Fish and Wildlife, South Coast Region

California Department of Parks and Recreation

California Department of Public Health

California Department of Toxic Substances Control

California Department of Transportation, District 11, San Diego

California Department of Transportation: Division of Aeronautics; District 11 Office

California Environmental Protection Agency

California Highway Patrol

California Integrated Waste Management Board

California Native American Heritage Commission

California Office of Planning and Research (State Clearinghouse)

California Public Utilities Commission

California Regional Water Quality Control Board: Region 9, San Diego

California Resources Agency

California State Lands Commission

California State Water Resources Control Board

4.2.3 Regional and Local Agencies

City of Chula Vista: Planning Department; Chula Vista Public Library, Civic Center Branch

City of Coronado: Community Development Department; Coronado Public Library

City of Imperial Beach: Community Development Department; Fire Department; Imperial Beach Brach Library

City of National City: Community Development Department; National City Public Library

City of San Diego: Central Library; Districts 1 through 10; Development Services; Planning Department; Transportation Division; City Clerk; Mayor's Office; City Council; Water Department; Stormwater Pollution Prevention District; Wastewater Department

County of San Diego: County Clerk; Board of Supervisors; Planning and Land Use Department; Department of Environmental Health; Air Pollution Control District; Land Use and Environmental Group

San Diego Association of Governments

San Diego Chamber of Commerce

San Diego County Regional Airport Authority

San Diego County Water Authority

San Diego Gas & Electric

San Diego Metropolitan Transit System

Other interested individuals, organizations, and groups also received a postcard noticing the availability of the Draft EIR.

4.3 Comments Received on the Draft EIR

The District received 10 comment letters on the Draft EIR during the public review period. Topics included air quality, biological resources, greenhouse gas (GHG) emissions, hydrology and water quality, noise, and transportation and traffic. Table 4-1 lists the agencies and interested parties that provided comment letters.

Table 4-1. Agencies and Organizations that Submitted Comment Letters on the Draft EIR

Letter	Agency/Organization	Dated	Received	Page
Federal Agencies				
A	Federal Emergency Management Agency	3/23/17	4/25/17	4-4
B	United States Fish and Wildlife Service	5/2/17	5/2/17	4-6
State Agencies				
C	Governor's Office of Planning and Research, State Clearinghouse and Planning Unit	5/3/17	5/8/17	4-24
D	California Coastal Commission	5/1/17	5/1/17	4-26
E	California Department of Fish and Wildlife	5/2/17	5/2/17	4-33
Regional and Local Agencies				
No comment letters were received from regional or local agencies.				
Organizations				
F	Coastal Environmental Rights Foundation	5/2/17	5/2/17	4-46
G	Fireworks & Stage FX America	4/18/17	5/2/17	4-56
H	H.P. Purdon	5/1/17	5/1/17	4-71
I	Pacific Tugboat Service	5/1/17	5/1/17	4-75
J	Pyro Spectaculars, Inc.	5/2/17	5/2/17	4-77
Individuals				
No comment letters were received from individuals.				

4.4 Comment Letters and Responses

4.4.1 Comment Letter A: Federal Emergency Management Agency

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APR 25 2017

SAN DIEGO UNIFIED
PORT DISTRICT
REAL ESTATE

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052

FEMA

March 23, 2017

Wileen Manaois,
Real Estate Development Department
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92101-1128

Dear Ms. Manaois:

A-1 This is in response to your request for comments regarding the Notice of Availability of a Draft Environmental Impact Report for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project.

A-2 Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the County of San Diego (Community Number 060284) and City of San Diego (Community Number 060295), Maps revised April 5, 2016. Please note that the City of San Diego, San Diego County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any ***development*** must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

A-2 cont

- All buildings constructed within a coastal high hazard area, (any of the "V" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at http://www.fema.gov/business/nfip/forms.shtm.

Please Note:

A-3

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The San Diego floodplain manager can be reached by calling Jamal Batta, CFM, P.E., Floodplain Manager, at (619) 553-7482. The San Diego County floodplain manager can be reached by calling Sara Agahi, Flood Control District Manager, at (858) 694-2665.

If you have any questions or concerns, please do not hesitate to call Mark Delorey of the Mitigation staff at (510) 627-7057.

Sincerely,

Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:
Jamal Batta, CFM, P.E., Floodplain Manager, City of San Diego
Sara Agahi, Flood Control District Manager, San Diego County
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources, Southern Region Office
Mark Delorey, NFIP Compliance Officer, DHS/FEMA Region IX
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

Response to Comment A-1

This comment is an introductory statement indicating that the Federal Emergency Management Agency (FEMA) is providing comments on the Draft EIR for the proposed project.

The District appreciates FEMA's interest in the proposed project. This comment does not raise any environmental issues requiring a response pursuant to the California Environmental Quality Act (CEQA). The specific comments raised in the pages that follow this introduction are listed separately along with the District's individual responses.

Response to Comment A-2

This comment is requesting that the District review the current effective countywide Flood Insurance Rate Maps for the County of San Diego and City of San Diego, and identifies the City and County of San Diego as participants in the National Flood Insurance Program (NFIP). The comment also identifies the basic NFIP floodplain management building requirements as described in Volume 44 of the Code of Federal Regulations (CFR), Sections 59 through 65.

The District acknowledges the City and County of San Diego as participants in the NFIP. The proposed project involves the adoption of an ordinance to govern existing and proposed new fireworks display events in San Diego Bay and the Imperial Beach Oceanfront, as well as four proposed new fireworks display events in San Diego Bay adjacent to the National City and Chula Vista Bayfronts. During preparation of the Draft EIR, the District reviewed the Flood Insurance Rate Maps within the vicinity of the proposed project. However, the project does not propose the construction of any buildings or other structures; therefore, the NFIP floodplain management building requirements are not applicable to the proposed project. No changes to the Final EIR are required.

Response to Comment A-3

The comment letter concludes by noting that many communities that participate in the NFIP have adopted floodplain management building requirements that are more stringent than the federal standards described in Volume 44 of the CFR, and provides the contact information for the City and County of San Diego floodplain managers. The commenter provides the FEMA contact name and information. As previously stated in the response to comment A-2, the NFIP floodplain management building requirements are not applicable to the proposed project.

The District appreciates FEMA's interest in the proposed project. This comment does not raise any environmental issues requiring a response pursuant to CEQA, as the floodplain management building requirements do not apply to the proposed project. No changes to the Final EIR are required.

4.4.2 Comment Letter B: U.S. Fish and Wildlife Service

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

San Diego National Wildlife Refuge Complex
P.O. Box 2358
Chula Vista, California 91912

In Reply Refer To:
FWS-SDG-15B0320-17CPA0125

May 2, 2017
Sent by Email

Ms. Wileen Manaois
Real Estate Development Department
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92101-1128

Subject: Comments on the San Diego Unified Port District's Draft Environmental Impact Report for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (UPD #EIR-2015-115)

Dear Ms. Manaois:

The U.S. Fish and Wildlife Service (Service) has reviewed the above-referenced Draft Environmental Impact Report (DEIR) for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (Project), in San Diego County, California. The enclosed comments are based on information provided in the DEIR and the Service's knowledge of sensitive and declining species and their habitats.

B-1 The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). The Service also owns and operates National Wildlife Refuges (NWR).

For the proposed project, the San Diego Unified Port District (Port) will (1) develop an ordinance establishing a District Code section to govern existing and proposed new fireworks display events within San Diego Bay and the Imperial Beach oceanfront, and (2) support four new fireworks display events in south San Diego Bay adjacent to the National City and Chula Vista Bayfront.

B-2 We have previously provided the Port comments on the notice of preparation of the DEIR in letter dated October 6, 2015, as well as recommendations regarding fireworks displays in San Diego Bay in letters dated May 9, 2016, and January 11, 2007, which are attached and incorporated

B-2 cont. herein by reference. While the DEIR addresses some of our past comments, many are not adequately addressed.

B-3 We have worked with fireworks sponsors, organizers, and operators to develop minimization measures for the federally listed threatened western snowy plover (Pacific Coast population DPS) [*Charadrius nivosus nivosus* (*C. alexandrinus n.*); plover], as well as the endangered California least tern [*Sterna antillarum browni* (*Sterna a. b.*); least tern] and light-footed Ridgway's (=clapper) rail [*Rallus obsoletus* (=*longirostris*) *levipes*; rail]. In our May 9, 2017, letter, we specifically recommended that fireworks shows be excluded from South San Diego Bay during the nesting season.

B-4 However, we continue to have concerns that fireworks conducted in south San Diego Bay will also result in impacts to nesting, roosting, rafting, and foraging seabirds, shorebirds, and waterfowl. Our concerns stem from the proximity of proposed fireworks launch sites in south San Diego Bay to the San Diego Bay NWR (Refuge) which supports thousands of nesting and wintering birds and is subject to low levels of disturbance under baseline conditions. As discussed in the Biological Technical Study (EIR, Appendix F), there is potential for avian behavioral responses to the bright lights, noise, and vibration associated with fireworks. In addition, fireworks events in south San Diego Bay may result in significant spectator presence on and near the Refuge. Due to our concerns regarding the potential direct and indirect effects of a fireworks show, we continue to recommend that fireworks shows do not occur in the vicinity of the Chula Vista Bayfront. We also recommend that the Port consider an alternative that will not introduce night time fireworks disturbance to the vicinity of the Refuge.

Specific Comments:

Chapter 2 – Environmental Setting

B-5 1) Fireworks Launch Site for the Proposed National City Fireworks Display

The description of the location for the temporary barge that "would take place within view of Pepper Park," as described on 2-12 of the draft EIR, appears to be inconsistent with Figure 2-1. The text states the "fireworks display event, likely a Fourth of July event, may occur along the National City Bayfront and is anticipated to involve the placement of a single, temporary barge in the vicinity of Pepper Park." This text implies that the barge would be located within the Sweetwater River flood control channel; however, Figure 2-1 indicates that the site would be well to the north of Pepper Park, where there appears to be little or no public access to the waterfront. The location of potential barge sites should be clarified in the document, as the proposed location could have significant, adverse effects on least terns that nest on the D Street Fill. The understanding of the exact locations in which the fireworks displays can occur is further complicated by language provided on page 4.3-5, which states: "The sites for the proposed new fireworks display events are within and/or adjacent to the District's jurisdiction within San Diego Bay along

B-5 cont. the National City and Chula Vista Bayfronts. These proposed new displays are anticipated to occur on barges and/or piers within these locations" (emphasis added). Chapter 2 does not address the potential for the new sites to include pier areas. If the use of piers in addition to barges is being considered for the new sites, the draft EIR should redistributed to public comment after it has been revised to identify potential pier sites and to address the potential impacts of using those pier sites for fireworks displays.

B-6 2) Fireworks Launch Site for the Proposed Chula Vista Bayfront Fireworks Display

Page 2-13 states "A total of three fireworks display events (including one on the Fourth of July) along the Chula Vista Bayfront area ... are anticipated to involve the placement of a single, temporary barge in the Bay in the vicinity of the two parks." Based on the information provided in Figure 2-1, it appears that the proposed location of this barge occurs within the boundaries of the Refuge. If the barge is to be located within the boundaries of the Refuge, the draft EIR should be revised to acknowledge that the proposal would require a Special Use Permit from the Refuge, as well as compliance with National Environmental Policy Act (NEPA). Additional discussion of this issue is provided below.

Chapter 4, Section 4.3 – Biological Resources

B-7 1) The habitat information provided in Figure 4.3-1 is incomplete and should be updated to show salt marsh in the western salt ponds, which were restored in 2011. In addition, the D Street Fill and South Bay Salt Works levees should be shown as supporting seabird and shorebird nesting habitat, including least terns and snowy plovers.

B-8 2) The habitat information provided in Figure 4.3-2 is incomplete and should be updated to include snowy plover habitat at Silver Strand State Beach and the Navy's proposed alternate least tern nesting site at Naval Air Station, North Island. The polygon(s) depicted in the legend as "Sensitive Nesting Areas 1 mile" will need to be adjusted once the missing nesting habitat is added to the figure.

B-9 3) The discussion of the San Diego Bay's subtidal vegetated habitat on page 4.3-7 should also address the importance of this habitat to the bay's population of eastern Pacific green sea turtles.

B-10 4) The discussion under *Upland Transition and Upland Areas* on page 4.3-9 should be expanded to acknowledge the significant seabird nesting areas that occur in proximity to the proposed fireworks launch sites. These include the D Street Fill, located immediately south of Pepper Park, which is a mitigation site set aside as nesting habitat for the least tern and snowy plover, and the levees of the South Bay Salt Works that support tens of thousands of nesting waterbirds between the months of March and September. The significance of these nesting areas is highlighted by the fact that in 2016, the San Diego

B-10 cont. Bay Refgure is estimated to have supported over 60,000 waterbird nests representing 16 species. The effects of impacts to this number of nesting birds should be evaluated in the effects section.

B-11 5) On page 4.3-10, note that the South Bay Salt Ponds are part of the Refuge, and not a separate area.

B-12 6) On page 4.3-11, note that the South Bay Salt Works levees and Pond 11 are managed by the Service, not the District.

B-13 7) Table 4.3-2 inaccurately states that eastern Pacific green sea turtle have a low potential to occur in San Diego Bay. Researchers continue to tag and monitor green sea turtles in San Diego Bay (Madrak *et al*. 2016), particularly in the south end of the Bay. In addition, norther harriers are routinely observed at Sweetwater Marsh and in the south bay, therefore, they have a high potential to occur in the affected area.

B-14 8) As addressed previously, the location proposed as a fireworks launch site for the Chula Vista Bayfront appears to be located within the boundaries of the Refuge; therefore, the discussion of applicable laws and regulations related to the Refuge on Page 4.3-19 should be expanded to address Federal regulations related to uses on a NWR. Uses on a NWR require compliance with the National Wildlife Refuge System (NWRS) Administration Act of 1966 as amended by the NWRS Improvement Act of 1997, 16 U.S.C. 668dd-668ee (Improvement Act) and the National Environmental Policy Act (NEPA).

B-15 The Improvement Act provides clear standards for management, use, planning, and growth of the NWRS. The Improvement Act requires that each refuge be managed to fulfill the "wildlife first" mission of the NWRS, as well as the specific purposes for which a refuge was established. The Refuge was established to protect, manage, and restore habitats for federally listed endangered and threatened species and migratory birds, as described in the Act, and maintain and enhance the biological diversity of native plants and animals, as described in the Fish and Wildlife Act of 1956, as amended.

In accordance with the Improvement Act, uses permitted on a NWR must be determined to be compatible with the mission of the NWRS and Refuge purposes. The Service's Appropriate Use Policy (*Service Manual, Part 603 FW* 1) provides a national framework for determining appropriate refuge uses and outlines the procedures refuge managers must follow when deciding if a new or existing use is an appropriate use on the refuge. The proposed use must contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or must be beneficial to the refuge's natural or cultural resources. If this is not the case, such a use would generally be considered not appropriate.

B-15 cont.

If a use is determined to be appropriate, it must then be evaluated for compatibility. The Service's Compatibility Policy (*Service Manual, Part 603 FW 2*) includes guidelines for determining if a use proposed is compatible with Refuge purposes. A compatible use is defined in the policy as a proposed or existing use of a NWR that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the NWRS mission or the purposes for which the Refuge was established.

Another significant directive of the Improvement Act is to ensure that we maintain the ecological integrity of the NWRS for present and future generations of Americans. Uses that we reasonably may anticipate to conflict with pursuing this directive are contrary to fulfilling the NWRS mission and are therefore not compatible. Under the authorities of the Improvement Act, fireworks displays conducted on a NWR would not represent an appropriate or compatible use of Refuge lands. As such, a Refuge Special Use Permit to allow such events could not be issued.

B-16

9) If there is the potential for a barge to be sited within Sweetwater River flood control channel in the vicinity of Pepper Park or for the fireworks launch site for the National City and/or Chula Vista Bayfront to be located somewhere other than the location shown in Figure 2-1, the discussion of impacts to birds and listed species should be expanded. This is particularly important because of the potential for significant adverse effects to sensitive salt marsh habitat, nesting least terns, and resident rails as a result of siting the fireworks barge in the Sweetwater River channel or in proximity to the outer levees of the salt works.

B-17

10) The proposed mitigation measures, particularly those intended to minimize indirect impacts related to human disturbance of nesting areas, are inadequate as they only address public viewing areas. The areas that would be affected include open water areas, and areas that are not open to the public, but would be subject to unauthorized access as a result of the proposed action.

B-18

11) There is no monitoring proposed to determine if the measures included in the DEIR for mitigating both direct and indirect impacts are being implemented and/or are effective in avoiding and minimizing impact to nesting least terns, snowy plovers and rails. The DEIR should include requirements for monitoring to assess the initial response and overall effects to nesting success on these species.

B-19

12) The DEIR should characterize the difference in ambient night time disturbance levels at nest sites in north San Diego Bay and the nest sites at the Refuge. The DEIR should distinguish between the baseline conditions at these sites.

B-20

13) Appendix F of the DEIR discusses previous fireworks monitoring efforts at (1) a north San Diego Bay least tern colony (San Diego International Airport; Airport), (2) at Naval Base Coronado, (3) at Gualala Point, and (4) in the Netherlands. Although the

B-20 cont.

results from these studies demonstrate that individual birds are likely to display a direct physiological stress response, Appendix F (re-iterated in section 4.3) concludes that "it does not appear that the level of disturbance stress generated from the fireworks translate to a level achieving harassment or harm for avian species". This conclusion is not consistent with the result of the Gualala Point study, which concluded that nests had been abandoned as a result of the fireworks display. Nest abandonment and likely chick mortality was also documented subsequent to the Big Bay Boom in 2012, when a malfunction resulted in the detonation of all of the fireworks in a short period (Patton 2012, pers. comm.). Based on the nesting chronology of the least tern, western snowy plover, and rail, it is likely that there will be active nests and adults brooding dependent chicks during the proposed 4th of July event. Although we agree that it is difficult to quantify the number or extent of impacts, we remain concerned that individual nests or chicks may be abandoned due to the night time disturbance, or chicks may flee into harm's way, particularly since the Refuge sites are not subject to night time disturbances under baseline conditions. For example, least tern habitat at the Refuge is subject to less night time disturbance than least tern habitat at the Airport. The monitoring reports from the Airport nest site state "colonies elsewhere with less habituation to noises would be expected to react more than those at the airport, and the observed flushing of adults, fledglings, and running of chicks in response to the fireworks confirm fears of possible threat of fledglings relocating to roost in active roadways, taxiways or runway following dispersal due to fireworks." Therefore, we anticipate that the response of avian species at the Refuge will be greater than that observed at the Airport and Naval Base Coronado.

B-21

14) The DEIR should include conservation measures to avoid and minimize the potential impacts of the Project on sensitive wildlife. The Carlsbad Fish and Wildlife Office (CFWO) has previously recommended conservation measures be included to existing and ongoing fireworks displays specifically to avoid and/or minimize potential impacts to nesting least terns and snowy plovers, including: (1) Location of discharge sites for fireworks as far away as possible (minimum of 1 mile) from the nearest least tern or snowy plover nesting site; (2) Delineation and law enforcement patrol of shoreline around least tern and snowy plover nesting areas to prevent spectators from coming ashore or anchoring in eelgrass beds; (3) Reduction in shell size to reduce the percussive vibrations associated with fireworks detonations; (4) Development and implementation of a least tern, snowy plover and rail monitoring approach approved by the CFWO; and (5) Development of a plan to mitigate any negative impacts (to least terns, snowy plovers and rails) observed by the monitoring biologist.

B-22

The DEIR should discuss the occurrence and location of rafting bird species during the non-breeding season, the anticipated footprint of increased boat traffic, and the likely impacts of increased boat traffic on rafting birds in south San Diego Bay. In addition, the DEIR should specify minimization measures to reduce the impacts of increased boat traffic on rafting birds.

B-23 Thank you for the opportunity to comment on the DEIR. We request a meeting with the Port to go over our comments and concerns regarding the Project.

If you have any questions regarding this letter, please contact Sandy Vissman of the Carlsbad Fish and Wildlife Office at (760) 431-9440 or Brian Collins of the San Diego National Wildlife Refuge at (619) 575-2704.

Sincerely,

Digitally signed by DAVID ZOUTENDYK
Date: 2017.05.02 15:43:19 -07'00'

Karen A. Goebel
Assistant Field Supervisor
Carlsbad Fish and Wildlife Office

ANDREW YUEN

Digitally signed by ANDREW YUEN
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Andrew Yuen
Project Leader
San Diego National Wildlife Refuge Complex

Enclosure

LITERATURE CITED

Personal Communication

Patton, R. 2012. Email distribution of monitoring results from July 4, 2012. Least tern monitoring at San Diego International Airport. 1 page.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
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In Reply Refer To:
FWS-SDG-15B0320-16CPA0275

MAY 09 2016

Eileen Maher
Principal, Environmental Conservation
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92101

Subject: San Diego Bay and Imperial Beach Fireworks Shows on July 4, 2016

Dear Ms. Maher:

B-24 This letter responds to your request for guidance from the U.S. Fish and Wildlife Service (Service) to reduce potential impacts to sensitive wildlife from the San Diego Bay (Big Bay Boom) and Imperial Beach (IB) fireworks shows on July 4, 2016, funded by the Port of San Diego (Port). We appreciate your efforts to incorporate measures that address wildlife concerns into the 2016 fireworks shows, as the primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States, and is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). We previously provided comments on the Port's Notice of Preparation of a Draft Environmental Impact Report for San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (UPD #EIR-2015-115)(DEIR)(Port 2015) in our letter dated October 6, 2015 (FWS-SDG-15B0320-15CPA0334)(Service 2015).

B-25 We are pleased that, consistent with recommendations in our October 6, 2015, letter, no fireworks shows are proposed at the Chula Vista Bayfront or Loew's Coronado Resort. Due to their close proximity to sensitive wildlife, including the federally listed threatened western snowy plover (*Charadrius nivosus nivosus*; snowy plover), as well as the endangered California least tern [*Sterna antillarum browni* (*Sterna a. b.*); least tern] and light-footed Ridgway's (=clapper) rail [Rallus obsoletus (=longirostris) levipes; rail] nesting sites, we recommend that the Chula Vista Bayfront and Loew's Coronado Resort be excluded from future fireworks shows during the nesting season.

B-26 The Big Bay Boom and IB fireworks shows will occur in north San Diego Bay (Bay) and IB in the same locations as previous shows. Both shows will last 18 minutes, and be launched from four barges in the north Bay and from the IB Pier. Shells launched within the Bay would be a

B-26 cont. maximum of 10-inch shells, and those launched from the IB Pier would be a maximum of 8-inch shells.

B-27 As outlined in our October 6, 2015, letter, our primary concern with fireworks shows is the potential impact to wildlife from the fireworks, spectators, and introduction of harmful chemicals and debris into the water. Numerous birds species, including the snowy plover, least tern and Ridgway's rail, use wetlands, shoreline habitats, and/or open water of the Bay and Pacific Ocean in the vicinity of the proposed fireworks shows.

B-28 Birds in areas close to fireworks shows are likely to be exposed to the explosive noises, vibrations, and bright flashes of light which may disrupt normal breeding and roosting behavior. Potential avian responses to fireworks include flushing from nests and nest abandonment (Stephensen *et al.* 2012; Weigand and McChesney 2008; Patton 2012, 2013, 2015), although these responses are not always observed (Heinz 2013; Elliott 2014). Reduced avian parental attendance from flushing exposes eggs and/or chicks to night time air temperatures and predators, and may result in changes in hatchability/survivorship depending upon variables such as the length of parental absence, temperature, and predator presence. Illumination and disturbance from fireworks may result in increased visibility of birds, eggs or chicks to predators, particularly in exposed habitat. In addition, spectators of the fireworks shows may disturb or harm breeding or roosting birds, eggs, or chicks (Caffree 1993). Spectator boats traveling within the Bay at night may disturb or collide with rafting birds. Spectators may also leave trash and food waste, which can attract potential predators to sensitive areas. Fireworks launched over water deposit debris and chemical constituents of expended shells into the water, which could indirectly affect birds.

B-29 The least tern nests at the San Diego International Airport (SDIA) and Naval Air Station, North Island (NASNI) about1 mile from Bay launch site. The least tern also nests at the mouth of the Tijuana River in the Tijuana Slough National Wildlife Refuge (Refuge) about 1.5 miles south of the IB Pier launch site. The snowy plover nests on the beaches to the north and south of the IB Pier. Nest distribution shifts from year to year, and in 2014, two snowy plover nests were initiated less than 1 mile north and south of the IB Pier launch site (Navy 2015; Patton 2015, pers. comm.). The rail occupies the Oneonta Slough, within the Refuge, about 0.5 mile south of the IB Pier launch site. Recent monitoring estimated 127 rail pairs in the slough in 2016 (Collins 2016, pers. comm.).

B-30 Our October 6, 2015, letter recommended several conservation measures for fireworks shows to avoid and/or minimize potential impacts to least terns and snowy plovers. Consistent with our recommendations, the Port proposes to implement the following measures: 1) locating launch sites greater than 1 mile from least tern nesting sites; 2) installing signs to prevent trespass into the Refuge; 3) limiting maximum shell size to 10 inches in the Bay, and 8 inches at IB Pier; 4) limiting show length at 18 minutes; 5) picking up floating and shoreline debris after the event; 6) monitoring least tern nesting at the SDIA; and 7) monitoring water quality after the event in compliance with the Regional Water Quality Control Board fireworks permit. We appreciate the

B-30 cont. Port's proposed minimization measures and offer the following comments and suggestions to further reduce the potential for impacts to snowy plovers, least terns, and rails.

B-31 Active least tern nests, chicks and adults will likely be present at the SDIA, NASNI and Refuge nesting sites during the fireworks shows. Based on the baseline level of disturbance at these sites and the results of previous monitoring, we anticipate that the Big Bay Boom fireworks show will temporarily disrupt least tern nesting and roosting at SDIA and NASNI (Patton 2013), and will temporarily separate parents from flightless chicks. Spectators that view the Big Bay Boom from the parking lot adjacent to SDIA Oval O-3S could also disrupt or harm nesting or roosting terns. The least tern nesting site at the Refuge was not monitored during past fireworks shows and we do not have information regarding the response of this colony to fireworks. However, due to the greater distance from the launch site (i.e., 1.5 miles) and smaller shell size (i.e., 8-inch) we expect the fireworks show at IB to disrupt least tern nesting to a lesser degree than at SDIA. However, spectators that view the IB show from the beach south of Sea Coast Drive could disrupt or harm nesting or roosting terns at the mouth of the Tijuana River.

B-32 While the current proposed launch locations are consistent with our recommendation that launch sites be at least 1 mile from nest sites, we note that least terns nesting at SDIA (about1 mile from the Bay launch site) were observed to flush from nests during past Big Bay Boom fireworks shows (Patton 2012, 2013, 2015). A firework study conducted in San Francisco Bay detected no least tern flushing from nests when fireworks were launched about 2 miles from the colony (Elliott 2014). Therefore, we recommend that the Port increase the distance between the least tern colonies and the Big Bay Boom launch sites as much as possible to reduce the disturbance to a level that does not result in least tern flushing. To reduce the potential for spectator disturbance at the SDIA nesting site, we recommend that the Port close the parking lot that lies adjacent to nesting oval O3-S on July 4. To reduce the potential for spectator disturbance at the Refuge nesting site, we recommend that the Port coordinate with the City of IB and the Refuge staff to assure that, in addition to signage, adequate enforcement personnel are present south of IB Pier to prevent spectators from entering into the nesting site. Specifically, we recommend that a uniformed enforcement agent be stationed at the south end of Sea Coast Drive on the evening of July 4.

B-33 Active snowy plover nests, chicks and adults will likely be present on the beaches to the north and south of the IB Pier during the IB fireworks show. We recommend that the Port coordinate with the City of IB and Refuge to assure that signage and enforcement presence is in place to the north of the IB Pier, as well as to the south (recommended above to protect least terns), to reduce spectator foot traffic in snowy plover nesting habitat. Specifically, we recommend that a uniformed enforcement agent be stationed at the Navy's "Camp Surf" on the evening of July 4.

B-34 It is likely that Oneonta Slough will support active rail nests, chicks, and adults during the IB fireworks show. We anticipate disturbance to rails, given the close proximity of the IB Pier launch site, and encourage the Port to offset disturbance by contributing to the efforts to improve rail habitat, maintain water quality, reduce human and pet disturbance, and open the mouth of the Tijuana Estuary consistent with the Light-footed Clapper Rail Recovery Plan (Service 1985).

B-35 The Port proposes to deploy "No Trespass" signs to reduce the potential for unintended spectator impacts to rail nesting. We also recommend that the Port coordinate with the City of IB and the Refuge staff to assure that adequate enforcement is present to prevent spectators from entering into the Tijuana Slough nesting site. Specifically, we recommend that a uniformed enforcement agent be stationed at the south end of Sea Coast Drive on the evening of July 4 (as recommended above in reference to least tern and snowy plover protection). In addition, we recommend that the Port clean up any trash or food waste left by spectators near least tern, snowy plover and rail nesting sites.

B-36 Biological monitoring during anthropogenic activities such as fireworks shows can provide valuable information that increases our understanding of wildlife response to potential disturbance. Information obtained during monitoring may assist in assessment of effects of future activities, and can also help us to refine minimization measures. Biological monitoring during night time activities, such as fireworks shows, presents unique challenges since observations are compromised by lack of light and nocturnal disturbance from the monitoring itself may impact birds. Monitoring nest sites before and after disturbance events can also aid in assessment of impacts, particularly in situations where night time monitoring is problematic. We recommend monitoring of least terns and snowy plovers, as described below, however we do not recommend monitoring of rails at this time due to the potential for disturbance associated with monitoring (Zembal 2016, pers. comm.).

B-37 The Port proposes to monitor the least tern colony at SDIA, and we recommend that, similar to previous years, monitoring occur on the following dates and times: July 3 and July 4, 1 hour before, during, and 1 hour after the time of the fireworks show; and July 5, early in the morning. Monitoring should include assessment of nest attendance (or abandonment), and estimates of adult, chick, and fledgling numbers and behavior, including any observed responses to fireworks shells. We recommend that the Port also coordinate with the Navy regarding comparable least tern monitoring at NASNI. We also recommend that the noise and vibration be monitored at SDIA and NASNI. Reporting should include the noise and vibration levels before and during the fireworks show; the location of the night roosts (if possible); observations of spectator disturbance; observations of least tern response to fireworks and spectators; estimated number of adult least terns, active nests, and chicks onsite before and after the fireworks show; and any evidence of harm to least terns.

B-38 We recommend that the least tern nesting colony at the Refuge be monitored on July 4 prior to the event, and in the morning on July 5 to assess colony attendance and estimate the number of active nests and chicks present onsite. Reporting should include the location of roosting/nesting area(s) and the estimated number of adult least terns, active nests, fledglings, and chicks onsite, and any observations of nest disturbance or harm to least terns.

B-39 No snowy plover monitoring has been proposed by the Port, however we recommend that the Port coordinate with the Refuge and Navy to determine if active snowy plover nests or broods lie within 1.5 miles of the IB Pier launch site on July 3. If active nests or broods occur within this area, we recommend monitoring on July 4 and 5 to assess nest activity and brood presence

B-39 cont. before and after the fireworks display. Reporting should include the location of nests and broods, the number of active nests, chicks and adults onsite, and any observations of nest disturbance or harm to snowy plovers.

B-40 We appreciate the opportunity to provide recommendations to reduce potential impacts to sensitive wildlife from the Big Bay Boom and IB fireworks shows. Results from our recommended monitoring should aid the preparation of the DEIR for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project. We request that the Port provide a response to our recommendations and a draft monitoring plan for our review by June 1, 2016, and a monitoring report by September 15, 2016. Should you have any questions regarding this letter or need further assistance, please contact Sandy Vissman at (760) 431-9440, extension 274.

Sincerely,

for

Karen A. Goebel
Assistant Field Supervisor

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
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In Reply Refer To:
FWS-SDG-15B0320-15CPA0334

OCT 06 2015

Mr. Jason H. Giffen
Director, Environmental Land Use and Management
San Diego Unified Port District
P.O. Box 120488
San Diego, California 92112-0488

Subject: Comments on the Notice of Preparation of a Draft Environmental Impact Report for San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (UPD #EIR-2015-115), in San Diego County, California

Dear Mr. Giffen:

The U.S. Fish and Wildlife Service (Service) has reviewed the Notice of Preparation of a Draft Environmental Impact Report (EIR) for San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (NOP). The NOP describes the proposed project and was distributed to the Service to request guidance regarding the scope and content of the environmental information to be included in the EIR. The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

B-41 The proposed Project involves continued permitting of ongoing and proposed fireworks display events in and around San Diego Bay and the Imperial Beach Oceanfront in San Diego County, California. Current fireworks display events include the "Big Bay Boom" and other smaller events operated by the San Diego Unified Port District's (District's) tenants. Proposed fireworks displays include fireworks on the Chula Vista Bayfront. Fireworks are detonated from flight decks, barges, and/or piers located adjacent to, or in the waters of San Diego Bay or the Imperial Beach Oceanfront. The District estimates that at this time approximately 50 fireworks displays are permitted per year, and anticipates that firework displays within the Project Area are likely to increase at a rate of 2 percent per year. Fireworks displays currently occur year-round, with a duration ranging from 5-20 minutes. Existing events occur at South Embarcadero, North Embarcadero, near Shelter Island, near Harbor Island, Glorietta Bay, and Imperial Beach Oceanfront.

B-41 cont. We appreciate the efforts of the District to address the cumulative impacts of multiple fireworks displays in the proposed DEIR, and offer the following comments and recommendations to assist the District in identifying, avoiding, minimizing, and adequately mitigating direct and indirect project-related impacts to fish and wildlife resources, including Endangered and Threatened species:

B-42

1. San Diego Bay and the Imperial Beach Oceanfront, including the vicinity of some launch and viewing sites, support resident and migratory sea birds, shore birds, passerines, endangered bird species, sea turtles, fish, and marine mammals. Significant populations of birds use portions of San Diego Bay year round: during the summer months thousands of birds nest, breed, and raise young, particularly in south San Diego Bay; and during the winter months, thousands of migrating or wintering waterfowl take refuge in the Bay. Fireworks displays include significant levels of light, noise, and vibration known in some instances to result in temporary disturbance to wildlife (Patton 2013; Sandoval 2005). Fireworks may also disrupt roosting and exacerbate predation pressure (Caffree 1994). If launched over or near the water, displays may deposit residual debris and chemical constituents into the water and thereby affect water quality (San Diego Regional Water Quality Control Board 2011). Please include in the DEIR a thorough review of the available literature pertaining to the potential or documented impacts of fireworks displays or similar punctuated disturbances on wildlife.

B-43

2. To facilitate assessment of the environmental effects of the proposed action, we recommend that the DEIR include: 1) a figure that depicts the precise location of existing and future proposed launch sites; 2) a figure depicting the location of sensitive resource use areas within the vicinity of proposed launch sites (including, but not limited to, Sweetwater National Wildlife Refuge, Chula Vista Wildlife Reserve, South San Diego Bay Unit of San Diego National Wildlife Refuge, San Diego International Airport Least Tern Nesting Area, Naval Base Coronado Delta Beaches, Naval Base Coronado "heron park", Tijuana National Wildlife Refuge, marine mammal haul out areas); 3) a figure that depicts the location and abundance of rare, endangered, and other sensitive species that occur in the vicinity of proposed launch sites (including, but not limited to, federally threatened Western snowy plover (*Charadrius nivosus nivosus*, snowy plover), federally endangered California least tern (*Sternula antillarum browni*, least tern), federally endangered Light-footed clapper rail, recently reclassified as "Ridgeway's rail" (*Rallus longirostris levipes*, clapper rail), Belding's Savannah sparrow (*Passerculus sandwichensis beldingi*, Savannah sparrow), American Peregrine falcon (*Falco peregrinus anatum*, peregrine falcon), gull-billed tern (*Gelochelidon nilotica*)); 4) information regarding the abundance and distribution of water birds use San Diego Bay, Tijuana Estuary, and Imperial Beach (for example, information available from San Diego Bay bird surveys supported by the U.S. Navy and the District, annual San Diego Shorebird Survey, and San Diego National Wildlife Refuge bird surveys).

B-44 3. Please include in the DEIR detailed information regarding the number, location, and duration of baseline events that have occurred in recent years, and the number, location, and duration of additional proposed events (i.e. events that have been permitted by the District, but have not yet occurred).

B-45 4. The DEIR should include an analysis of the intensity and extent of light, sound, vibration, and debris/fallout anticipated as a result of the fireworks displays, based on the size and number of fireworks shells that will be used. The analysis of the effects of the proposed action should include an assessment of the areas where light, sound, vibration, and debris are expected to have a direct impact on wildlife.

B-46 5. The DEIR should include an analysis of the potential indirect effects of the fireworks displays on wildlife resources in the Project Area. Potential indirect effects of fireworks displays include, but are not limited to: disturbance or impacts to resources from spectators, changes in water quality associated with debris or fallout from fireworks.

B-47 6. The Carlsbad Fish and Wildlife Office has previously recommended, and continues to recommend that the no fireworks displays occur within the Chula Vista Bayfront during the avian breeding season (generally January-September) due to the close proximity to the abundance of sensitive wildlife resources that occur within and around the Sweetwater National Wildlife Refuge, the South San Diego Bay National Wildlife Refuge (Wildlife Refuges), and the Chula Vista Wildlife Reserve. Similarly, we have recommended and continue to recommend that fireworks displays be minimized at the Loew's Coronado Resort during the avian breeding season due to the proximity of this hotel to protected least tern and snowy plover habitat at Silver Strand State Beach and Naval Base Coronado.

B-48 7. The DEIR should include conservation measures to avoid and minimize the potential impacts of the Project on sensitive wildlife. The Carlsbad Fish and Wildlife Office has previously recommended conservation measures be included to existing and ongoing fireworks displays specifically to avoid and/or minimize potential impacts to nesting least terns and snowy plovers, including: 1) Location of discharge sites for fireworks as far away as possible (minimum of 1 mile) from the nearest least tern or snowy plover nesting site; 2) Delineation and law enforcement patrol of shoreline around least tern and snowy plover nesting areas to prevent spectators from coming ashore or anchoring in eelgrass beds; 3) Reduction in shell size to reduce the percussive vibrations associated with fireworks detonations; 4) Development and implementation of a least tern and snowy plover monitoring approach approved by the CFWO; 5) Development of a plan to mitigate any negative impacts (to least terns and snowy plovers) observed by the monitoring biologist.

B-49

8. The District estimates that fireworks displays may increase approximately 2 percent per year. The DEIR should analyze the need for an increased number of fireworks displays. We recommend that the District consider limiting the number of fireworks displays that may occur throughout the year at approved launch sites.

We appreciate the opportunity to provide comments on this NOP. Should you have any questions regarding this letter, please contact Sandy Vissman of my staff at (760) 431-9440.

Sincerely,

for: Karen A. Goebel
Assistant Field Supervisor

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In Reply Refer To:
FWS-SDG-3978.4

Jan 11 2007

Mr. Ralph Hicks
Director, Land Use Planning
San Diego Unified Port District
3165 Pacific Highway
San Diego, CA 92112-0488

Subject: Comments on the Draft Environmental Impact Report for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment, City of Chula Vista, California (SCH #2005081077)

Dear Mr. Hicks,

The U.S. Fish and Wildlife Service (Service) and California Department of Fish and Game (Department) (collectively referred to as 'Wildlife Agencies') have reviewed the above-referenced draft Environmental Impact Report (DEIR) and supporting documentation for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (Proposed Project), dated September 29, 2006. The public review period for the DEIR ends January 11, 2007. The comments provided in this letter represent our concerns about the Proposed Project's potential impacts on sensitive biological resources.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act (16 U.S.C. 1531 *et seq.*). The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA) Guidelines, Sections 15386 and 15381, respectively. The Department is responsible for the conservation, protection, and management of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act and other sections of the Fish and Game Code, and administers the Natural Community Conservation Planning (NCCP) program.

The 562-acre Chula Vista Bayfront (Bayfront) is located on the southeastern edge of San Diego Bay in the City of Chula Vista. The subject planning area shares a common border with the Sweetwater Marsh Unit of the San Diego Bay NWR at its northern boundary and the South San Diego Bay Unit of the San Diego Bay NWR at its southern boundary. In 2002, the San Diego Unified Port District (Port) and the City of Chula Vista (City) joined together to prepare a master

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plan for the Bayfront, which includes approximately 500 acres of land area and 62 acres of water area. Proposed uses include hotel, retail, entertainment, conference center, office, residential, civic/cultural, marina and ferry terminal, recreation, parkland, environmental buffers, a public pier, and associated public facilities such as streets, bikeways, pedestrian paths, and parking structures. Key components of the Proposed Project described in the DEIR include:

- A resort conference center and other hotels with a maximum height limit of 300 feet (25 stories);
- Up to 2,000 residential units with a maximum height limit that ranges from 300 feet in the Harbor District to 200 feet in the Otay District;
- Mixed use office and commercial recreation uses with maximum allowable heights ranging from 85 to 200 feet in the Harbor District and 40 to 100 feet in the Sweetwater District;
- Waterfront retail uses and public gathering spaces around the harbor;
- A new commercial harbor, ferry terminal, and realigned navigation channel;
- A 21-acre public park and other open space areas;
- A public promenade and bike trail through the entire Bayfront;
- A new traffic circulation system, storm water system, and the installation of various other public services and facilities to serve the proposed uses; and
- The relocation of the existing power plant to the southern end of the planning area.

The master planning area has been divided into three districts: the northern 129-acre Sweetwater District; the central 280-acre Harbor District; and the southern 153-acre Otay District. Development within the planning area would occur in three phases over an approximately 25-year period. Construction of Phase I is proposed to begin upon project approval and conclude approximately six years later. Phase I components would be concentrated in the Harbor and Sweetwater Districts. Phase II construction would be completed approximately five years after the completion of Phase I and Phase III is expected to be completed approximately 13 years after the completion of Phase II.

As the master plan represents a joint planning effort covering a large area of land and water, a number of jurisdictional issues must be addressed and resolved. The Port currently has jurisdiction over much of the land and water areas, while the City currently exercises jurisdiction over some of the inland portions of the planning area. The Proposed Project includes a land exchange between the Port and a private developer. This land exchange would include the transfer of up to 97 acres of land in the Sweetwater District from a private developer to the Port, in exchange for up to 57 acres of land in the Harbor and Otay Districts from the Port to the private developer. In association with this exchange, lands currently designated for residential use in the Sweetwater District would be redesignated for uses permitted on State tidelands and areas in the Harbor and Otay District would be redesignated to allow for residential development.

The DEIR also addresses the following Project-related actions: an amendment to the Port Master Plan; a coastal development permit for those portions of the project that would occur within the Port's jurisdiction; an amendment to the City's Bayfront Area Plan of the General Plan; amendments to the City's Local Coastal Program, Bayfront Specific Plan, and Bayfront/Town Centre 1 Redevelopment Plan; approval of a dredging permit from the State Lands Commission

in order to realign the existing navigation channel in San Diego Bay; and issuance of permits from the U.S. Army Corps of Engineers, the Department, and the Regional Water Quality Control Board.

The Department and the Service previously commented on the Notice of Preparation (NOP, SCH# 2002081116) for the Bayfront Village Project that was restricted to the 128-acre area currently included in the Sweetwater District. The Department commented in a letter dated September 24, 2002, and the Service provided a similar letter, dated September 19, 2002. The Wildlife Agencies also commented on the NOP for the Proposed Project in a letter dated September 12, 2005. The Service also provided a letter to the Port and City, dated April 22, 2004, that emphasized the importance of the habitats in the south end of San Diego Bay and the need for the Proposed Project to adequately protect the south bay's locally, regionally, and globally important natural resources. We appreciate that, relative to the project previously proposed in 2002, it appears that the currently Proposed Project would result in considerably adverse biological impacts within the Sweetwater District. However, considering the overall intensity of the larger project proposal, we retain many of the concerns that we raised in our previous letters. All of our comments in past letters also apply to the Proposed Project, as described in the DEIR dated September 2006.

A summary of the Wildlife Agencies' primary comments and concerns about the DEIR follows. We are disappointed that the DEIR provides no or inadequate analysis of, and mitigation for, many of the biological impacts about which we previously provided (in letters and electronic mail to, and meetings with, the Port) substantive comments and recommendations, and requested the DEIR thoroughly address. We request a meeting with the Port, the City, and stakeholders to further discuss the Proposed Project and our comments, after we have had an opportunity to review the responses to our comments, and prior to the Port's decision as to whether to revise and recirculate the DEIR (comment 2 below), or well in advance of the Board of Port Commissioners' consideration of the DEIR for certification.

1. The Wildlife Agencies do not concur with the DEIR that significant impacts to biological resources and wetlands have been minimized to a level less than significant (Section 4.8.7). The DEIR does not adequately evaluate all project impacts to biological resources, even at a programmatic level, and the full range of mitigation measures needed to reduce potential impacts to a level less than significant are either not addressed or, in some instances where measures are addressed, future implementation of the measures cannot be assured. We strongly urge the Port to (a) revise the DEIR to adequately identify and analyze the Proposed Project's biological impacts addressed in this comment letter, and to provide appropriate mitigation for the impacts, and (b) to recirculate the revised DEIR for public review and comment.

2. The Wildlife Agencies support a land exchange that eliminates or minimizes the possibility of residential development and its associated direct and indirect impacts to on-site and adjacent sensitive biological resources. We therefore recommend that the Proposed Project be modified to incorporate certain components of both the Modified Land Exchange and the Harbor Park Alternative, as specified in our detailed comments in the Enclosure. We do not support the inclusion of a 2,000 to 5,000 seat amphitheater on

parcel HP-1, which is proposed as part of the Harbor Park alternative, because it would increase disturbance to wildlife that roost and nest within and/or in the vicinity of the project site.

3. Based on information available regarding the Proposed Project, we are especially concerned about its potential direct and indirect impacts to: (a) intertidal wetlands (*e.g.*, Sweetwater Marsh, F&G Street Marsh, J Street Marsh, and the mudflats located north of the Harbor District) and their associated federally and state-listed plant and wildlife species, including the light-footed clapper rail (*Rallus longirostris levipes*) and Belding's savannah sparrow (*Passerculus sandwichensis beldingi*); (b) subtidal bay habitats and their associated fisheries resources, eelgrass beds, and migratory bird foraging and rafting areas; (c) migratory birds, including those birds identified by the Service as Birds of Conservation Concern, that rely on the south San Diego Bay for foraging and resting areas during migration along the Pacific Flyway; (d) colonial nesting seabirds such as the federally and state-listed California least tern (*Sterna antillarum browni*) and federally listed western snowy plover (*Charadrius alexandrinus nivosus*), shorebirds, and waterfowl that nest in proximity to the project site; and (e) species covered by the City's Multiple Species Conservation Program (MSCP) Subarea Plan.

4. The level of detail provided in the DEIR for specific project design, potential project impacts, and appropriate mitigation measures for the Phase I projects is not sufficient to allow adequate project-specific review under CEQA. Therefore, the analyses provided throughout the DEIR should be considered programmatic.

5. Portions of the Proposed Project and lands adjacent thereto are subject to the standards laid out in the City MSCP Subarea Plan. Since the Port does not have a habitat conservation plan/NCCP to guide its development projects, the entire project should meet or exceed the mitigation ratios, guidelines, and standards required by the City's MSCP Subarea Plan to maintain consistency with its application to the on-site and adjacent areas within Plan.

6. The DEIR does not identify the Proposed Project's many indirect impacts to adjacent sensitive habitats and sensitive species located therein, nor does it propose adequate measures to mitigate such impacts. Such indirect impacts, otherwise known as "edge effects," include increased predation, increased disturbances to wildlife, bird strikes and disorientation, shading of adjacent habitat, human encroachment, increased noise, increased illumination, and detrimental changes to hydrology and water quality. A fenced minimum 100-foot wide "no-touch" habitat buffer should be provided around all sensitive habitats, including mitigation habitats, to minimize indirect impacts. Degradation of habitats due to unavoidable indirect impacts should be mitigated, in part, through creation or restoration of similar habitats.

The Wildlife Agencies offer the preceding general comments, and our general and specific recommendations and comments on the adequacy of DEIR in the accompanying Enclosure, to assist the Port and project applicant(s) in ensuring that the Proposed Project's biological impacts are avoided and/or minimized to below a level of significant.

We appreciate the opportunity to comment on the DEIR. For questions regarding this letter, contact: Carolyn Lieberman or Amber Himes at (760) 431-9440 of the Service; and Libby Lucas at (858) 467-4230 or Marilyn Fluharty at (858) 467-4231 of the Department.

Sincerely,

//s//Kathleen Brubaker, for
Therese O'Rourke
Assistant Field Supervisor
U.S. Fish and Wildlife Service

//s//
Michael J. Mulligan
Deputy Regional Manager
California Department of Fish and Game

Enclosure

cc: Marisa Lundstedt, City of Chula Vista
Robert Smith, U.S. Army Corps of Engineers
Chris Means, California Regional Water Quality Control Board
Deborah Lee, California Coastal Commission
Robert Hoffman, National Marine Fisheries Service
Joanna Grebel, California Energy Commission
Andy Yuen, Project Leader, San Diego NWR Complex
State Clearinghouse

WILDLIFE AGENCIES' COMMENTS ON THE DRAFT EIR FOR THE CHULA VISTA BAYFRONT MASTER PLAN AND PORT MASTER PLAN AMENDMENT

The Wildlife Agencies offer the following general and specific recommendations and comments on the adequacy of Draft Environmental Impact Report (DEIR) to assist the San Diego Unified Port District (Port) and project applicant(s) in ensuring project impacts to biological resources are avoided and/or minimized to below a level of significant. Our specific comments are based on the preferred alternative. If the alternative approved for implementation deviates from the preferred alternative presented in the DEIR, we may have additional comments. We request a meeting with the Port, the City, and stakeholders to further discuss the Proposed Project and our comments, after we have had an opportunity to review the responses to our comments, and prior to the Port's decision as to whether to revise and recirculate the DEIR (comment 2 below), or well in advance of the Board of Port Commissioners' and consideration of the DEIR for certification.

The Proposed Land Exchange

1. The Wildlife Agencies support a land exchange that eliminates or minimizes the possibility of includes removal of residential development and its associated direct and indirect impacts to on-site and adjacent sensitive biological resources. We therefore recommend that the Proposed Project implement an alternative that incorporates the following components of both the Modified Land Exchange and the Harbor Park Alternative:

    a. the components of the Modified Land Exchange that avoid placing residential development and its associated impacts adjacent to the J Street Marsh and the Sweetwater Marsh and South San Diego Bay Units of the San Diego NWR;

    b. the components of the Harbor Park Alternative that relocate (i) the Signature Park from the Sweetwater District (S-2) to the Harbor District (H-3), and (ii) a conference hotel from the Harbor District to the Sweetwater District (S-2), to minimize uncontrolled human and animal encroachment into the Sweetwater Marsh Unit and adjacent mudflats;

    c. move the Resort Conference Center (RCC) farther away from San Diego Bay (from H-3 to H-23) to avoid impacts to the F&G Street Marsh and the Bay due to shading, to minimize its potential for losses of listed species from avian predators perching on tall structures, and to reduce the potential for bird strikes; and,

    d. reduce the building heights in the areas of the Sweetwater District (S-1) that are adjacent to the Sweetwater Marsh Unit to avoid impacts related to shading and predator perching.

We do not however support the inclusion of a 2,000 to 5,000 seat amphitheater on parcel HP-1, which is proposed as part of the Harbor Park alternative, because it would increase disturbance to wildlife that roost and nest within and/or in the vicinity of the project site.

Adequacy of Environmental Review under CEQA

2. Throughout the DEIR, there are multiple instances of inadequate identification and analysis (even at a programmatic level) of biological impacts, and inadequate, or inappropriate deferral of, mitigation. Subsequently, the impact analyses and proposed mitigation is insufficiently detailed to assess the biological implications of the Proposed Project. CEQA requires that all anticipated impacts and proposed mitigation be clearly identified in a DEIR and not deferred for future study. This is supported by *Sundstrom v. County of Mendocino*, 202 Cal.App3d 296, which states "the requirement that the applicant adopt mitigation measures recommended in a future study is in direct conflict with the guidelines implementing CEQA....By deferring environmental assessment to a future date, the conditions run counter to that policy of CEQA which requires environmental review at the earliest feasible stage in the planning process."

   The lack of inadequate analysis and mitigation in the DEIR undermines the basic purposes of CEQA. These purposes include, but are not limited to the following: (a) informing governmental decision-makers and the public about the potential, significant environmental effects of proposed activities; (b) identifying the ways that environmental damage can be avoided or significantly reduced; and (c) preventing 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 [CEQA Guidelines, section 15002(a)].

   Based on the foregoing and ensuing comments and recommendations, we strongly urge the Port to (a) revise the DEIR to adequately identify and analyze the Proposed Project's biological impacts addressed in this comment letter, and to provide appropriate mitigation for the impacts, and (b) pursuant to Section 15088.5 of the CEQA Guidelines, recirculate the revised DEIR for public review prior to its consideration for certification.

   This would be particularly appropriate if, for example, there is one or more feasible project alternative(s), or there are mitigation measures, considerably different from those previously analyzed that would clearly lessen the environmental impacts of the Proposed Project, but the Port declines to adopt them [CEQA Guidelines, Section 15088.5(a)(3)]. Our recommendation derives from the lack of basic impact analyses in the DEIR, analyses needed to conform to CEQA. The revisions to the DEIR to be recirculated should be fully responsive to our comments by providing full disclosure of the potential project-related biological impacts, and additional measures necessary to mitigate the impacts to a level less than significant.

3. The DEIR states, "Additional environmental review …required for Phases II and III projects will be determined pursuant to State CEQA Guidelines Section 15168." However, the project description, impact analysis, and proposed mitigation measures in the DEIR for Phase I projects provide insufficient information to constitute a project-level review under CEQA. Again, the DEIR does not satisfy the basic purposes of CEQA because it lacks the level of detail (particularly with respect to project descriptions, impact analysis, and proposed mitigation) needed for thorough evaluation and review of potential Project-related impacts. For these reasons, as discussed further in subsequent comments herein, the entire DEIR should be considered a programmatic DEIR, and all project components, including those in Phase I, should be subject to subsequent public review and comment.

4. The existing conditions discussion of Land/Water Use Compatibility (Section 4.1 of the DEIR) is generally limited to land uses within the Proposed Project footprint, though the discussion should also address the Proposed Project's compatibility with adjacent uses. The document should describe the land uses and planning policies established for the San Diego Bay National Wildlife Refuge (NWR), which abut the Proposed Project site to the north, south, and west. For this purpose, Section 4.1.1.1 of the recirculated/final EIR should include a discussion of the recently approved Comprehensive Conservation Plan for the NWR. In addition, the recirculated/final EIR should accurately analyze the potentially significant land use compatibility impacts to the NWR that could result from the implementation of various components of the Proposed Project.

Specific Comments

The following comments address specific sections in the DEIR where project information is insufficient for the level of review necessary under CEQA. The recirculated/final EIR should provide a level of detail necessary for adequate analysis and disclosure of biological impacts and determination of appropriate mitigation.

5. Section 4.1.1.1 should be revised to address the NWR, and Figure 4.1-5 should be revised to include not only the current boundary of the Sweetwater Marsh Unit of the NWR, but also the current boundary of the South San Diego Bay Unit of the NWR to the south and west. Suggested language for Section 4.1.1.1 (San Diego Bay NWR Comprehensive Conservation Plan) is provided below.

   g. San Diego Bay NWR Comprehensive Conservation Plan

   The U.S. Fish and Wildlife Service recently completed a Comprehensive Conservation Plan (CCP) for the San Diego Bay NWR (USFWS 2006). The CCP, which provides a 15-year strategy for achieving refuge purposes and contributing towards the mission of the National Wildlife Refuge System, describes why this Refuge was established and outlines the Refuge purposes, vision, goals, and objectives.

The San Diego Bay NWR includes the 316-acre Sweetwater Marsh Unit to the north of the Proposed Project, and the South San Diego Bay Unit, which includes 2,300 acres of land and water to the south and west of the Proposed Project. The Refuge was established to protect, manage, and restore habitats for federally listed species and migratory birds, and to maintain and enhance the biological diversity of native plants and animals on the Refuge. The Refuge includes most of what remains of San Diego Bay's historic coastal salt marsh and intertidal mudflat habitat. Refuge goals include: protecting, managing, enhancing, and restoring the coastal wetland and upland habitats on the Refuge to benefit native fish, wildlife, and plant species; protecting state and federally listed species and migratory birds supported on the Refuge; protecting foraging and nesting habitat for colonial nesting seabirds in the South San Diego Bay Unit; and providing opportunities for public uses that are compatible with Refuge purposes.

6. The project description in the recirculated/final EIR should provide more than only limited acknowledgement that the southern end of the Proposed Project footprint abuts a segment of the South San Diego Bay Unit NWR. A portion of parcel OP-2A directly borders 3000 feet of the NWR. The label "South San Diego Bay Unit of the San Diego Bay National Wildlife Refuge" should be used to identify the NWR on Figures 3-2, 3-3, 3-4, 3-5, 3-7, and 4.8-1. In addition, Section 3.1 and associated graphics should be revised to distinguish between the Sweetwater Marsh Unit and the South San Diego Bay Unit of the NWR. The last sentence in the second paragraph of Section 3.1 should read: "Palomar Street and the South San Diego Bay Unit of the San Diego Bay NWR, which includes the existing salt evaporation ponds, at the southern end of San Diego Bay border the planning area to the south and west."

7. The analysis of compatibility of the Proposed Project with the NWR on page 4.1-77 of the DEIR is inadequate. The significant impacts identified on page 4.1-68 of the DEIR related to public access, lighting, and noise (which should also address fireworks, outdoor concerts, and in-water uses) should also be clearly presented under Criterion 3 in Section 4.1.3 and should be expanded to address both the Sweetwater Marsh and South San Diego Bay Units of the NWR. Factors that should be considered in determining the Proposed Project's compatibility with the NWR include impacts to NWR habitats and wildlife from shading, storm water discharge, changes in topography that could affect current hydrological conditions on the NWR, increased noise levels and increased night lighting and sky glow, increases in predation, unauthorized access onto sensitive habitats, and other factors addressed throughout this comment letter. Corresponding enforceable mitigation measures that would reduce impacts to a level less than significant should also be added to Section 4.1.4. Finally, the Wildlife Agencies do not concur with the conclusion of the DEIR that "strategic" fencing would reduce compatibility impacts to a level less than significant, in part because no amount of fencing will minimize most the negative effects of most of the factors mentioned above. Nevertheless, the entire boundary of the Proposed

Project should have fencing or other suitable barriers that would prevent unauthorized access by humans and pets into sensitive coastal habitats.

8. The Wildlife Agencies consider the DEIR misleading in its classification of wetland resources under different regulatory jurisdictions. For example, the DEIR indicates that seasonal ponds in the Otay District and mulefat scrub in the Sweetwater District are exempt from the U.S. Army Corps of Engineers' (Corps) jurisdiction due to isolation. And, Figure 4.8-6, *Overview of USACE Jurisdictional Resources*, labels these wetlands as "exempt from jurisdiction." However, the Corps has not made this conclusion. Until the Corps designates which areas within the Project footprint are subject to or exempt from their regulation, the EIR should refrain from making such designations. The Wildlife Agencies believe that these seasonal ponds may be subject to the Corps jurisdiction based on information provided in the DEIR. Specifically, the DEIR indicates that the Soil Survey for San Diego County maps tidal flat soils along the eastern edge of the Otay District. Furthermore, the historic footprint (*i.e.*, 1859) of San Diego Bay also occurred within the Otay District (Map 3-1 in San Diego Bay Integrated Natural Resource Management Plan, Navy and Port 2000). We recommend that the recirculated/final EIR reflect wetland delineations that have been verified by the appropriate agencies so that the public can review all impacts to wetlands and waters, and their associated mitigation.

9. Based on the description of the uses to be permitted within the eastern 200 feet of the proposed 400-foot wide "ecological buffer," the Wildlife Agencies request that the nomenclature used for the buffer be changed to avoid any misunderstanding on the part of the public or the decision makers. As described in the DEIR, the 400-foot-wide area does not meet the intent of an "ecological buffer." Specifically, the human activities to be allowed within the eastern 200 feet are not compatible with the purposes of an ecological buffer. A true ecological buffer represents an area where no human activity is allowed except for conservation and restoration purposes. In the case of the Proposed Project, the only ecological buffer is within the 200-foot no touch/mitigation area, with the exception of the proposed trail outlooks. The 100-foot limited use buffer and 100-foot transitional use zone should not be considered ecological buffers because they allow uses that are not compatible with conservation. Therefore, the recirculated/final EIR should rename this 200-foot area to more accurately describe the types of low intensity park uses that are proposed within it. Note that we are not requesting a wider true ecological buffer; we are simply a requesting clarification of the intent and uses that would occur within the 400-foot-wide area that abuts the Sweetwater Marsh Unit.

10. The DEIR does not identify the numbers, heights, or locations of the buildings proposed on each parcel. This lacking information is particularly important for parcels S-1, S-4, H-3, H-13, H-14, and O-1A and O-1B, which are adjacent to preserved wetlands within the NWR or other wetland areas (*e.g.*, Sweetwater Marsh, F&G Street Marsh, and J Street Marsh). Depending on their design and location, the buildings on these parcels could provide raptorial perches that overlook wildlife habitat supporting several sensitive avian species

that are prey for raptors, result in bird strikes, and shade adjacent wildlife habitats. Yet, the DEIR does not include adequate mitigation measures to avoid and minimize biological impacts associated with the buildings.

11. The DEIR does not provide adequate information to enable the reviewer to understand how the existing elevations within the Proposed Project site would be changed or how existing drainage patterns would be altered to accommodate future development. The full project-level impact analysis of Phase I in the recirculated/final EIR should include a detailed grading plan for each of the Phase I development areas. Without this information, it is infeasible to properly assess the Phase I potential effects to adjacent coastal resources.

12. The overall design of the Proposed Project should minimize biological impacts in all three project Phases. Project components of Phase I should not foreclose the potential to avoid or minimize the biological impacts from Phases II and III. For example, to a considerable degree, the design (e.g., height) and location of the buildings (i.e., aspects of the buildings that affect biological resources such as the Pacific Flyway) in Phase I will dictate the same for buildings in Phases II and III. Trade-offs among the three Phases in the design and location of buildings warrant considering the entire project as a whole to avoid or minimize its biological impacts.

13. The project description for Parcel S-2 Signature Park (Phase I) lacks the detail necessary for a full analysis of its impacts. The recirculated/final EIR should include: an as-built 11"x17" rendering of the of the Proposed Project design; a full description, with all permitted uses, anticipated activities, hours of operation, structures, lighting fixtures, and other accessory features fully described; and, a detailed analysis of the impacts associated with each of these proposed elements.

14. The project description for Parcel S-2A Open Space (Phase I) describes the parcel as an existing street and as a project mitigation site. The DEIR provides no description of the condition of the vegetation on site, nor details regarding the possible use of the site for mitigation. If this parcel is to be included in Phase I, then the proposed use of the parcel should be fully described. Decisions regarding use of the site for mitigation and whether or not the existing street segment would be demolished are necessary in order to complete adequate project specific CEQA review. The EIR should address the following: whether the site, if used for mitigation, would become part of the F & G Street Marsh; how might the restored habitat be affected by implementation of the Proposed Project; and what would be the value of the site in terms of conservation.

15. The project description in the recirculated/final EIR should acknowledge that the southern end of the Proposed Project is located in the vicinity of the City of San Diego's MSCP preserve, the Multiple Habitat Planning Area (MHPA). Figure 4.8-1 should be revised to include the boundaries of the MHPA.

16. Figure 4.8-1 should be revised to identify the mudflats located west of the Sweetwater Marsh and north of the Harbor District. The recirculated/final EIR should discuss the importance of this mudflat as a biological resource that provides essential foraging and resting areas for birds migrating along the Pacific Flyway.

17. The recirculated/final EIR should provide the details and purpose of the habitat buffer (*e.g.*, buffer width, vegetative cover, permitted and prohibited uses within) between the J Street Channel and development in the Harbor District or around the F&G Street Marsh.

18. The description of the design of the new F&G Street Marsh Bridge is not of sufficient detail to allow for adequate project-level analysis of potential impacts to wetlands and biological resources in the adjacent NWR. The description lacks important details such as the overall design (*e.g.*, length of the bridge), the type of crossing (*e.g.*, box culvert, open span), and duration of its construction.

19. If the recirculated/final EIR retains (we recommend that it not – comment 31b) the proposed pedestrian bridge at Lagoon Drive between the seasonal wetland (SP-2) and F&G Street Marsh, it should provide an evaluation of how the bridge could affect the restoration potential of these two marshes (*e.g.*, any restoration limitations due to the length and height of the bridge).

20. The recirculated/final EIR should provide the design specifications (*e.g.*, box culvert or open expanse, length, height) of the bridge for the new E Street as it crosses the primary tidal channel connecting the F&G Street Marsh to San Diego Bay (see comment 31d).

21. The design of the Resort Conference Center (RCC; Parcel H-3) is not described sufficiently to fully analyze potential impacts. Important design features that need to be discussed in the project description include the proposed building layout on the site with all building heights indicated, the building surface design (*e.g.*, amount and height of glass), building and landscape lighting proposals, and the major components of the landscape design (*e.g.*, tree placement and potential species mix).

22. The project description for parcel HP-23A states, "Because no specific use is proposed, uses that would generate traffic would be subject to separate environmental review pursuant to CEQA Guidelines 15168." This is a misleading statement in that, regardless of the amount of traffic they would generate, all of the programmatic level components (*i.e.*, all project components of Phase II or III, not just parcel HP-23A) of the Proposed Project would likely be subject to subsequent environmental project-level analysis pursuant to CEQA in order to fully evaluate all of their potential environmental effects. This project-level analysis should occur only after site plans and design for Phases II and III are prepared.

Mitigation for Direct Losses of Habitat and Species

23. Throughout the project description, there is mention of small areas that would be designated as "Wetlands and Mitigation Bank." However, there is no description of what this designation means. It is unclear whether these areas are intended solely for project-related mitigation obligations, or to provide the latter plus mitigation "credits" using excess (*i.e.*, beyond the project-related mitigation obligations) mitigation for other projects. If the intent is the former, the term "Mitigation Bank" should not be used. If the intent is the latter, the project applicant needs to go through the appropriate channels to obtain authorization to sell mitigation credits. In this case, the project applicant should discuss this with the Wildlife Agencies as soon as possible, though it may be that the Wildlife Agencies will accept these mitigation areas as mitigation only for the indirect impacts of the Proposed Project.

24. The DEIR identifies the mitigation for the entire Proposed Project. While this addresses the cumulative impacts of the Proposed Project, recirculated/final EIR should also provide the impacts and associated mitigation broken down per parcel. Assuming that the owners of each individual parcel would be responsible for mitigating the impacts to that parcel, it will be necessary to have a table and/or text description of who would be responsible for what impacts and mitigation per.

25. The recirculated/final EIR should clarify why Table 4.8-5 distinguishes between total acreage and total credits, and which number is intended to account for the mitigation obligations of the Proposed Project

26. Since the clapper rail is not only a federal and state endangered species, but also a State Fully Protected Species, only the Service can authorize its take.[1] Therefore, Mitigation Measure 4.8-4, which addresses direct impacts to light-footed clapper rail (*Rallus longirostris levipes*, clapper rail), should be modified to assure that impacts to clapper rail are avoided year-round because this species is a year-round resident. As the species is secretive and reacts to disturbances by hiding in the vegetation, it is susceptible to being crushed by heavy equipment. Therefore, any work occurring within potential clapper rail habitat may affect this listed species and requires consultation with the Service pursuant to the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). The DEIR should acknowledge that any take must be authorized by the Service and should be expanded to indicate how implementation of the proposed biological monitoring will be assured. Mitigation measure 4.8-7 should be revised to provide assurance that there will be no take of clapper rail.

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1 Pursuant to Section 3511 of the California Fish and Game Code, the light-footed clapper rail is also designated as a State Fully Protected species. This designation prohibits take or possession of this species at any time (i.e., no take authorizations from the State are available). This also applies to the bird's eggs.

27. The statement on page 4.8-37 indicating that gnatcatcher have not been reported in the project vicinity is incorrect. The statement should be revised to state that gnatcatcher have been observed in upland habitat on the Sweetwater Marsh NWR. The impact and mitigation section should also be revised to recognize the project's effect on gnatcatchers. Any potential take, either direct or indirect, of gnatcatchers requires consultation with the Service pursuant to the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

28. Mitigation Measure 4.8-9 B and Mitigation Measure 4.8-10 B should be revised to require that all updated assessments of potential impacts from the Proposed Project and proposed mitigation be submitted to the Wildlife Agencies for review and approval, in addition to being submitted to the Port and/or City.

29. Inappropriately, the DEIR does not require mitigation for losses of raptor foraging habitat (*e.g.*, non-native grassland). Mitigation for project-related losses of raptor foraging habitat should occur at a ratio of 1:1 away from the project site (*e.g.*, east of Interstate 5 or south of the South San Diego Bay Unit) since concentrating raptor habitat, and thus raptors, into the remaining habitat within and adjacent to the project site could compromise the survivorship of sensitive ground nesting birds raptors prey upon.

30. Except for mitigation for impacts to raptor foraging habitat, the Wildlife Agencies recommend that all mitigation for project-related direct and indirect impacts to sensitive habitats occur within or adjacent to the project area.

31. The following comments are specific to the *Mitigation Opportunities for the Chula Vista Bayfront Project in the City of Chula Vista, California (Recon 2006*, Mitigation Plan, and Appendix AA).

    a. To offset loss of wetlands and uplands, the DEIR proposes mitigation within the approximate 200-foot "no-touch" habitat buffer along the western boundaries of the Sweetwater (Parcel SP-1) and Otay (Parcel OP-2A) Districts. The Mitigation Plan (Appendix AA) states, "A carefully designed buffer zone…will lessen the impacts associated with development and create an interface that gradually transitions from undeveloped native landscape to developed areas." The Wildlife Agencies consider the restored habitat within the no-touch buffer zone as mitigation only for indirect impacts to the adjacent sensitive biological resources (*e.g.*, Sweetwater Marsh and associated mudflats and J Street Marsh), not for direct impacts (*i.e.,* habitat losses). Created or restored habitat that is intended as mitigation for loss of sensitive habitat should have a minimum 100-foot no-touch habitat buffer between it and adjacent development to minimize indirect impacts from development to the mitigation site. Therefore, the recirculated/final EIR should identify locations other than the no-touch buffer zone to create or restore habitat as mitigation for habitat losses. The Wildlife Agencies do, however,

concur that the habitat restoration within the buffer should be subject to a monitoring and maintenance program.

b. Rather than replace Lagoon Drive [between the seasonal wetland (SP-2) and F&G Street Marsh] with a pedestrian bridge, the Wildlife Agencies recommend that Lagoon Drive be permanently removed to maximize restoration opportunities within and adjacent to the F&G Street Marsh and the seasonal wetland (SP-2). This would partially meet mitigation obligations for loss of habitat, and would minimize human disturbances to the wildlife that may reside within them.

c. Consistent with our July 20, 2006, letter to the City of Chula Vista concerning the Mapping Conflict within the F&G Street Marsh area of the Chula Vista MSCP Subarea Plan, (FWS-SDG-882.7) we request that Marina Parkway proposed to also be demolished and restored as part of the buffer between the project and F&G Street Marsh, and that the restored area be remapped to again be within the City's MSCP Preserve. This would partially meet mitigation obligations for loss of habitat, and would minimize human disturbances to the wildlife that may reside within F&G Street Marsh.

d. The Wildlife Agencies recommend an open expanse for the bridge of the proposed E Street crossing the primary tidal channel between the F&G Street Marsh and San Diego Bay. In addition, the length and height of the bridge should be maximized. This would ensure that the restoration potential within F&G Street Marsh is not limited by insufficient tidal exchange and that adequate high-tide refugia are provided to accommodate wildlife moving between the Bay and the marsh.

e. Any habitat mitigation proposed within the F&G Street Marsh must be coordinated with, and approved by, the Refuge Manager in accordance with the existing Memorandum of Understanding for the Mitigation Leasehold Overlays on the Sweetwater Marsh Unit. Habitat mitigation and/or changes to the existing tidal channel that connects the F&G Street Marsh to San Diego Bay should also be coordinated with the Refuge Manager to ensure that no adverse effects to NWR resources could result from such actions.

Indirect Impacts and Habitat Degradation

32. The DEIR should acknowledge that indirect impacts associated with development adjacent to sensitive habitats would result in a degradation of habitat. The Proposed Project would introduce new and exacerbate existing anthropogenic negative indirect effects to adjacent biological resources; these effects include increased predation on wildlife, increased disturbances to wildlife, bird strikes and disorientation, shading of adjacent habitat, human encroachment, increased noise, increased illumination, and

detrimental changes to hydrology and water quality. Many of these indirect impacts, also referred to as "edge effects," result in a degradation of habitat. In addition, the DEIR should analyze the adverse effects of human activity within 100 feet of the adjacent Sweetwater Marsh Unit, and does it identify potential impacts related to unencumbered access from the Signature Park into the adjacent wetlands (*i.e.*, a continuous fence to protect coastal resources from human and domestic animal intrusion).

A report published by the Department in 1973 on the natural resources of San Diego Bay states, "direct and indirect impacts upon the Sweetwater marsh complex by any further development will seriously threaten the capacity of the area to support resident and migrant wildlife populations" (Department 1973; page 87). It is primarily the potential indirect impacts associated with development that are of such concern. In 1979, the Department wrote a memo to the San Diego Coast Regional Commission on the Chula Vista Land Use Plan. The memo favors the maintenance of the agricultural operation that existed at that time adjacent to the coastal salt marsh, stating, "It would seem to be more compatible with the marsh than the proposed residential and visitor serving development. The agricultural operation provides an effective buffer between the marsh habitat and urban (or industrial) encroachment" (Department 1979).

The Wildlife Agencies recognize the efforts made to reduce the intensity of the development proposed adjacent to the Sweetwater Marsh. However, despite these efforts, we concur with the sentiments reflected in the preceding paragraph because the overall intensity of development within the Proposed Project area could still result in significant direct and indirect impacts to sensitive habitats and the species they support. The wildlife habitats that occur within or in close proximity to the Proposed Project area (*e.g.*, Sweetwater Marsh and South San Diego Bay Units of the NWR, the F&G Street Marsh, the J Street Marsh, the shoreline and mudflats of San Diego Bay, and the Chula Vista Nature Reserve) are important to the survival of numerous resident and migratory species. As such, future development must retain the biological functions and values of these sensitive habitats. The recirculated/final EIR should reflect project modifications and require habitat restoration and management elements that would mitigate for the direct, indirect, and cumulative impacts from the project. We provide below a more detailed discussion of specific indirect impacts and possible mitigation measures to reduce impacts that should be identified and addressed in the recirculated/final EIR.

<u>Mitigation Measures for All Indirect Impacts</u>

33. Mitigation for indirect impacts that result in permanent degradation of sensitive habitats within or adjacent to the project site should include enhancement or restoration of directly and indirectly avoided in-kind habitat elsewhere within the Proposed Project area at a minimum of a 1:1 ratio. For example, the project description indicates that Parcel HP-5, consisting of wetlands within an existing narrow "L" shaped drainage channel, would remain, and would contain a 50-foot-wide setback on either side to protect against

encroachment into the wetlands. The Wildlife Agencies generally recommend that a minimum of a 100-foot wide buffer be provided between wetlands and development. Although the wetland on Parcel HP-5 is considered open space and un-impacted in the DEIR, this wetland would experience a number of indirect impacts (*e.g.*, shading, night lighting, urban runoff). The recirculated/final EIR should fully address all such impacts to wetlands and other sensitive habitats and should provide appropriate mitigation to reduce the impacts to a level less than significant. Similarly, mitigation for degradation of the wetlands located in the Sweetwater District (SP-2 and SP-1) and the F&G Street Marsh and its tidal tributary should include enhancement of those wetlands and the restoration of similar habitats at a minimum of a 1:1 ratio.

Buffers to Sensitive Habitat and Wildlife

34. In our September 12, 2005, letter, we requested that adequate habitat buffers (*e.g.*, no touch buffers) surround all sensitive biological areas to minimize indirect impacts from adjacent development. These buffers should prohibit human and domestic animal access, consist of only appropriate locally native species, and be free of all project infrastructure (*e.g.*, erosion control devices, fences, brush management, trails, and picnic tables). To prevent human and mammalian access into buffer areas, fencing or other suitable barrier systems should be installed at the outside edge of the habitat buffer prior to the initiation of project construction. Additionally, screening or berms should be incorporated around or within the habitat buffers to protect wetland birds from lighting and noise related-disturbances from beyond the buffer. In concert with the habitat buffer, land uses adjacent to the buffer should include low intensity public use (*e.g.*, walking, biking, and passive recreation) to minimize indirect impacts (*e.g.*, lighting, shading, and noise) associated with high intensity development. We recommend that landscaping adjacent to buffers utilize only native species to conserve water and avoid or minimize pollutant (*e.g.*, fertilizers, pesticides) discharge into wetlands.

Specific Comments

35. In addition to the habitat buffers proposed in the DEIR, a no-touch minimum 100-foot wide habitat buffer should be designed around any wetland in or adjacent to the project site. For instance, buffers should surround the wetlands in SP-1, SP-2, HP-5 (L Marsh), F&G Street Marsh and its associated tidal inlet, J Street Marsh, Telegraph Creek (OP-2A), and the South San Diego Bay Unit of the NWR. These buffers should be incorporated into Parcels SP-1, S-2, HP-11, S-2A, H-13, H-14, HP-6, HP-7, OP-2A, and O-1A. A 100-foot buffer should also be placed along the entire shoreline to prevent human and domestic animal access to the mudflats and salt marsh. As the project is proposed, only parcel H-1A is designed to have a 100-foot buffer along its shoreline.

36. The DEIR inappropriately identifies the 400-foot-wide buffer (Parcel SP-1) between development (S-1, SP-3, and S-2) and Sweetwater Marsh Unit as an "ecological buffer."

Comment 9 explains why this term inaccurately describes the proposed buffer. As discussed in our September 12, 2005, letter, the 200-foot no-touch buffer zone within the Sweetwater District (Parcel SP-1) should include no human activities and should be protected with a permanent fence. As shown in Figure 4.8-24, there is an outlook, fence, and berm proposed within this no-touch buffer. The outlook, fence, and berm all need to be relocated to the 100-foot limited use zone. A permanent fence should be placed along the northern and westerly edge of the entire length of the 200-foot buffer to prevent human and animal encroachment into the habitat buffer and adjacent sensitive habitats. As recommended in our September 12, 2005, letter and discussed at several meetings with Port and City representatives, mitigation for significant direct and indirect impacts to sensitive wetland areas as a result of increased human and domestic animal activity in and around Sweetwater Marsh and adjacent intertidal areas should be provided through installation of appropriate fencing. We continue to recommend a minimum six-foot-high black vinyl chain link fence along the development side of the habitat buffer boundary. Any fencing between development and the NWR should be coordinated with the Refuge Manager. Native cacti, as proposed on page 3-28 of the DEIR, would not adequately mitigate potential impacts related to unauthorized access into sensitive areas from the adjacent park site.

The Mitigation Plan (Appendix AA) indicates that the Transitional Use Zone in SP-1 may incorporate a more landscaped theme. The Wildlife Agencies recommend that landscaping use only native species to conserve water and avoid and minimize pollutant (*e.g.*, fertilizers, pesticides) discharge into wetlands. Landscaping should not include trees that may provide nesting for pest species (*e.g.*, rats) or predator perches with a line-of-sight into the NWR or adjacent mudflats.

The Wildlife Agencies recommend that impacts to the wooly sea-blite population located within SP-1, which is considered a buffer, be avoided.

37. A buffer of at least 200 feet should be provided between wetland resources within the Sweetwater Marsh Unit and the edge of Parcel S.

38. A no-touch habitat buffer should be included between the office buildings proposed on Parcel S-4 and the wetlands to the north, which are located on the NWR.

39. The mudflat shoreline extending north of the Harbor District is used by migratory birds for foraging and resting. Human and animal encroachment into the mudflats would disturb the birds, causing them to move and expend energy otherwise necessary for completion of their migration. The DEIR proposes a buffer and signage along the entire shoreline of the project in the Sweetwater District to help protect the mudflats from human impacts. We recommend that suitable physical barriers (*i.e.*, chain link fence) be provided along the buffer edge farthest from the mudflat shoreline to minimize encroachment from humans and domestic animals into the mudflats.

40. The Wildlife Agencies recommend that the buffer and shoreline north of the J Street Channel (HP-6 and HP-7) be naturalized. For instance, the rip rap could be removed to provide a more natural shoreline, with native upland plants installed between the channel and the proposed promenade. As already indicated, the habitat buffer north of the J Street Channel should be at least 100 feet wide. To maximize the width of the habitat buffer, we recommend that the width of the promenade be reduced from 12 feet to 8 feet.

41. Although parcel OP-2A is designated as an ecological buffer, the project description refers to a pedestrian pathway and a public boardwalk/observation area that could encroach into the buffer. The recirculated/final EIR should identify where encroachment occurs and fully analyze all associated impacts to the ecological buffer within parcel OP-2A, as well as to the adjacent segment of the Refuge, J Street Marsh, and the wildlife these areas support.

42. The DEIR provides no discussion in the project description about parcel O-4 or the buffer area shown immediately to the west of this parcel on Figure 1-1. The recirculated/final EIR should indicate what, if any, uses are proposed between the relocated power plant and the South San Diego Bay Unit of the NWR. The Wildlife Agencies recommend that a 100-foot-wide ecological buffer be provided to minimize or avoid impacts to the adjacent wetland area.

<u>Increased predation on wildlife</u>

43. The DEIR does not adequately address the inevitable project-related increase in levels of predation on sensitive species located on the NWR and other sensitive habitats. The recirculated/final EIR should include an adequate analysis of the impacts related to increased predation as a result of: (1) increases in nocturnal lighting; (2) displacement of foraging raptors and mammalian predators from the project site to adjacent wildlife habitats; (3) increases in the numbers of generalist predators (*e.g.*, rats, ravens, crows, gulls) attracted to the area due to increases in trash; and (4) the introduction of additional cats and dogs as a result of new residential development. The recirculated/final EIR should also propose adequate measures to mitigate these impacts to a level less than significant.

44. The Wildlife Agencies are concerned about the inclusion of the proposed Signature Park on S-2 because it would likely attract generalist predators to the adjacent NWR and mudflats. The Signature Park includes amenities such as lighting, picnic areas, and vending of food and beverages, which could attract generalist predators due to an increase in trash. Though trash containers would be provided, some windblown trash from park users would end up in the adjacent wildlife habitats (Significant Impact 4.5-1), thus attracting predators that also prey on ground nesting birds.

45. The recirculated/final EIR should identify the potential for indirect impacts to wildlife from increased predator perching due to the building heights and designs and types of landscaping proposed on the following parcels (adjacent habitat affected shown in parenthesis): S-1 (Sweetwater Marsh), S-4 (Sweetwater Marsh), H-3 (F&G Street Marsh), H-13 (J Street Marsh), H-14 (J Street Marsh), and O-1A and O-1B (J Street Marsh).

Mitigation Measures

46. We recommend that all relatively tall structures and all landscaping within the project site be situated away from sensitive habitats to reduce predator perches with a line-of-sight into adjacent sensitive habitats, as well as to reduce shading effects on sensitive habitats, and bird strikes (*i.e.*, collisions with reflective glass). For example, development on S-1 and S-4 should be re-oriented so that the buildings (*e.g.*, 125-foot tall buildings proposed on Parcel S-4) and any tall landscaping is located at the southern portion of the parcels while the parking is located at the north end of the parcels. This would minimize the introduction of predator perching with a line-of-sight into the adjacent marshes north and west of the parcels. Figure 3-9 of the DEIR shows that the buildings are proposed to be located at the northern end of the parcels in close proximity to the adjacent sensitive habitats. Similarly, the tallest buildings associated with the RCC should be located on the southeast portion of Parcel H-3. This would also reduce the RCC's shading impacts to the F&G Street Marsh and minimize the potential for bird strikes.

47. While the DEIR acknowledges that increased predation could result from an increase in predator perches with a line-of-site into habitats, no mitigation measures are proposed to avoid and minimize such impacts. The recirculated/final EIR should require that all buildings, signs, lighting fixtures, and tall landscaping with a line-of-site into sensitive habitats be designed and/or placed in such a manner to avoid the introduction of predator perches and thereby reduce the potential for take of sensitive wildlife.

48. To at least partially mitigate for the project-related increase of predation take of federally and/or state listed ground nesting birds (*i.e.*, least tern, western snowy plover, clapper rail, and Belding's savannah sparrow), the recirculated/final EIR should require (a) that the applicant establish a non-wasting endowment that would accrue sufficient interest annually to underwrite the costs of the services of predator control specialists, such as U.S. Department of Agriculture, Wildlife Services, and (b) the in-perpetuity implementation of a predator control on the adjacent NWR (Sweetwater Marsh and South San Diego Bay Units) and other sensitive habitat areas (mudflats west of Sweetwater District, J Street Marsh). The Port should coordinate with the Refuge Manager to determine the appropriate size of the endowment commensurate with the project-related impacts.

49. The Proposed Project would result in a significant impact to San Diego Bay and adjacent wetlands due to wind-blown litter (Significant Impact 4.5-1). To mitigate such impacts,

the project includes trash control measures (*e.g.*, trash containers with attached lids, trash control enclosures). However, this may not be adequate. Chain link fencing should be provided along the entire interface of development and sensitive habitats to capture trash and reduce attraction of predators and pest species into sensitive areas.

Disturbances to Wildlife

50. Disturbances to wildlife associated with the implementation and long-term operation of the Proposed Project should be addressed. For instance, outdoor activities, such as fireworks, concerts, and other light and noise generating activities that could be associated with the resort/conference center, Signature Park, other parkland, harbor, ferry terminal, and various retail/commercial recreation areas, and their impacts to wildlife are need to be described, and their impacts analyzed. Similarly, impacts to migratory, resident, and breeding birds that could result from the increased on-water recreation from redevelopment of the South Bay Boatyard (HW-6) and the Commercial Harbor (HW-3) within the Chula Vista Marina should also be described.

The new commercial harbor is intended to enhance public access to the water, and enhance boating activity on the water. Envisioned for this commercial harbor are water taxis, dinner boats, harbor cruises, visiting historic vessels, and boat rentals, a ferry terminal, and restaurant. Increased boating activity could negatively affect foraging and loafing activities of shorebirds and waterfowl. Increased disturbances to foraging habitat could negatively affect the stability of the adjacent nesting bird colonies (*i.e.*, South San Diego Bay and Sweetwater Marsh Refuge) because disturbance-free foraging areas to obtain food for chicks are important (Rodgers and Smith 1997). Increased boating could also displace water fowl access to feeding areas and result in a subsequent loss of production of young (Drent and Guiguet 1961, Conservation Committee Report 1978, Huffman 1999, Manning 2002). Although the birds can fly to other areas to avoid highly disturbed foraging habitat, such behavioral adaptations can increase the numbers of flights and flight times between foraging and loafing, resulting in energy deficiencies that could translate to reduced productivity and fitness (Manning 2002).

51. Though impacts to wildlife from construction noise are addressed, the DEIR does not adequately address impacts to wildlife from operational noise. The Biology sections of the recirculated/final EIR should include a discussion of operational noise impacts to wildlife. Currently, operational noise is addressed only in Section 4.7 *Noise*. Based on figure 4.7-3, it appears that noise levels that may affect several sensitive avian species could occur within all habitats within the project site [*e.g.*, L Street Marsh (HP-5), Telegraph Creek (OP-2A), ephemeral wetland (S-2A)] and habitats adjacent to the project site (J Street Channel and Marsh, and F&G Street Marsh and its tidal tributary). However, impacts to other habitats adjacent to the project site (*e.g.*, Sweetwater Marsh and South San Diego Bay Units of the NWR, Chula Vista Nature Reserve) cannot be evaluated because the noise contours provided in Figure 4.7-3 do not extend sufficiently

beyond the project boundary. As such, Figure 4.7-3 should be revised to include noise contour that extend 200 feet beyond the project boundary.

Mitigation Measures

52. Fireworks and outdoor concerts that generate noise beyond the development boundary should be restricted to outside the avian breeding season (*i.e.*, January through September, depending on the species) to minimize impacts to nesting and fledging birds.

53. To partially mitigate the Proposed Project's indirect impacts, the recirculated/final EIR should: (a) prohibit boating in the open waters east of the proposed realigned navigation channel and north of the South Bay boat yard to avoid or minimize disturbance to migratory birds feeding along the mudflats and resting in San Diego Bay; (b) require the installation of regulatory signage on buoys and boat markers along the boat channel; and, (c) require increased enforcement by the Harbor Patrol to deter watercraft from going ashore onto sensitive habitat areas (*e.g.*, Chula Vista Wildlife Reserve, northern levees of the Salt Ponds, mudflats along Sweetwater Marsh, J Street Marsh) and adversely affecting the birds and habitat that nest, forage, and rest there, and are subject to indirect project-related impacts.

54. Depending on an analysis of the noise contours in Figure 4.7-3 requested above, it may be necessary to mitigate for traffic related noise. For example, sound walls along the roads adjacent to sensitive habitats may be warranted. Potential mitigation should be addressed in the recirculated/final EIR.

<u>Human Encroachment</u>

55. The Wildlife Agencies are concerned that the Signature Park on Parcel S-2 would invite uncontrolled human and domestic animal encroachment onto the Refuge and the adjacent mudflats, thus disrupting wildlife. The recirculated/final EIR should require that the Proposed Project provide full-time personnel at the Signature Park to enforce restrictions on human and domestic animal access to the NWR and mudflats.

56. Shoreline promenades (HP-3, HP-6, and HP-7) occur immediately north of the J Street Channel and J Street Marsh. A four-foot-high railing is proposed to minimize encroachment into the J Street Channel and Marsh. The Wildlife Agencies recommend that the recirculated/final EIR require that the design of the railing include multiple horizontal railings and/or mesh fencing to ensure that domestic animals do not move under the railing into the marsh.

57. The following comments pertain to the Draft Port Master Plan Amendment (Appendix B to the DEIR; Draft Amendment).

a. Page 33 of the proposed Draft Amendment describes land use designations utilized for Port-owned lands. The Port proposes to modify the "wetland" designation to "wetland and mitigation bank area." Specifically, the Draft Amendment includes language to allow areas within the wetlands on site identified for potential enhancement, restoration, and/or creation opportunities to be utilized as mitigation for future development projects. As indicated in Comment 23, this language may be inappropriate, and should be considered for elimination from the Draft Amendment.

b. The Draft Amendment proposes language (Page 33) that allows passive uses, such as overlooks, picnic areas, and/or spur-trails, within the wetland buffers with the proposed designation of "wetland and mitigation bank area." These proposed modifications are inappropriate. Any wetland area, or their associated biological buffers, should be devoid of all development, including the passive uses proposed to be allowed. If such uses are to be allowed within wetland areas or their associated buffers, the recirculated/final EIR should provide an adequate analysis of the potential impacts to wetlands from these uses and discuss appropriate mitigation. Otherwise, the Port should remove from the Draft Amendment the proposed language allowing such uses.

c. The Draft Amendment also includes language (Page 33) allowing interpretive and educational opportunities within the wetland buffers while, including coastal access. While the proposed language requires that such uses occur in a manner that will ensure the protection and preservation of these sensitive habitat areas. We recommend that all outlooks and interpretive tools occur outside of the 100-foot wetland buffer.

Bird Strikes and Disorientation

58. Despite our recommendations in our September 2005, letter, and in electronic mail to and meetings with the Port, on how the Proposed Project could avoid or minimize bird strikes and/or disorientation from collisions with buildings, the DEIR does not adequately address these impacts to migrating or resident birds. South San Diego Bay has been identified as a significant wintering ground and migratory stopover point along the Pacific Flyway because of its proximity to high-quality coastal salt marsh and San Diego Bay. Much of what remains of San Diego Bay's historical shallow subtidal, intertidal mudflat, and salt marsh habitats within the south bay provides essential foraging and resting areas for ten of thousands of birds migrating along the Pacific Flyway. In recognition of the importance of these remaining habitats, the south bay has been designated a Western Hemisphere Shorebird Reserve Network Site and the Units within the Refuge have each been recognized as Globally Important Bird Areas by the American Bird Conservancy. The recirculated/final EIR should address these important biological resources that occur immediately adjacent to the project boundaries. Additionally, the recirculated/final EIR

should include a map showing potential migration corridors through and/or adjacent to the subject property and how the migration corridor would be affected by the project.

Mitigation measures

59. There is a high potential for impacts to migrating and resident birds colliding with the buildings located on the following parcels: S-1 (Sweetwater Marsh), S-4 (Sweetwater Marsh), H-3 (F&G Street Marsh), H-13 (J Street Marsh), H-14 (J Street Marsh), and O-1A and O-1B (J Street Marsh). The DEIR includes mitigation measures to address these impacts only from buildings greater than 100 feet in height (Mitigation Measure 4.8-24). However, as stated in the DEIR, "both tall buildings and low buildings can be dangerous to birds" (Page 4.8-89). Therefore, such measures should be applied to all buildings that have an unobstructed line of sight to nearby open water or large areas of open space regardless of height. To determine if these measures are adequate, we again recommend that monitoring for bird strikes be implemented during Phase I of project implementation. The recirculated/final EIR should also require that, if there is evidence that bird strikes are occurring, the applicant contact the Wildlife Agencies as soon as possible to discuss potential measures for implementation to reduce these impacts.

60. Buildings should be oriented so the tallest buildings are as far away as possible from San Diego Bay or adjacent habitats.

61. The height limits on Parcel H-3 should be reduced to a maximum of three stories (or 50 feet) to avoid shading impacts to adjacent habitat areas and to minimize the potential for bird strikes.

<u>Shading of Adjacent Habitat</u>

62. Despite our recommendations in our September 12, 2005, letter, and in electronic mail to and meetings with the Port, the DEIR fails to address the biological impacts associated with shading of habitat by buildings and structures. Reductions in available light levels from shading can disrupt photosynthetic processes and impair growth of plants, algae, and phytoplankton in wetlands or waters, and thus modify existing habitats, which in turn can impair their suitability for avian species and other wildlife. We recommended that for each development option, the recirculated/final EIR provide three-dimensional images of any structures that could cast shadows on adjacent freshwater, intertidal, and tidal wetland areas. These images should reflect the maximum allowable floor area ratio, the maximum allowable height, and the minimum contemplated setbacks (*i.e.*, buffers). The acreages of the shaded areas should be quantified by habitat type and described. Based on our review of the DEIR, we anticipate the following project components would impact habitats from shading.

a. Development adjacent to the L-Marsh (HP-5) would consist of 300-foot tall buildings set only 50 feet back from the wetland. These buildings would shade and negatively affect the L Marsh and could potentially affect the J Street Channel and J Street Marsh. Based on an analysis of the potential shading effects of each building on sensitive habitat, the recirculated/final EIR should (a) describe modifications to building designs and/or locations (*i.e.*, reduced building heights or increased width of setbacks), and (b) if shading impacts still occur, require appropriate mitigation consistent with Comment 33.

b. Parcel H-3 has a maximum building height of 300 feet. Depending upon the placement of the buildings on this site, future development could negatively affect the F&G Street Marsh (which would represent a direct impact to resources located on federal owned land) and its tidal inlet. To avoid shading impacts, the maximum height limit on this parcel should be reduced to three stories (or 50 feet). The recirculated/final EIR should (a) describe such modifications to the building designs, and (b) if shading impacts still occur, require appropriate mitigation consistent with Comment 33.

Increased Illumination

63. Despite our recommendations in our September 12, 2005, letter, and in electronic mail to and meetings with the Port, the DEIR does not fully address impacts associated with artificial night lighting (ANL), including direct and indirect (*i.e.*, sky glow, light pollution) ANL. ANL generally threatens wildlife by disrupting biological rhythms and otherwise interfering with the behavior of nocturnal animals (see contributions from Artificial Night Lighting Conference 2002). Nocturnal and migrating birds, migrating bats, insects, fish, and sea turtles are particularly impacted by ANL (Evans Ogden 1996 and citations therein). Migrating birds use the stars and moon for navigation during migrations. These birds can become disoriented when flying through a brightly lit area; this disorientation can lead to injury and/or death. Artificial night lighting also disrupts the behavior of fish and amphibians, and billions of moths and other insects are killed from the lights each year. ANL can also affect aquatic invertebrates that are prey for other animals. Some zooplankton migrate vertically in response to lighting. In the evening, they rise in the water column to feed on drifting microscopic plants (phytoplankton). When daylight approaches they migrate down to avoid predators. However, ANL may keep them from rising and feeding (Moore et al. 2000). Reduced predation on the phytoplankton can result in phytoplankton blooms which deplete the dissolved oxygen in the water and shade aquatic vegetation (Harder 2004). Reduced oxygen levels can then negatively affect fish or other organisms depending on dissolved oxygen in the water column.

Mitigation measures

64. The recirculated/final EIR should provide a delineation of areas with sensitive habitats that are expected to be directly or indirectly exposed to light levels of higher intensity (including increased sky glow) than existing ambient levels. The delineation should be on a large scale aerial photograph (a scaled figure). The recirculated/final EIR should evaluate the direct, indirect, and cumulative biological impacts resulting from the project-related ANL, based on the delineation, and should propose specific measures whose implementation would prevent an increase in existing ambient light levels in sensitive habitats.

65. To minimize the biological impacts from outdoor ANL, we recommend that design standards for all phases of development ensure that outdoor lighting throughout the project study area is minimized and that no project-related lighting falls outside the project boundaries, upon any habitat buffers, habitats, or open water. All lights, including street lights, pedestrian and bicycle path lighting, and any recreational lighting should be directed away from and fully shielded so as to not illuminate adjacent habitats. In addition, no external lighting of buildings (*e.g.*, cosmetic lighting) or other structures should be permitted, no lighted building signs should be permitted beyond the first floor, and all commercial signage should be provided on monument signs rather than pole signs or on the sides of buildings.

66. Lighting proposed for the Signature Park (S-2) and the Shoreline Promenade (HP-3, HP-6, and HP-7) should be placed only where needed for human safety. Lights should be on low-standing (*e.g.*, 2-feet tall) bollards, shielded, and flat-bottomed so illumination is directed downward onto the walkway and does not scatter. Low-pressure sodium bulbs that emit only a narrow range of yellow light should be utilized because monochromatic yellow light, which is not perceived as "natural" light by wildlife, minimizes ecological disruptions.

<u>Increased Freshwater Input, Degraded Water Quality, and/or Erosional Surface Flows</u>

67. The DEIR does not adequately describe or analyze the potential degradation of existing wetlands within and adjacent to the project site due to project-related changes in surface storm water flows, nor does it provide measures to prevent, or mitigation to offset, such degradation. The project-related storm water (freshwater) flows would be discharged into the seasonal wetland in the Sweetwater District (S-2), the F&G Street Marsh and its tidal tributary, the J Street Channel, Telegraph Creek, and the J Street Marsh. Grading in SP-1 and S-1 would increase water flows into Parcel SP-2 (season wetlands) and F&G Street Marsh, and there would be more storm drains draining into the J Street Channel and Telegraph Creek. Increases in storm water flows into relatively rare salt-water wetlands can result in a type-conversion to more common freshwater wetlands. In addition, depending on the velocity of the storm water discharges, the flows could disrupt the

morphology of the receiving waters/habitats by ongoing erosion. Over time, the discharges can seriously damage sensitive habitats. Increases in flows from impervious surfaces associated with urbanization can result in: a) stream bed scouring and habitat degradation; b) shoreline erosion and stream bank widening; c) loss of aquatic species; and d) decreased baseflow (USEPA 1999). Furthermore, the project-related increases in traffic will result in higher concentrations of vehicle-related contaminants (*e.g.*, copper, asbestos, hydrocarbons, and antifreeze) in the storm water flows.

We are particularly concerned about deleterious changes to the salt balance, morphology, hydrology, and water quality of the F&G Street Marsh and its tidal tributary because such changes can negatively affect future restoration of the F&G Street Marsh, and because the light-footed clapper rail has been known to reside there. Conversely, current storm water flows into the L-Marsh (HP-5) would be redirected to the street, potentially reducing water flows to the wetland and thereby also reducing the wetland habitat. While the DEIR acknowledges the expected changes in storm water flows, it does not quantify the changes in flow, nor does it identify the design and location of the best management practices (BMPs) for Phase I to avoid impacts associated with the post-construction surface flows. The recirculated/final EIR should include a thorough discussion of project-related changes in surface flows and how these changes would affect the existing wetlands within and adjacent to the project site.

Mitigation Measures

68. All storm water flows should be treated and filtered prior to entering existing wetlands and San Diego Bay to avoid the introduction of pollutants (*e.g.*, hydrocarbons, sediments, fertilizers, pesticides, and trash).

69. The site designs for the Proposed Project should minimize the project-related increase in dry and wet-weather surface flows, and integrate on-site BMPs that would attenuate the flows (prior to their discharge) to reduce their impacts on the morphology of sensitive habitats to which they ultimately discharge. Examples of BMPs to consider include appropriately sized grass swales and vegetated detention basins. Because these BMPs occupy space, their timely consideration of the requirements that apply to the project site pursuant to the numeric sizing criteria in the Municipal Storm Water Permit is necessary. All BMPs should be within the development footprint, outside of the buffers. The recirculated/final EIR should provide the location(s) and descriptions of the proposed construction and post-construction BMPs, and should discuss the long-term maintenance of the latter.

<u>Marine Biological Resources and In-water Construction</u>

70. To adequately evaluate marine biological resources and potential impacts to these resources, the recirculated/final EIR should:

a. provide a figure indicating the different marine habitat classifications (*i.e.*, intertidal, shallow subtidal, moderate subtidal, deep subtidal, salt marsh, and eelgrass) within and adjacent to the project area;

b. provide a table that identifies the range of depth of different marine habitat classifications, including: (1) intertidal (+7.8 feet to -2.2 feet MLLW (mean lower low water)); (2) shallow subtidal (-2.2 MLLW to -12 feet MLLW); (3) medium subtidal (-12 feet MLLW to -20 feet MLLW), and deep subtidal (deeper than -20 feet MLLW) habitats; and

c. indicate the areas of intertidal habitat and shallow subtidal habitat that are/would be natural (*e.g.*, soft-bottom) vs. artificial (*e.g.*, rip rap, concrete) before and after project development. Soft bottom intertidal habitat provides foraging habitat for wading birds and shorebirds, including the federally listed endangered western snowy plover (*Charadrius alexandrinus nivosus*). Shallow subtidal habitat consisting of either unvegetated soft bottom areas or areas vegetated with eelgrass (*Zostera marina*) are considered significant habitats for birds (including the least tern and brown pelican), fish, benthic invertebrates, and other organisms (including the Pacific green sea turtle).

71. Section 4.9, *Marine Biology,* in the recirculated/final EIR should include a discussion of permanent and temporary losses of foraging habitat for birds that visually search for their fish prey and plunge-dive into the water to capture their fish. Foraging habitat is defined as open water containing suitable fish prey that is available for foraging by plunge-diving birds (*e.g.*, least terns and brown pelicans) by not being obstructed and/or covered by structures (*e.g.*, piers, docks, or boats). This is particularly significant resource at the project site due to its close proximity to the Sweetwater Marsh and South San Diego Bay Units of the Refuge and the Chula Vista Wildlife Reserve (*i.e.*, approximately 1 mile or less), where plunge-diving birds both nest and/or roost during their migration. Additionally, covering open water habitats with structures would reduce light availability in the water column and introduce hard substrate which would likely support a different species composition and biological community than the extant composition. In essence, there could be an ecological type conversion where structures are introduced. We recognize that there is a discussion of the permanent impacts to surface water foraging habitat in the Section 4.8, *Terrestrial Biology*, but the impacts to this resource resulting from in-water construction make it appropriate to include a discussion of these impacts in Section 4.9.

Mitigation measures

72. The Wildlife Agencies concur that increases in structures (*e.g.*, docks, wharfs, piers) covering the San Diego Bay should be offset (Mitigation Measures 4.8-7 and 4.8-8 in the

Section 4.8, *Terrestrial Biology*). Temporary and/or permanent reductions in foraging habitat for sight-foraging birds that feed on fish (*e.g.*, least tern, brown pelican) should be avoided and minimized. We also recommend that a mitigation measure be added that requires that temporary reductions in foraging habitat due to in-water construction activities that result in increased turbidity (*e.g.*, dredging, pile pulling, jetting, and driving) be conducted outside the breeding season of the least tern (April 1 to September 15) to avoid impacts to this listed species.

73. The Wildlife Agencies recommend that losses of intertidal habitat (*i.e.*, 0.03 acre anticipated from redevelopment of HW-3) be mitigated with creation of in-kind habitat and at a minimum 1:1 ratio. Impacts to pickleweed habitat (*i.e.*, salt marsh habitat) should be mitigated at a 4:1 ratio to be consistent with City's MSCP Subarea Plan. As such, Mitigation Measure 4.9-5A should be revised to include mitigation of 0.004 acre of pickleweed.

74. The Wildlife Agencies recommend that dredging activities be surrounded by silt curtains to minimize sedimentation and smothering of adjacent eelgrass.

75. The DEIR indicates that losses in the existing benthic community from dredging activities would be less than significant due to the rapid recolonization of the benthic community in the new area. The Wildlife Agencies request that the recirculated/final EIR provide documentation to support this conclusion. Absent such documentation, we recommend that the dredging activities be coupled with a benthic study to characterize (*e.g.*, rate and community composition) recolonization of the benthic community.

Hazards and hazardous materials/public safety (*i.e.*, contaminants)

76. The DEIR highlights areas where property owners are potentially liable for impacts of contamination. The DEIR notes that known contaminated sites must be remediated to the satisfaction of the Regional Water Quality Control Board, County of San Diego Department of Environmental Health, State Department of Toxic Substances and Disease Control (DTSC) and perhaps others. We would like to work with the above regulatory agencies to ensure that remedial actions at identified sites would be protective of ecological receptors. Such actions include consideration of ecological risk based cleanup goals for contaminated media, and ensuring that contaminated media that are on site do not migrate off site into ecologically sensitive areas such as San Diego Bay and neighboring marsh habitats, especially those in the NWR. In that regard, the recirculated/final EIR should address the following specific comments.

    a. Mitigation for hazards posed by clean-up and construction operations should include the preparation and implementation of plans to prevent migration of contaminated material into environmentally sensitive areas. Migration paths of concern for ecological receptors include groundwater that may surface in marshes,

streams or San Diego Bay (especially at the sediment-water interface), and soil that may migrate off site via erosion and surface runoff. Contaminant levels that pose insignificant risk to human health, especially under the commercial/industrial use scenario, may still pose significant risk to ecological receptors, both in terrestrial and aquatic settings. Consequently, contaminant levels deemed to be safe for humans are not necessarily safe for ecological receptors, and measures to prevent off-site migration of hazardous contaminants should be planned and implemented even though risks to humans may not be significant.

b. Actions being taken to address ecological hazards should be noted. For example, clean-up of Parcel HP-5 (*i.e.*, L Marsh) and any potentially contaminated areas should ensure that concentrations of contaminants in materials left on site and/or leaving the site(s) should not meet or exceed concentrations of risk to ecological receptors (*e.g.*, invertebrates, birds).

c. Mitigation Measures 4.12-1, Item B, should mention ecological risks for areas that are to remain open and are being remediated to ecological risk-based goals (*e.g.*, the L Marsh or Unit HP-5). In Item B, replace "(*i.e.*, commercial, residential)" with "(*i.e.*, commercial, residential, ecological)."

d. Contaminant levels suitable for ocean disposal may not be suitable for re-suspension in San Diego Bay. Accordingly, Mitigation Measures 4.5-4 and 4.9-6 should be revised by deleting the following text from part B: "If the sediment would be suitable for ocean disposal, no silt curtain shall be required."

Consistency with the City of Chula Vista's MSCP Subarea Plan

77. The proposed land exchange would bring lands into the City's jurisdiction that were not considered in the development and approval of the City's MSCP Subarea Plan. As such, take of listed species and impacts to covered species on those lands are not authorized by the MSCP. In order to bring those lands into the MSCP, development within the area to be annexed must be consistent with the MSCP and the City's Subarea Plan. An amendment to the Subarea Plan and incidental take permit will be required (Section 5.3.1.2 of the City's Subarea Plan). The recirculated/final EIR should incorporate this requirement and the applicant should begin working with the City and the Wildlife Agencies as soon as possible to start the amendment process.

78. Portions of Proposed Project lie within the boundaries of the City's MSCP Subarea Plan and portions of the proposed land transfer that are currently within the Port's jurisdiction would come under the jurisdiction of the City. Furthermore, the Proposed Project borders portions of the City's MSCP Preserve and is surrounded by adjacent lands that lie within the boundaries of the City's MSCP Subarea Plan. Some portions of Proposed Project site currently lie within the City and some portions of the Proposed Project site that are

currently under the Port's jurisdiction would come under the jurisdiction of the City with the proposed land exchange. Furthermore, the lands within the City are/would be within the boundaries of the City's MSCP Subarea Plan, and portions of the Proposed Project site are adjacent to the City's MSCP Preserve. As an important component of regional conservation planning efforts, the City's MSCP Subarea Plan provides a strong framework for how and where development and habitat conservation occurs within the City. Mitigation ratios established through the negotiations for habitat conservation plans (HCP)/NCCPs are generally lower than those in areas not subject to an HCP/NCCP because the planning assures that mitigation is conducted in a manner and at pre-determined locations agreed to by all parties to create a habitat preserve. The Port is not party to the MSCP or any other HCP/NCCP. We typically expect that the mitigation for project-related habitat losses within a jurisdiction with no HCP/NCCP would be provided at higher ratios than required by an HCP/NCCP to account for the lack of coordination provided by an HCP/NCCP. In this instance, we recommend that the habitat losses throughout the project site, regardless of jurisdiction, meet or exceed the mitigation ratios, guidelines, and standards required by the City's MSCP Subarea Plan to maintain consistency with its application to the on-site and adjacent areas within Plan.

79. The Wildlife Agencies recommend that vegetation classifications provided in Table 4.8-1 *Existing Vegetation Communities and Land Cover Types (acres)* and Figure 4.8-3 *Vegetation Communities and Land Cover Types* be consistent with the vegetation classification for the City's MSCP. The DEIR utilizes alternative vegetation classifications for some habitat types. For instance, coastal brackish marsh in the DEIR is classified as southern coastal salt marsh by the MSCP, seasonal pond in the DEIR is classified as disturbed wetland by the MSCP, and disturbed riparian in the DEIR is classified as disturbed southern coastal salt marsh by the MSCP.

Mitigation Measures

To assure consistency with the MSCP throughout the project site, we provide the following specific comments on the proposed mitigation measures.

80. In order to limit construction disturbance to raptors, we recommend that Mitigation Measure 4.8-1 be modified, as follows.

> *To ensure that no direct or indirect impacts to nesting raptors occur during construction (including clearing and grubbing), construction activities within the area of potential effect for nesting habitat should occur outside of the raptor breeding season (January 15 to July 31), or sooner if a qualified biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting activities are complete. If construction (other than vegetation clearing and grubbing) must occur during the breeding season, prior to initiating any construction-related activities,*

pre-construction surveys must be performed by a City- or Port-approved (depending on the jurisdiction) biologist to determine the presence or absence of nesting raptors within 500-feet of the construction area. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and its results submitted to the City or Port (depending on the jurisdiction) for review and approval prior to initiating any construction activities. If nesting raptors are detected, a mitigation plan shall be prepared by a City- or Port-approved biologist and submitted to both the City and Port for review and approval. The applicant shall implement the mitigation plan to the satisfaction of the City and Port to ensure that disturbance of breeding activities is reduced to a level less than significant. A bio-monitor must be on site during construction until all young have fledged to minimize construction impacts and ensure that no nests are removed or disturbed and no nesting activities are disrupted.

81. In order to limit construction disturbance to burrowing owls, we recommend that Mitigation Measure 4.8-2 be modified, as follows:

To ensure that no direct or indirect impacts to nesting burrowing owls occur during construction (including clearing and grubbing), construction activities within the area of potential effect for nesting habitat should occur outside of the burrowing owl's breeding season (April 15 to July 31), or sooner if a qualified biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting is complete. If construction (other than vegetation clearing and grubbing) must occur during the breeding season, prior to initiating any construction-related activities, pre-construction surveys must be performed by a City- or Port-approved (depending on the jurisdiction)biologist to determine the presence or absence of active burrows within all suitable habitat. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and its results submitted to the City or Port (depending on the jurisdiction) for review and approval prior to initiating any construction activities. If an active burrow is detected during the breeding season, a mitigation plan shall be prepared by a City- or Port-approved biologist and submitted to both the City and Port for review and approval. The applicant shall implement the mitigation plan to the satisfaction of the City and Port to ensure that disturbance of breeding activities is reduced to a level less than significant. Construction setbacks of 300 feet from occupied burrows shall be implemented until the young are completely independent of the nest. A bio-monitor must be on site during construction until all young have fledged to minimize construction impacts and ensure that no nests are removed or disturbed

and no nesting activities are disrupted. If an active burrow is found outside of the breeding season, or after an active nest is determined to no longer be active by a qualified biologist, the burrowing owl would be relocated in coordination with the Wildlife Agencies.

82. In order to limit construction disturbance to migratory birds, we recommend that Mitigation Measure 4.8-3 be modified, as follows:

To ensure that no direct or indirect impacts to nesting migratory birds occur during construction (including clearing and grubbing), construction activities within the area of potential effect for nesting habitat should occur outside of the general avian breeding season (January 15 to August 31), or sooner if a qualified biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting is complete. If construction (other than vegetation clearing and grubbing) must occur during the breeding season, prior to initiating any construction-related activities, pre-construction surveys must be performed by a City- or Port-approved (depending on the jurisdiction) approved biologist to determine the presence or absence of nesting birds within 300 feet of the construction area. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and its results submitted to the City or Port (depending on the jurisdiction) for review and approval prior to initiating any construction activities. If nesting birds are detected, a mitigation plan shall be prepared by a City- or Port-approved biologist and submitted to both the City and Port for review and approval. The applicant shall implement the mitigation plan to the satisfaction of the City and Port to ensure that disturbance of breeding activities is reduced to a level less than significant. A bio-monitor should be on site during construction until all young have fledged to minimize construction impacts and ensure that no nest is removed or disturbed and no nesting activities are disrupted.

83. As indicated on page 3-17 of the DEIR, "The project site is situated entirely within the Chula Vista Coastal Zone." To be consistent with the City's MSCP Subarea Plan, recirculated/final EIR should require that all impacts to riparian scrub be mitigated at a 3:1 ratio, not 2:1 as indicated in Mitigation Measures 4.8-9 and 4.8-10.

84. The following comments relate to the Proposed Project's consistency with the City's MSCP Preserve adjacency guidelines. The recirculated/final EIR should reflect that application of these guidelines to all parcels adjacent to City's MSCP Preserve (*i.e.*, Parcels SP-1, S-4, SP-2, S-2A, HP-11, HP-6, and HP-7), as well any parcels adjacent to sensitive habitats [Sweetwater Marsh and South San Diego Bay Units of the Refuge, San

Diego Bay, the mudflats west of the Sweetwater District, F&G Street Marsh and its associated tidal inlet, L Marsh (HP-5), J Street Marsh, Telegraph Creek, and Chula Vista Wildlife Reserve]. For purposes of this letter, all of the sensitive habitats listed in the brackets above are considered Preserve.

a. In parcels adjacent to Preserve areas, permanent fencing (*i.e.*, a minimum six-foot tall black vinyl chain link fence) should be placed along the boundary between the ecological buffer and the Proposed Project use area. Stands of native cacti, for example as proposed on page 4.8-71 of the DEIR, cannot effectively keep humans and domestic animals out of the Preserve areas.

b. Mitigation Measure 4.8-6 A. should be modified to read as follows.

> *Construction related noise shall be limited adjacent to the Sweetwater Marsh and South San Diego Bay Units of the Refuge, F&G Street Marsh, the mudflats west of the Sweetwater District, and J Street Marsh during the general avian breeding season of January 15 to August 31. During the avian breeding season, noise levels from construction activities must not exceed 60 dB(A) L_{eq}, or ambient noise levels if higher than 60dB(A). Before any construction begins, a qualified acoustician shall prepare and submit to the Port and City for review and approval an acoustical analysis to determine the ambient noise level, anticipated noise level of construction, and whether noise attenuation measures will need to be implemented to reduce the expected noise level to below 60dB(A). If noise attenuation measures or modifications to construction activities are unable to reduce the noise level below 60dB(A), either the applicant must immediately consult with the Wildlife Agencies to develop a noise attenuation plan or construction in the affected areas must cease until the end of the breeding season.*

c. The first sentence of Mitigation Measure 4.8-6 B should read as follows.

> *To reduce the potential for raptors to perch within the landscaping and hunt sensitive bird species from those perches, the following design criteria will be identified in the CVBMP master landscape plan and incorporated into all building and landscape plans with a line-of-sight to the City's MSCP Preserve, buffer zones, and on-site open space.*

d. Mitigation Measure 4.8-6 F indicates that all landscaping plans must ensure that no plants listed in Appendix N of the City's MSCP Subarea Plan are planted in

the project area. However, when referring to landscaping, the City's MSCP Subarea Plan makes reference instead to the "Wildland/Urban Interface: Fuel Modification Standards," or Appendix L, of the Subarea Plan. In addition, it specifies that no invasive non-native plant species should be introduced into areas immediately adjacent to Preserve areas. All project-related landscaping plans should include, to the maximum extent practicable, native plants that are compatible with native vegetation located in the ecological buffers and/or MSCP Preserve.

e. Mitigation Measure 4.8-6 G should provide more specific language as to how the Proposed Project would minimize the release of toxins, chemicals, petroleum products, exotic plant materials, and other pollutants that might degrade or harm the natural environment or ecosystem processes within the Preserve. As discussed above (and as mentioned in Comment 67), it is unclear what BMPs would be used to prevent the release of such pollutants and how the project would meet NPDES (National Pollution Discharge Elimination System) standards and the requirements of the City's Standard Urban Storm Mitigation Plan.

f. Mitigation Measure 4.8-6 J should specify that all trash cans installed on the project site would be animal- (non-human) proof. The proposal to provide trash cans with lids is not enough of a deterrent to scavenging animals.

g. Table 4.8-6 *Mitigation Required for Significant Impacts to Vegetation Communities and Land Cover Types – Port Lands (acres)* should include the following revisions.

   i. The mitigation ratio for disturbed seasonal pond (*e.g.*, classified as disturbed wetland per the City's MSCP) should be increased from 1:1 to 2:1 to be consistent with the City's MSCP Subarea Plan.

   ii. Impacts and mitigation for losses to non-native grassland and other raptor foraging habitat (*i.e.*, habitat in the Sweetwater District) should be included in the table consistent with the City's MSCP. The mitigation ration for losses to non-native grassland and other raptor foraging habitat is 0.5:1 if mitigated inside Preserve-designated land and 1:1 if mitigated outside preserve-designated land. As explained in Comment 29, mitigation for project-related losses of raptor foraging habitat should occur at a ratio of 1:1 away from the project site.

   iii. The acreage of permanent impacts to southern coastal salt marsh during Phase II should be increased from 0.04 to 0.10 to be consistent with the text on page 4.8–75 of the DEIR. The acreage of mitigation provided for

this impact should be appropriately revised to 0.4 acre, as written under Mitigation Measure 4.8-9.

h. Mitigation Measure 4.8-9 should be revised to include mitigation for loss of non-native grassland, disturbed habitat that is raptor foraging habitat (*i.e.*, Sweetwater District), and coastal sage scrub in Phase III.

i. Mitigation Measure 4.8-11 and Table 4.8-9 should be revised to indicate that impacts to Corps jurisdictional waters should be mitigated at a 2:1 ratio to be consistent with the City's MSCP.

85. The DEIR identifies temporary impacts that the project would have on sensitive habitats within the project footprint and indicates that all temporary impacts would be mitigated at 1:1. This is inconsistent with the guidelines established by the City's MSCP Subarea Plan, which requires the same mitigation for temporary and permanent impacts. Therefore, the recirculated/final EIR should account for appropriate temporary impact mitigation according to the mitigation ratios listed in Tables 5-3 and 5-6 of the MSCP Subarea Plan.

86. The recirculated/final EIR should include a map that clearly depicts: a) the jurisdictional boundaries before and after the land exchange; b) vegetation communities within both areas; and c) sensitive species points that are present in both the Port and City's jurisdictions after the land exchange. This will allow a determination of the Proposed Project's effects on habitats and species within each jurisdiction. This information will also be necessary to process the required amendment to the City's MSCP Subarea Plan and incidental take permit.

Growth Inducement

84. The Growth Inducement discussion in the DEIR focuses on the economic effects of the Proposed Project, but ignores the significant effects to the environment that could result from growth in the surrounding area, that is, growth that is related to redevelopment of the subject property. The recirculated/final EIR should expand this section to address the significant effects on the environment, both individually and cumulatively, from growth stimulated by the subject project (*i.e.,* growth that would likely not occur but for the approval and implementation of the Chula Vista Bayfront Master Plan). An evaluation of the effects on air and water quality as a result of this new growth should be provided, as well as a discussion of the potential for even greater impacts (*e.g.*, night lighting, human and pet intrusion, increased noise levels) than the Proposed Project alone would cause to nearby sensitive biological resources.

Mitigation Measure

85. Impacts associated with the growth-inducing effects of project implementation could be reduced if the appropriate planning documents that regulate development in the areas immediately surrounding the project are amended to include specific development and design criteria for new development. Such criteria would include: restrictions on lighted signage; requirements for fully shielded street and other outdoor lights; restrictions on uses that could generate excessive noise impacts, particularly at night; building design standards that address height, lighting, and window design; and requirements for adequately sized open space and public recreation areas to accommodate new residents and their pets.

Unavoidable and Irreversible Significant Environmental Effects

86. The Wildlife Agencies do not agree that implementation of the mitigation measures identified in the DEIR would reduce the impacts to biological resources to a level less than significant. Therefore, this section in the recirculated/final EIR should discuss the unavoidable and irreversible effects that implementation of the Proposed Project would have on the sensitive coastal resources that occur within and adjacent to the project boundaries.

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Response to Comment B-1

This comment is an introductory comment indicating that the U.S. Fish and Wildlife Service (USFWS) is providing comments on the Draft EIR for the proposed project. Additionally, the comment also states USFWS's legal responsibility and that it owns and operates the National Wildlife Refuge (NWR). The comment also summarizes the proposed project.

The District appreciates USFWS's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA. The specific comments raised in the pages that follow this introduction are listed separately along with the District's individual responses.

Response to Comment B-2

This comment identifies the previous comments provided to the District by USFWS, which includes comments on the Notice of Preparation (NOP) for the Draft EIR, as well as recommendations for fireworks display events in San Diego Bay. The comment also states that the Draft EIR addresses some past comments, but indicates that many are not adequately addressed.

The specific responses to these letters are provided in responses to comments B-24 through B-49 below. No specific environmental issues are raised in this comment, so no further response is warranted.

Response to Comment B-3

This comment states that USFWS has been involved in past fireworks display events to develop minimization measures for federally listed species. The comment also indicates that USFWS suggested in a letter dated May 9, 2016 that fireworks display events be excluded in south San Diego Bay during the nesting season.

The specific responses to this letter are provided in responses to comments B-24 through B-40 below. No specific environmental issues are raised in this comment, so no further response is needed.

Response to Comment B-4

The comment states USFWS's concerns that fireworks display events in south San Diego Bay will result in impacts on nesting, roosting, rafting, and foraging seabirds, shorebirds, and waterfowl. The comment specifically identifies that fireworks noise, light, and vibration, as well as a significant increase in spectators, may result in direct and indirect effects on avian species present in south San Diego Bay and the San Diego Bay NWR. The comment recommends that fireworks display events do not occur in the vicinity of the Chula Vista Bayfront, and that the District consider an alternative that would not introduce nighttime lighting near the NWR.

The environmental impacts of the proposed project are fully disclosed in the Draft EIR. The Draft EIR considered the potential direct and indirect effects of the proposed new fireworks display events on biological resources, including sensitive species, habitat, and native wildlife nursery sites, which included impacts associated with fireworks noise, light, and vibration, as well as trash and debris from the fireworks themselves. The potential indirect effects analyzed included human-generated trash and debris, human trespass within or adjacent to sensitive areas and wetlands, and increased boat traffic. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, all

potentially significant impacts would be reduced to a less than significant level with the implementation of mitigation measures.

Regarding the commenter's recommendation to consider an alternative that will not introduce nighttime fireworks in the vicinity of the NWR, the No Project Alternative (as described in Chapter 7, *Alternatives to the Proposed Project*), would meet this recommendation. The No Project Alternative was one of three alternatives considered and selected for detailed analysis in the Draft EIR. Under the No Project Alternative, the proposed new fireworks display events along the National City and Chula Vista Bayfronts would not occur. As a result, no nighttime fireworks would be introduced in the vicinity of the NWR or any other sensitive habitat or species within south San Diego Bay. No changes to the Final EIR are required.

Response to Comment B-5

This comment states that the description of the proposed barge location for the National City Bayfront fireworks display event is inconsistent with Figure 2-1. The comment states that the text of the Draft EIR implies that the barge for this display would be located in the Sweetwater River channel.

The commenter is correct in stating that the proposed barge location for the National City Bayfront fireworks display event would be well north of Pepper Park, where there would be little to no public access to the waterfront. Pepper Park is the closest publicly accessible space that could potentially have a partial view of this fireworks display event. As depicted on Figure 2-1, the proposed barge is located in the middle of the Bay and not within the Sweetwater River channel. Chapter 2, *Environmental Setting*, has been revised to further clarify the location of the proposed barge for the National City Bayfront fireworks display event. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

The comment identifies concerns with potential impacts on least terns from fireworks launch sites. The potential impacts on the California least tern are detailed within Section 4.3, *Biological Resources*, of the Draft EIR.

Additionally, the commenter is correct that Chapter 2 does not address the potential for the new sites to include pier areas. As indicated in Chapter 3, *Project Description*, of the Draft EIR, the proposed new fireworks display events are anticipated to be launched from barges within San Diego Bay. Section 4.3, *Biological Resources*, of the Draft EIR has been revised to clarify that the proposed new fireworks display event is anticipated to occur on barges only. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR. As pier areas are not being used (as clarified in the Errata), the Draft EIR does not require recirculation.

Response to Comment B-6

The comment indicates that the proposed barge location for the Chula Vista Bayfront fireworks display events appears to be located within the NWR based on Figure 2-1. The comment states that any fireworks display event within the NWR would require a Special Use Permit from USFWS and compliance with NEPA. The comment indicates that additional discussion regarding this issue is to follow.

In response to USFWS's concerns regarding the barge for the proposed Chula Vista Bayfront fireworks display events being located within the NWR, the barge for these fireworks display events

has been relocated outside of the NWR. Specifically, the relocated barge has been positioned outside of the eastern boundary of the Refuge, in the middle of the Bay. Accordingly, the revised location for the Chula Vista Bayfront fireworks display events has been updated in Figure 2-1. The relocated barge site for the proposed Chula Vista Bayfront fireworks display event would still maintain a minimum 1-mile distance from least tern and snowy plover nesting colonies, and therefore would not result in any changes to the impact analysis. In addition, because the relocated barge site would be positioned in deeper open water, the potential for eelgrass impacts is reduced from what was originally proposed. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-7

The comment suggests that the habitat information provided in Figure 4.3-1 is incomplete and should be updated to show additional salt marsh, as well as the D Street Fill and South Bay Salt Works levees, which should be shown as supporting seabird and shorebird nesting habitat.

Figure 4.3-1 has been updated as suggested to include additional habitat. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-8

The comment suggests that the habitat information provided in Figure 4.3-2 is incomplete and should be updated to include snowy plover habitat at Silver Strand State Beach and the Navy's proposed alternate least tern nesting site at Naval Air Station North Island. The comment also states that the "Sensitive Nesting Area 1 Mile" will need to be adjusted to reflect this new habitat.

Figure 4.3-2 has been updated as suggested to include snowy plover habitat at Silver Strand State Beach and the 1-mile buffer has been revised accordingly. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-9

The comment states that the discussion of San Diego Bay's subtidal vegetated habitat should also address the importance of this habitat to the Bay's population of eastern Pacific green sea turtles.

Section 4.3, *Biological Resources*, of the Draft EIR has been updated to identify that eelgrass beds are considered an important foraging resource for the resident population of eastern Pacific green sea turtles, a threatened species under the Endangered Species Act. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-10

This comment suggests that the discussion of upland transition and upland areas be expanded to recognize seabird nesting areas in proximity to the proposed new fireworks displays, including the D Street Fill and levees of the South Bay Salt Works. The comment states that the effects on nesting birds within these areas should be evaluated.

The effects on nesting birds within these areas is evaluated in Section 4.3, *Biological Resources*, of the Draft EIR. Section 4.3 has been updated to recognize seabird nesting areas within the South Bay Salt Works, on the D Street Fill, and on portions of the Chula Vista Wildlife Reserve Island. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-11

The comment states that the South Bay Salt Ponds are part of the NWR and not a separate area.

Section 4.3, *Biological Resources*, of the Draft EIR has been updated as suggested to clarify that the South Bay Salt Ponds are part of the NWR. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-12

The comment states that the South Bay Salt Works levees and Pond 11 are managed by USFWS, not the District.

Section 4.3, *Biological Resources*, of the Draft EIR has been updated as suggested to clarify that the South Bay Salt Works levees and Pond 11 are managed by USFWS, rather than the District. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-13

The comment states that Table 4.3-2 inaccurately states that eastern Pacific green sea turtles have a low potential to occur in San Diego Bay. In addition, the comment states that northern harriers have a high potential to occur south San Diego Bay.

Table 4.3-2 has been updated as suggested to indicate that eastern Pacific green sea turtles and northern harrier have a high potential to occur. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-14

The comment indicates that the barge location for the proposed Chula Vista Bayfront fireworks display events appears to be located within the boundaries of the NWR, and suggests that the discussion of applicable laws and regulations in the Draft EIR be expanded to address Federal regulations related to uses on a NWR.

Please see response to comment B-6. The barge for the proposed Chula Vista Bayfront fireworks display events has been relocated outside of the NWR. Moreover, Section 4.3, *Biological Resources*, of the Draft EIR has been updated to include a discussion of the applicable Federal regulations related to uses on a NWR, including National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvements Act of 1997, as well as the National Environmental Policy Act. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-15

The comment summarizes the requirements of the National Wildlife Refuge System Improvements Act and USFWS's Appropriate Use Policy. The comment further states that, under the authority of the National Wildlife Refuge System Improvements Act, fireworks displays conducted on a NWR would not represent an appropriate or compatible use of NWR lands. The commenter further indicates that a Refuge Special Use Permit to allow such events could not be issued.

Please see response to comment B-6. The barge for the proposed Chula Vista Bayfront fireworks display events has been relocated outside of the NWR based on guidance from USFWS. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-16

The comment states that the discussion of impacts on birds and listed species should be expanded if there is a potential for a barge to be sited within the Sweetwater River channel near Pepper Park or if the proposed new fireworks display events would be located anywhere other than where they are currently identified on Figure 2-1.

Please see responses to comments B-5 and B-6. No barges are proposed to be sited anywhere within the Sweetwater River channel. Therefore, an expanded discussion of impacts on birds and other listed species is not required. As indicated in earlier responses, the barge for the proposed Chula Vista Bayfront fireworks display events has been relocated outside of the NWR based on guidance from USFWS. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment B-17

The comment states that the proposed mitigation measures to minimize indirect impacts related to human disturbance on nesting areas is inadequate because they only address public viewing areas. Areas that may be impacted by unauthorized access are the open water areas and other areas not open to the public. The comment also states the USFWS opinion that the proposed mitigation to minimize human impacts on nesting areas is inadequate specifically regarding unauthorized access.

In response to this comment the District has revised the mitigation measure MM-BIO-2 and the proposed ordinance to include requirements for events in the South Bay to hire private security to patrol the water area and enforce the existing restrictions on access to unauthorized areas as follows:

(e) Protection of Species and Habitat. The following conditions shall apply to fireworks display events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies:

3. Security. For fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one-half mile of unprotected (i.e., unfenced) federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall provide a minimum of two professional security guards to direct persons away from and to discourage trespass into sensitive nesting areas or habitat during such displays.

   <u>In addition, the fireworks organizer shall provide security patrols of the water area to enforce the existing restrictions on access to unauthorized areas during such fireworks display events in the South Bay.</u>

Response to Comment B-18

The comment indicates that no monitoring is currently proposed to determine if the measures included in the Draft EIR are being implemented and or are effective in avoiding and minimizing impacts on nesting least terns, snowy plovers, and rails. The comment suggests that monitoring

should be included to assess the initial response and overall effects on nesting success on these species. The comment states that additional assurance is needed to ensure that avoidance and minimization are effectively implemented as described in the Draft EIR.

Section 4.3, *Biological Resources*, of the Draft EIR has been updated to include a clarifying mitigation measure (MM-BIO-4) that would require biological monitoring and reporting for the proposed new fireworks display events in south San Diego Bay. It should be noted that all potentially significant impacts on biological resources were determined in the Draft EIR to be less than significant with the implementation of mitigation measures. The addition of the biological monitoring mitigation measure as suggested by USFWS and CDFW would not result in any changes to the determinations made in the Draft EIR. Changes to mitigation are included in Chapter 3, *Errata and Revisions*, of the Final EIR and are reflected in the project's Mitigation Monitoring and Reporting Program (MMRP).

In addition, Section 7 (o) has been added to the proposed ordinance as follows and shown in Chapter 3, *Errata and Revisions*, of the Final EIR:

(o) Mitigation Measures: All permit applications shall be reviewed by the District for consistency with the Mitigation Monitoring and Reporting Program (MMRP) from the Final Environmental Impact Report for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project, as certified by the Board of Port Commissioners, and all applicable mitigation measures from the MMRP shall be identified as required conditions of the approved permit issued by the District.

Response to Comment B-19

The comment suggests that the Draft EIR should distinguish between the ambient nighttime disturbance levels at nesting sites in north San Diego Bay and the Refuge under baseline conditions.

Section 4.3, *Biological Resources*, of the Draft EIR has been updated as suggested to distinguish between the existing ambient nighttime disturbance levels at nesting sites in north San Diego Bay and the Refuge. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR. The revisions to Section 4.3 do not result in changes to the conclusions of impacts and mitigation measures as identified in the EIR.

Response to Comment B-20

The comment identifies the previous fireworks monitoring efforts that were discussed in Appendix F, Biological Technical Report, of the Draft EIR. The comment repeats the conclusion in Appendix F that the level of stress generated from the fireworks translate to a level achieving harassment or harm for avian species. The comment states that this conclusion is not consistent with the results of the Gualala Point study, and cites the malfunction that occurred during the 2012 Big Bay Boom. The comment acknowledges that it is difficult to quantify the number and extent of impacts, but states that USFWS remains concerned about potential effects. The comment states the difference in ambient nighttime disturbances between the Refuge and San Diego International Airport and Naval Base Coronado. The comment further states that USFWS anticipates avian response to be greater at the Refuge because of these differences.

The discussion of fireworks disturbance to nesting birds has included a broad survey of available information with a range of avian response to fireworks shows that range from nest abandonment to temporary disturbance without lasting effects. This summary of available case studies was

provided and utilized in Appendix F, Biological Technical Report (BTR) of the Draft EIR in order to frame the discussion on impact scale anticipated within San Diego Bay and make a determination as to the anticipated nature and degree of effect the San Diego Bay fireworks shows would have on sensitive nesting species. The commenter notes that Appendix F identified differing degrees of avian response from differing fireworks events and that its conclusions appear to be inconsistent with the study at Gualala Point, as well as observations reported by Robert Patton at the San Diego Airport colony during the malfunction detonation of all fireworks simultaneously during 2012. However, in these instances, the circumstances differed substantively from the proposed fireworks activities. In the first, as reported in the BTR, both the circumstances of the colony site and the bird species involve were substantively different from the activities proposed for San Diego Bay. In the second instance, the fireworks disturbance was the result of an anomalous malfunction resulting in a 30-second continuous detonation rather than an extended fireworks show with lower illumination and noise levels over a more prolonged period. For these reasons, it is believed that the best indication of avian response to the fireworks shows in San Diego Bay are derived from the results from monitoring during prior events within the Bay with normal detonation sequencing and frequencies. We concur with the commenter's note that the ambient conditions at the nest sites vary through the Bay with the Refuge and other South Bay colonies having lower overall disturbance levels and thus it would be expected that birds on these nest sites would be less habituated to disturbance (see response to B-19). This was noted in the BTR. The proposed ordinance integrates conditions requiring that launch sites be located at least 1 mile from nest colony sites or that shells be reduced to no more than 8-inch diameter in order to control the experienced scale of the show at sensitive species nest sites. In addition, as previously stated, measures have been integrated into the proposed ordinance to control secondary disturbance of public access on sensitive nest areas. With these measures, it is anticipated that the distance from nest sites of plovers and terns and the scale of the new fireworks display event would be adequately controlled to remain similar in effect to those that have been occurring in the north Bay.

Response to Comment B-21

The comment suggests that the Draft EIR should include conservation measures similar to those previously provided by the USFWS's Carlsbad Office to avoid and minimize impacts on sensitive wildlife, such as nesting least terns and snowy plovers. The comment also lists the specific conservation measures that were previously provided by USFWS.

The recommended conservation measures were previously provided by USFWS in a comment letter on the NOP for the proposed project on October 6, 2015. The District considered USFWS's previously recommended conservation measures when preparing the Draft EIR. As detailed in Section 4.3, *Biological Resources*, of the Draft EIR, all potentially significant biological resources impacts would be less than significant with the implementation of mitigation. As originally proposed in Chapter 3, *Project Description*, of the Draft EIR, the proposed barge locations for both the National City and Chula Vista Bayfront fireworks display events were located a minimum of 1 mile from sensitive nesting colonies. The barge for the proposed Chula Vista Bayfront fireworks display events has been relocated outside of the NWR as suggested by USFWS. As shown on Figure 4.3-1, which has been revised to reflect the relocated barge for the Chula Vista Bayfront fireworks display events, both launch sites for the proposed new fireworks display events are located a minimum of 1 mile from the closest sensitive nesting colonies.

Regarding recommended conservation measure (2), mitigation measure MM-BIO-2 requires the provision of security guards to direct persons away from and to discourage trespass into sensitive

nesting areas or habitat during the proposed new fireworks display events. As discussed in Section 4.3, the Harbor Police Department (HPD) currently assigns units to major patrol areas and deploys additional units on tidelands including bicycle and vessel units during existing fireworks display events (Brick pers. comm.). The landside patrols provide law enforcement within the landside viewing areas, while the special patrol vessels provide law enforcement on the water. Consistent with its current operational practices, HPD would continue to deploy special patrol vessels and conduct in-water law enforcement during fireworks display events. These existing procedures ensure that boating laws are properly enforced in the Bay. The District staff will continue to coordinate with HPD and U.S. Coast Guard, who are responsible for lawful boating practices in the Bay. In addition, MM-BIO-2 in Section 4.3 of the Draft EIR has been updated to include clarifying language to augment landside security patrols with in-water security patrols. This clarifying language is consistent with the analysis provided in the Draft EIR and current best practices. This clarifying language is included in Chapter 3, *Errata and Revisions*, of the Final EIR and is reflected in the project's MMRP.

Regarding recommended conservation measure (3), the maximum shell size allowed for the proposed new displays would be limited to 8 inches, as detailed in Chapter 3, *Project Description*, of the Draft EIR. This represents a reduction of 2 inches from other Fourth of July fireworks display events such as the Big Bay Boom. The 8-inch maximum shell size is consistent with the Fourth of July Imperial Beach Fireworks Show, as discussed in USFWS's letter dated May 6, 2016. In addition, mitigation measure MM-NOI-1 as described in Section 4.8, *Noise and Vibration*, requires that the maximum shell size is limited to 8 inches for any fireworks display event located within 1 mile of sensitive nesting colonies. This would further ensure that noise levels are reduced around sensitive nesting colonies.

Regarding recommended conservation measures (4) and (5), Section 4.3, *Biological Resources*, of the Draft EIR has been updated to include a clarifying mitigation measure (MM-BIO-4) that provides additional assurance that biological impacts would remain less than significant by requiring biological monitoring and reporting specific to the proposed new fireworks display events along the National City and Chula Vista Bayfronts. This measure is provided to ensure the fireworks are carried out as described in Chapter 3, *Project Description*, of the Draft EIR, and to account for any needed adjustments to continue to avoid and minimize impacts on biological resources. This clarifying mitigation measure is included in Chapter 3, *Errata and Revisions*, of the Final EIR and is reflected in the project's MMRP.

Response to Comment B-22

The comment states that the Draft EIR should discuss the occurrence and location of rafting bird species during the non-breeding season, footprint of increased boat traffic, and the potential impacts of increased boat traffic on rafting birds in south San Diego Bay. The comment also states that minimization measures should be identified to reduce the impacts of increased boat traffic on rafting birds.

Section 4.3, *Biological Resources*, of the Draft EIR has been updated to describe the rafting bird use of the Bay and to analyze project effects on this resource in more detail. The concerns over increased boat traffic impacts on nesting and roosting birds was discussed in the BTR and Draft EIR, however there was not a focus on loafing and rafting birds. The effects of increased boat traffic and fireworks displays on rafting birds are considered to be less than significant, causing temporary displacement over short periods of time within areas that are centered around launch barges. This effect is

substantially curtailed outside of the winter migratory period due to an overall reduction in the number of birds rafting on the waters. Additionally, south San Diego Bay has a posted 5 miles per hour speed limit. Further, because rafting tends to be highest in waters of protected leeward environments or extreme shallows, and vessel traffic and activities would be expected to be aggregated around launch barges that are proposed to be located further from shore or in areas of existing high traffic as a result of nesting colony buffering distances and established show locations, the highest density loafing areas would likely see little increase in vessel traffic disturbance.

Response to Comment B-23

This comment concludes the comment letter and provides a contact name and information.

The District appreciates USFWS's interest in the proposed project. This comment does not raise any issues needing a response pursuant to CEQA.

Response to Comment B-24

This comment is an introductory comment stating that the comment letter is being provided in response to the District's request for guidance from USFWS to reduce the potential effects on biological resources from the Big Bay Boom and Fourth of July Imperial Beach Fireworks Show on July 4, 2016. The comment also notes that USFWS previously provided comments on the NOP for the proposed project in a letter dates October 6, 2015.

Please refer to responses B-41 through B-49 regarding comments on the NOP on the Draft Environmental Impact Report in the letter dated October 6, 2015.

Response to Comment B-25

The comment states that USFWS is pleased that no fireworks display events are proposed at the Chula Vista Bayfront or Loews Coronado Resort for 2016 due to their proximity to sensitive wildlife. The comment also recommends that no future fireworks displays occur in these areas in the future during the nesting season.

This comment was based on anticipated Fourth of July fireworks display events for 2016. As discussed in Chapter 3, *Project Description*, of the Draft EIR, the proposed project includes three proposed new fireworks display events in San Diego Bay adjacent to the Chula Vista Bayfront, including one display on the Fourth of July. As identified in Section 4.3, *Biological Resources*, of the Draft EIR, the Draft EIR and the proposed ordinance include measures to reduce impacts on avian species during the nesting season to less than significant. The recommendation to exclude future fireworks display events in the nesting season adjacent to the Chula Vista Bayfront or Loews Coronado Resort would be considered by the Board of Port Commissioners when it makes its decision on whether or not to certify the Draft EIR.

Response to Comment B-26

The comment states the 2016 Big Bay Boom and Imperial Beach fireworks shows will occur in the same locations as previous shows. The comment states that the shells launched from the barges will be a maximum of 10-inches, and the shells launched from the Imperial Beach Pier will be a maximum of 8 inches.

This comment repeats the characteristics of the 2016 Big Bay Boom and Fourth of July Imperial Beach Fireworks Show. The comment does not raise specific issues related to the adequacy of the environmental analysis in the EIR; therefore, no additional response is required.

Response to Comment B-27

The comment states that USFWS's primary concern with fireworks shows is the potential impact on wildlife from fireworks, spectators, and introduction of chemicals and debris into the water. Numerous bird species are located in the vicinity of the fireworks show.

The potential impacts on wildlife associated with fireworks display events are discussed in Section 4.3, *Biological Resources*, of the Draft EIR, including potential impacts on the bird species referred to in the comment.

Response to Comment B-28

The comment states USFWS's concerns that birds in areas close to fireworks shows are likely exposed to noises, vibrations, and light that may disrupt normal breeding and roosting behavior. Several impacts on avian species were discussed including flushing from nests, abandonment, parental attendance, illumination and disturbance may expose habitat. Impacts from spectators of shows was also discussed.

The comment expresses specific concerns that were raised in USFWS's October 6, 2015 letter, which was submitted before preparation of the Draft EIR. These concerns were addressed in Section 4.3, *Biological Resources*, of the Draft EIR.

Response to Comment B-29

The comment states that least tern nests at the San Diego International Airport and Naval Air Station, North Island are located about 1 mile from the Bay launch site. The least tern also nests at the mouth of the Tijuana River about 1.5 south of the Imperial Beach Pier launch site. The snowy plover nests on the beaches to the north and south of the Imperial Beach Pier. The rail occupies the Oneonta Slough, which is about 0.5 mile south of the Imperial Beach Pier launch site.

The comment expresses specific concerns that were raised in USFWS's October 6, 2015 letter, which was submitted before preparation of the Draft EIR. These concerns were addressed in Section 4.3, *Biological Resources*, of the Draft EIR.

Response to Comment B-30

This comment refers to USFWS's October 6, 2015 letter, which recommended several conservation measures for fireworks shows to avoid or minimize impacts on least terns and snowy plovers. The comments states that USFWS appreciates the District's minimization measures and offered comments and suggestions to further reduce potential impacts on the snowy plovers, least terns, and rails.

The comment refers to measures that the District implemented for the 2016 Big Bay Boom Fireworks Display Event. The mitigation measures for the proposed new fireworks display events are identified in Section 4.3, *Biological Resources*, of the Draft EIR.

Response to Comment B-31

The comment refers to measures that the District implemented for the 2016 Big Bay Boom Fireworks Display Event. The mitigation measures for the proposed new fireworks display events are identified in Section 4.3, *Biological Resources*, of the Draft EIR. This comment expresses concern regarding the potential impacts of the Big Bay Boom and Imperial Beach fireworks displays on active least tern nesting sites.

The Big Bay Boom and Imperial Beach fireworks displays are existing events that have occurred annual for many years. As such, they are part of the physical conditions that existed at the time the District commenced preparation of the Draft EIR and are identified in the Draft EIR as part of the environmental setting for the proposed project, not part of the proposed project itself (Draft EIR, Ch. 2, Environmental Setting, pp. 2-5–2-8). CEQA does not require a lead agency to evaluate the potential impacts of existing conditions or to provide mitigation measures for existing environmental conditions. Although not subject to CEQA review, existing fireworks display events like the Big Bay Boom and the Imperial Beach events will be subject to the terms and conditions of the proposed ordinance. Accordingly, no further response is warranted.

Response to Comment B-32

This comment recommends measures to reduce potential impacts on biological resources that may result from the Big Bay Boom and the Imperial Beach fireworks display events. Please see response to comment B-31 above. Although not required by CEQA, the proposed ordinance includes conditions of approval concerning distance of launch sites from sensitive avian species, as well as security and educational measures to minimize trespass into sensitive habitat and disturbance of nesting colonies. The proposed ordinance does not include a condition requiring closure of parking lots because it would conflict with the public access requirements of the California Coastal Act and may inadvertently result in increased trespass related impacts.

Response to Comment B-33

This comment recommends measures to reduce impacts from spectator foot traffic on snowy plover nests on beaches near the Imperial Beach Pier. Please see responses to comments B-31 and B-32 above.

Response to Comment B-34

This comment expresses concern regarding potential impacts of the Imperial Beach fireworks display event on active rail nests in the Oneonta Slough. Please see responses to comments B-31 and B-32 above.

Response to Comment B-35

This comment recommends the District implement security and trash management measures to reduce potential impacts of the Imperial Beach fireworks display event on active rail nests in the Tijuana Slough and at the south end of Sea Coast Drive. Please see responses to comments B-31 and B-32 above.

Response to Comment B-36

This comment describes the benefits of biological monitoring and recommends monitoring least terns and snowy plovers, but does not recommend monitoring of rails due to the potential for disturbance associated with monitoring. The Draft EIR will be revised to include a mitigation measure requiring monitoring with respect to the proposed new fireworks display events (MM-BIO-4). With respect to monitoring of existing fireworks display events, please see responses to comments B-31 and B-32 above.

Response to Comment B-37

This comment recommends a monitoring program for the potential impacts of the Big Bay Boom fireworks display event on the least tern colony at San Diego International Airport. Please see responses to comments B-31 and B-32 above.

Response to Comment B-38

This comment recommends monitoring the least tern colony at the NWR for potential impacts resulting from the Imperial Beach fireworks display event. Please see responses to comments B-31 and B-32 above.

Response to Comment B-39

This comment recommends monitoring of snowy plover nests or broods within 1.5 miles of the launch site for potential impacts resulting from the Imperial Beach fireworks display event. Please see responses to comments B-31 and B-32 above.

Response to Comment B-40

This comment states the author's appreciation for the opportunity to provide recommendations to reduce potential impacts on sensitive wildlife from the Big Bay Boom and Imperial Beach fireworks display events, and requests the District provide a response to the recommendations and a draft monitoring plan by a specified date. Please see responses to comments B-31 and B-32 above.

Response to Comment B-41

This comment indicates that USFWS has reviewed the NOP and Draft EIR for the proposed project. The primary concern and mandate of USFWS is the protection of public fish and wildlife resources and their habitats. This comment states that USFWS appreciates the Districts' efforts to address the cumulative impacts of multiple fireworks displays in the proposed Draft EIR and offers comments and recommendations to assist the District in identifying, avoiding, minimizing, and mitigating direct and indirect project related impacts.

The District appreciates USFWS's interest in the proposed project. This comment does not raise any specific issues requiring a response pursuant to CEQA. The specific comments raised in the pages that follow this introduction are listed separately along with the District's individual responses.

Response to Comment B-42

This comment indicates that the San Diego Bay and Imperial Beach Oceanfront support resident and migratory sea birds, shore birds, passerines, endangered bird species, sea turtles, fish and marine mammals. This comment states that USFWS requests that the Draft EIR include a thorough review of the available literature pertaining to the potential or documented impacts of fireworks displays or similar punctuated disturbances on wildlife.

The Draft EIR includes an in-depth discussion of numerous existing studies that analyzed the effects of fireworks on wildlife, such as migratory sea birds, shore birds, passerines, endangered bird species, sea turtles, fish and marine mammals. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, an extensive literature review was completed with a focus on effects of fireworks in coastal areas outside of the San Diego region, and the effects of pyrotechnics and loud sounds, in general, on marine resources. The environmental impacts of the project are fully disclosed and any significant adverse impacts on biological resources would be mitigated to less than significant in the Draft EIR. No changes to the Final EIR are required.

Response to Comment B-43

This comment states that USFWS requests that the Draft EIR include the following:

- Figure that depicts the precise location of existing and future proposed launch sites.
- Figure depicting the located of sensitive resource use areas within the vicinity of proposed launch sites
- Figure that depicts the location and abundance of rare, endangered, and other sensitive species that occur in the vicinity of proposed launch sites
- Information regarding the abundance and distribution of water birds that use San Diego Bay, Tijuana Estuary, and Imperial Beach

The proposed launch sites for the fireworks display events are provided on Figure 3-1 in Chapter 3, *Project Description*, of the Draft EIR. The general biological habitats, sensitive habitats, wetlands, and locations of sensitive species of the Bay and Imperial Beach Oceanfront are mapped on Figures 4.3-1 and 4.3-2 of Section 4.3, *Biological Resources*, of the Draft EIR. Figure 4.3-2 specifically depicts the locations of habitat protection areas, marine mammal haul-out areas, sensitive habitats such as eelgrass and coastal salt marsh, and sensitive nesting areas for light-footed Ridgway's rail, Belding's Savannah sparrow, Western snowy plover, and California least tern, as well as a 1-mile buffer around these sensitive nesting areas. The locations of each of these sensitive habitats, wetlands, and sensitive species are mapped in relation to the barge locations for both existing and proposed new fireworks display events. Information regarding the abundance and distribution of water birds within the San Diego Bay is provided on Figure 4.3-2 and discussed in Section 4.3 of the Draft EIR.

Response to Comment B-44

This comment requests that the EIR include detailed information regarding the number, location and duration of baseline events that have occurred in recent years, and the number, location and duration of additional proposed events (events permitted by the District, but have not yet occurred).

As discussed in Chapter 2, *Environmental Setting*, of the Draft EIR, a number of existing fireworks display events occur year-round in and around San Diego Bay and the Pacific Ocean near Imperial

Beach. A list of these fireworks display events, and a description of their operational characteristics, is provided in Tables 2-1 and 2-2 respectively. Chapter 3, *Project Description*, of the Draft EIR provides a detailed project description of the four proposed new fireworks display events would be located adjacent to the National City and Chula Vista Bayfronts.

Response to Comment B-45

This comment requests an analysis of the intensity and extent of light, sound, vibration, and debris/fallout anticipated as a result of the fireworks displays, based on the size and number of fireworks shells that will be used. The analysis of the effects should include an assessment of the areas where light, sound, vibration, and debris are expected to have a direct impact on wildlife.

The Draft EIR included an in-depth discussion of numerous existing studies that analyzed the effects of fireworks on wildlife, including birds and marine mammals. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, an extensive literature review was completed with a focus on effects of fireworks in coastal areas outside of the San Diego region, and the effects of pyrotechnics and loud sounds, in general, on marine resources. In addition, the impact analysis made use of existing biological information for San Diego Bay, including the San Diego Bay Integrated Natural Resources Management Plan prepared by the U.S. Navy in conjunction with the District. Furthermore, general information was drawn from surveys of the nearshore environment near Imperial Beach Pier, particularly from the 2011–2012 benthic habitat mapping for the U.S. Navy's Silver Strand Training Complex Boat Lanes (Merkel & Associates, Inc. 2011a, 2012), surveys performed offshore of the Imperial Beach Pier for nearshore beach nourishment (Merkel & Associates, Inc. 2011b), nearshore habitat mapping performed by San Diego Association of Governments (SANDAG 2002; Merkel & Associates, Inc. et al. 2004), studies completed for the Naval Base Coronado Naval Outlying Field in Imperial Beach (Tierra Data 2011; Merkel & Associates, Inc. 2014a), and beach monitoring performed in association with the regional beach nourishment program (Merkel & Associates, Inc. 2014b). The results of these studies and surveys were incorporated into the impact analysis and were used to determine potential impacts related to the proposed project. The environmental impacts of the project are fully disclosed and any significant adverse impacts on biological resources would be mitigated to less than significant in the Draft EIR. No changes to the Final EIR are required.

Response to Comment B-46

This comment requests that the Draft EIR include an analysis of the potential indirect effects of the fireworks displays on wildlife resources including impacts from spectators, changes in water quality associated with debris or fallout from fireworks.

Section 4.3, *Biological Resources*, and Section 4.6, *Hydrology and Water Quality*, of the Draft EIR included an in-depth discussion of indirect effects of the fireworks displays on wildlife resources including impacts from spectators as well as changes in water quality associated with debris or fallout from fireworks. No changes to the Final EIR are required.

Response to Comment B-47

This comment indicates that the Fish and Wildlife Office has previously recommended that no fireworks displays occur within the Chula Vista Bayfront during the avian breeding season due to the close proximity of sensitive wildlife resources. USFWS has recommended that fireworks displays

be minimized at Loews Coronado Resort during avian breeding season due to sensitive habitat at Silver Strand Beach and Naval Base Coronado.

The proposed project includes four new fireworks display events in San Diego Bay adjacent to the National City and Chula Vista Bayfronts. Section 4.3, *Biological Resources*, of the Draft EIR provides an in depth discussion of the existing habitats and wildlife of the Bay and identifies the specific sensitive habitats and species in the vicinity of the proposed locations for the new fireworks display events. The Draft EIR determined that any potential impacts on wildlife resources would be reduced below significance with the implementation of the proposed mitigation measure identified in Section 4.3 of the Draft EIR. All firework display events that will occur along the Chula Vista Bayfront would be required to comply with the Chula Vista Bayfront Master Plan Settlement Agreement dated May 20, 2010.

For that reason the proposed project recommends allowing fireworks display events along the Chula Vista Bayfront within the avian breeding season. The District believes that the mitigation measures identified in Section 4.3 of the Draft EIR, and the conditions of approval of the proposed ordinance would adequately protect sensitive species during the nesting season.

With regard to Loews Coronado, the District agrees with the comments recommendation to minimize fireworks displays at Loew's Coronado resort during the avian breeding season. Fireworks display events at Loews Coronado are not included in the EIR or the proposed ordinance as an existing show that requires a discretionary action or is anticipated to require a discretionary action by the District.

Response to Comment B-48

This comment indicates that the Draft EIR include conservation measures to avoid and minimize the potential impacts on sensitive wildlife. The Carlsbad Fish and Wildlife Office has previously recommended conservation measures be included to existing and ongoing fireworks displays to avoid or minimize potential impacts on nesting least terns and snowy plovers, including:

- Location of discharge site a minimum of 1 mile from nearest least tern or snowy plover nesting site;
- Delineation and law enforcement patrol of shoreline around least tern and snowy plover nesting area to prevent spectators from coming ashore or anchoring in eelgrass;
- Reduction in shell size to reduce the percussive vibrations associated with fireworks detonations;
- Development and implementation of a least tern and snowy plover monitoring approach approved by the Carlsbad Fish and Wildlife Office; and
- Development of a plan to mitigate negative impacts observed by the biologist.

These recommendations are addressed in response to comment B-21.

The recommended conservation measures were previously provided by USFWS in comment letter on the NOP for the proposed project on October 6, 2015. The District considered USFWS's previously recommended conservation measures when preparing the Draft EIR. As detailed in Section 4.3, *Biological Resources*, of the Draft EIR, all potentially significant biological resources impacts would be less than significant with the implementation of mitigation. As originally proposed in Chapter 3, *Project Description*, of the Draft EIR, the proposed barge locations for both the National

City and Chula Vista Bayfront fireworks display events were located a minimum of 1 mile from sensitive nesting colonies. The barge for the proposed Chula Vista Bayfront fireworks display events has been relocated outside of the NWR as suggested by USFWS. As shown on Figure 4.3-1, which has been revised to reflect the relocated barge for the Chula Vista Bayfront fireworks display events, both launch sites for the proposed new fireworks display events are located a minimum of 1 mile from the closest sensitive nesting colonies.

Regarding recommended conservation measure (2), mitigation measure MM-BIO-2 requires the provision of security guards to direct persons away from and to discourage trespass into sensitive nesting areas or habitat during the proposed new fireworks display events. As discussed in Section 4.3 of the Draft EIR, HPD currently assigns units to major patrol areas and deploys additional units on tidelands including bicycle and vessel units during existing fireworks display events (Brick pers. comm.). The landside patrols provide law enforcement within the landside viewing areas, while the special patrol vessels provide law enforcement on the water. Consistent with its current operational practices, HPD would continue to deploy special patrol vessels and conduct in-water law enforcement during fireworks display events. These existing procedures ensure that boating laws are properly enforced in the Bay. The District staff will continue to coordinate with HPD and U.S. Coast Guard, who are responsible for lawful boating practices in the Bay. In addition, MM-BIO-2 in Section 4.3 of the Draft EIR has been updated to include clarifying language to augment landside security patrols with in-water security patrols. This clarifying language is consistent with the analysis provided in the Draft EIR and current best practices. This clarifying language is included in Chapter 3, *Errata and Revisions*, of the Final EIR and is reflected in the project's MMRP.

Regarding recommended conservation measure (3), the maximum shell size allowed for the proposed new displays would be limited to 8 inches, as detailed in Chapter 3, *Project Description*, of the Draft EIR. This represents a reduction of 2 inches from other Fourth of July fireworks display events such as the Big Bay Boom. The 8-inch maximum shell size is consistent with the Fourth of July Imperial Beach Fireworks Show, as discussed in USFWS's letter dated May 6, 2016. In addition, mitigation measure MM-NOI-1 as described in Section 4.8, *Noise and Vibration*, requires that the maximum shell size is limited to 8 inches for any fireworks display event located within 1 mile of sensitive nesting colonies. This would further ensure that noise levels are reduced around sensitive nesting colonies.

Regarding recommended conservation measures (4) and (5), Section 4.3 of the Draft EIR has been updated to include a clarifying mitigation measure (MM-BIO-4) that provides additional assurance that biological impacts would remain less than significant by requiring biological monitoring and reporting specific to the proposed new fireworks display events along the National City and Chula Vista Bayfronts. This measure is provided to ensure the fireworks are carried out as described in Chapter 3, *Project Description*, of the Draft EIR, and to account for any needed adjustments to continue to avoid and minimize impacts on biological resources. This clarifying mitigation measure is included in Chapter 3, *Errata and Revisions*, of the Final EIR and is reflected in the project's MMRP.

Response to Comment B-49

This comment noted that USFWS has requested that the Draft EIR analyze the need for an increased number of fireworks displays. USFWS recommends that the District consider limiting the number of fireworks displays that may occur throughout the year at approved launch sites.

As described in Chapter 3, *Project Description*, of the Draft EIR, the proposed would allow four new fireworks display events would be limited to four times per year, with two displays occurring on the Fourth of July, at the Chula Vista and National City Bayfronts. The proposed project would not increase the number of firework display events beyond these four proposed new events.

Response to Comment B-50

This letter is a comment letter that USFWS submitted to the District on the Draft EIR for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment. The comment letter identifies three references to fireworks and request that impacts related to public access, lighting, noise, and wildlife disturbances, associated with such events should be evaluated in the EIR.

The Final EIR for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment responded to all of the comments raised in this letter (District 2010). All of the issues raised in this comment letter related to fireworks have been addressed in Section 4.3, *Biological Resources*, of the Draft EIR. Consistent with the Chula Vista Bayfront Master Plan EIR, a maximum of three shows are proposed within the Chula Vista Bayfront, which all will occur outside of the least tern nesting season, except the Fourth of July. As identified on page 4.3-45, in accordance with the Chula Vista Bayfront Settlement Agreement and Natural Resources Management Plan (May 2016), proposed new fireworks display events that would occur within the Chula Vista Bayfront area during the least tern nesting season, which would include a Fourth of July event, are required to monitor the nesting colonies and be in full regulatory compliance with all applicable water quality and species protection regulations. All other comments are related to the Chula Vista Bayfront Master Plan and are not applicable to the proposed project. Therefore, no further response to this letter is required.

4.4.3 Comment Letter C: Governor's Office of Planning and Research, State Clearinghouse and Planning Unit

Comment Letter C

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

May 3, 2017

RECEIVED

MAY 08 2017

SAN DIEGO UNIFIED
PORT DISTRICT
REAL ESTATE

Wileen Manaois
San Diego Unified Port District
3165 Pacific Highway
San Diego, CA 92101

Subject: San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project
SCH#: 2015081013

Dear Wileen Manaois:

The enclosed comment (s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period, which closed on May 1, 2017. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

C-1 The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2015081013) when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

2015081013

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

San Diego National Wildlife Refuge Complex
P.O. Box 2358
Chula Vista, California 91912

In Reply Refer To:
FWS-SDG-15B0320-17CPA0125

May 2, 2017
Sent by Email

Governor's Office of Planning & Research
MAY 02 2017
STATE CLEARINGHOUSE

Ms. Wileen Manaois
Real Estate Development Department
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92101-1128

Subject: Comments on the San Diego Unified Port District's Draft Environmental Impact Report for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (UPD #EIR-2015-115)

Dear Ms. Manaois:

The U.S. Fish and Wildlife Service (Service) has reviewed the above-referenced Draft Environmental Impact Report (DEIR) for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (Project), in San Diego County, California. The enclosed comments are based on information provided in the DEIR and the Service's knowledge of sensitive and declining species and their habitats.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). The Service also owns and operates National Wildlife Refuges (NWR).

For the proposed project, the San Diego Unified Port District (Port) will (1) develop an ordinance establishing a District Code section to govern existing and proposed new fireworks display events within San Diego Bay and the Imperial Beach oceanfront, and (2) support four new fireworks display events in south San Diego Bay adjacent to the National City and Chula Vista Bayfront.

We have previously provided the Port comments on the notice of preparation of the DEIR in letter dated October 6, 2015, as well as recommendations regarding fireworks displays in San Diego Bay in letters dated May 9, 2016, and January 11, 2007, which are attached and incorporated

herein by reference. While the DEIR addresses some of our past comments, many are not adequately addressed.

We have worked with fireworks sponsors, organizers, and operators to develop minimization measures for the federally listed threatened western snowy plover (Pacific Coast population DPS) [*Charadrius nivosus nivosus* (*C. alexandrinus n.*); plover], as well as the endangered California least tern [*Sterna antillarum browni* (*Sterna a. b.*); least tern] and light-footed Ridgway's (=clapper) rail [*Rallus obsoletus* (=*longirostris*) *levipes*; rail]. In our May 9, 2017, letter, we specifically recommended that fireworks shows be excluded from South San Diego Bay during the nesting season.

However, we continue to have concerns that fireworks conducted in south San Diego Bay will also result in impacts to nesting, roosting, rafting, and foraging seabirds, shorebirds, and waterfowl. Our concerns stem from the proximity of proposed fireworks launch sites in south San Diego Bay to the San Diego Bay NWR (Refuge) which supports thousands of nesting and wintering birds and is subject to low levels of disturbance under baseline conditions. As discussed in the Biological Technical Study (EIR, Appendix F), there is potential for avian behavioral responses to the bright lights, noise, and vibration associated with fireworks. In addition, fireworks events in south San Diego Bay may result in significant spectator presence on and near the Refuge. Due to our concerns regarding the potential direct and indirect effects of a fireworks show, we continue to recommend that fireworks shows do not occur in the vicinity of the Chula Vista Bayfront. We also recommend that the Port consider an alternative that will not introduce night time fireworks disturbance to the vicinity of the Refuge.

Specific Comments:

Chapter 2 – Environmental Setting

1) Fireworks Launch Site for the Proposed National City Fireworks Display

The description of the location for the temporary barge that "would take place within view of Pepper Park," as described on 2-12 of the draft EIR, appears to be inconsistent with Figure 2-1. The text states the "fireworks display event, likely a Fourth of July event, may occur along the National City Bayfront and is anticipated to involve the placement of a single, temporary barge in the vicinity of Pepper Park." This text implies that the barge would be located within the Sweetwater River flood control channel; however, Figure 2-1 indicates that the site would be well to the north of Pepper Park, where there appears to be little or no public access to the waterfront. The location of potential barge sites should be clarified in the document, as the proposed location could have significant, adverse effects on least terns that nest on the D Street Fill. The understanding of the exact locations in which the fireworks displays can occur is further complicated by language provided on page 4.3-5, which states: "The sites for the proposed new fireworks display events are within and/or adjacent to the District's jurisdiction within San Diego Bay along

the National City and Chula Vista Bayfronts. These proposed new displays are anticipated to occur on barges and/or piers within these locations" (emphasis added). Chapter 2 does not address the potential for the new sites to include pier areas. If the use of piers in addition to barges is being considered for the new sites, the draft EIR should redistributed to public comment after it has been revised to identify potential pier sites and to address the potential impacts of using those pier sites for fireworks displays.

2) Fireworks Launch Site for the Proposed Chula Vista Bayfront Fireworks Display

Page 2-13 states "A total of three fireworks display events (including one on the Fourth of July) along the Chula Vista Bayfront area ... are anticipated to involve the placement of a single, temporary barge in the Bay in the vicinity of the two parks." Based on the information provided in Figure 2-1, it appears that the proposed location of this barge occurs within the boundaries of the Refuge. If the barge is to be located within the boundaries of the Refuge, the draft EIR should be revised to acknowledge that the proposal would require a Special Use Permit from the Refuge, as well as compliance with National Environmental Policy Act (NEPA). Additional discussion of this issue is provided below.

Chapter 4, Section 4.3 – Biological Resources

1) The habitat information provided in Figure 4.3-1 is incomplete and should be updated to show salt marsh in the western salt ponds, which were restored in 2011. In addition, the D Street Fill and South Bay Salt Works levees should be shown as supporting seabird and shorebird nesting habitat, including least terns and snowy plovers.

2) The habitat information provided in Figure 4.3-2 is incomplete and should be updated to include snowy plover habitat at Silver Strand State Beach and the Navy's proposed alternate least tern nesting site at Naval Air Station, North Island. The polygon(s) depicted in the legend as "Sensitive Nesting Areas 1 mile" will need to be adjusted once the missing nesting habitat is added to the figure.

3) The discussion of the San Diego Bay's subtidal vegetated habitat on page 4.3-7 should also address the importance of this habitat to the bay's population of eastern Pacific green sea turtles.

4) The discussion under *Upland Transition and Upland Areas* on page 4.3-9 should be expanded to acknowledge the significant seabird nesting areas that occur in proximity to the proposed fireworks launch sites. These include the D Street Fill, located immediately south of Pepper Park, which is a mitigation site set aside as nesting habitat for the least tern and snowy plover, and the levees of the South Bay Salt Works that support tens of thousands of nesting waterbirds between the months of March and September. The significance of these nesting areas is highlighted by the fact that in 2016, the San Diego

Bay Refgure is estimated to have supported over 60,000 waterbird nests representing 16 species. The effects of impacts to this number of nesting birds should be evaluated in the effects section.

5) On page 4.3-10, note that the South Bay Salt Ponds are part of the Refuge, and not a separate area.

6) On page 4.3-11, note that the South Bay Salt Works levees and Pond 11 are managed by the Service, not the District.

7) Table 4.3-2 inaccurately states that eastern Pacific green sea turtle have a low potential to occur in San Diego Bay. Researchers continue to tag and monitor green sea turtles in San Diego Bay (Madrak *et al.* 2016), particularly in the south end of the Bay. In addition, norther harriers are routinely observed at Sweetwater Marsh and in the south bay, therefore, they have a high potential to occur in the affected area.

8) As addressed previously, the location proposed as a fireworks launch site for the Chula Vista Bayfront appears to be located within the boundaries of the Refuge; therefore, the discussion of applicable laws and regulations related to the Refuge on Page 4.3-19 should be expanded to address Federal regulations related to uses on a NWR. Uses on a NWR require compliance with the National Wildlife Refuge System (NWRS) Administration Act of 1966 as amended by the NWRS Improvement Act of 1997, 16 U.S.C. 668dd-668ee (Improvement Act) and the National Environmental Policy Act (NEPA).

The Improvement Act provides clear standards for management, use, planning, and growth of the NWRS. The Improvement Act requires that each refuge be managed to fulfill the "wildlife first" mission of the NWRS, as well as the specific purposes for which a refuge was established. The Refuge was established to protect, manage, and restore habitats for federally listed endangered and threatened species and migratory birds, as described in the Act, and maintain and enhance the biological diversity of native plants and animals, as described in the Fish and Wildlife Act of 1956, as amended.

In accordance with the Improvement Act, uses permitted on a NWR must be determined to be compatible with the mission of the NWRS and Refuge purposes. The Service's Appropriate Use Policy (*Service Manual, Part 603 FW* 1) provides a national framework for determining appropriate refuge uses and outlines the procedures refuge managers must follow when deciding if a new or existing use is an appropriate use on the refuge. The proposed use must contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or must be beneficial to the refuge's natural or cultural resources. If this is not the case, such a use would generally be considered not appropriate.

If a use is determined to be appropriate, it must then be evaluated for compatibility. The Service's Compatibility Policy (*Service Manual, Part 603 FW 2*) includes guidelines for determining if a use proposed is compatible with Refuge purposes. A compatible use is defined in the policy as a proposed or existing use of a NWR that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the NWRS mission or the purposes for which the Refuge was established.

Another significant directive of the Improvement Act is to ensure that we maintain the ecological integrity of the NWRS for present and future generations of Americans. Uses that we reasonably may anticipate to conflict with pursuing this directive are contrary to fulfilling the NWRS mission and are therefore not compatible. Under the authorities of the Improvement Act, fireworks displays conducted on a NWR would not represent an appropriate or compatible use of Refuge lands. As such, a Refuge Special Use Permit to allow such events could not be issued.

9) If there is the potential for a barge to be sited within Sweetwater River flood control channel in the vicinity of Pepper Park or for the fireworks launch site for the National City and/or Chula Vista Bayfront to be located somewhere other than the location shown in Figure 2-1, the discussion of impacts to birds and listed species should be expanded. This is particularly important because of the potential for significant adverse effects to sensitive salt marsh habitat, nesting least terns, and resident rails as a result of siting the fireworks barge in the Sweetwater River channel or in proximity to the outer levees of the salt works.

10) The proposed mitigation measures, particularly those intended to minimize indirect impacts related to human disturbance of nesting areas, are inadequate as they only address public viewing areas. The areas that would be affected include open water areas, and areas that are not open to the public, but would be subject to unauthorized access as a result of the proposed action.

11) There is no monitoring proposed to determine if the measures included in the DEIR for mitigating both direct and indirect impacts are being implemented and/or are effective in avoiding and minimizing impact to nesting least terns, snowy plovers and rails. The DEIR should include requirements for monitoring to assess the initial response and overall effects to nesting success on these species.

12) The DEIR should characterize the difference in ambient night time disturbance levels at nest sites in north San Diego Bay and the nest sites at the Refuge. The DEIR should distinguish between the baseline conditions at these sites.

13) Appendix F of the DEIR discusses previous fireworks monitoring efforts at (1) a north San Diego Bay least tern colony (San Diego International Airport; Airport), (2) at Naval Base Coronado, (3) at Gualala Point, and (4) in the Netherlands. Although the

results from these studies demonstrate that individual birds are likely to display a direct physiological stress response, Appendix F (re-iterated in section 4.3) concludes that "it does not appear that the level of disturbance stress generated from the fireworks translate to a level achieving harassment or harm for avian species". This conclusion is not consistent with the result of the Gualala Point study, which concluded that nests had been abandoned as a result of the fireworks display. Nest abandonment and likely chick mortality was also documented subsequent to the Big Bay Boom in 2012, when a malfunction resulted in the detonation of all of the fireworks in a short period (Patton 2012, pers. comm.). Based on the nesting chronology of the least tern, western snowy plover, and rail, it is likely that there will be active nests and adults brooding dependent chicks during the proposed 4th of July event. Although we agree that it is difficult to quantify the number or extent of impacts, we remain concerned that individual nests or chicks may be abandoned due to the night time disturbance, or chicks may flee into harm's way, particularly since the Refuge sites are not subject to night time disturbances under baseline conditions. For example, least tern habitat at the Refuge is subject to less night time disturbance than least tern habitat at the Airport. The monitoring reports from the Airport nest site state "colonies elsewhere with less habituation to noises would be expected to react more than those at the airport, and the observed flushing of adults, fledglings, and running of chicks in response to the fireworks confirm fears of possible threat of fledglings relocating to roost in active roadways, taxiways or runway following dispersal due to fireworks." Therefore, we anticipate that the response of avian species at the Refuge will be greater than that observed at the Airport and Naval Base Coronado.

14) The DEIR should include conservation measures to avoid and minimize the potential impacts of the Project on sensitive wildlife. The Carlsbad Fish and Wildlife Office (CFWO) has previously recommended conservation measures be included to existing and ongoing fireworks displays specifically to avoid and/or minimize potential impacts to nesting least terns and snowy plovers, including: (1) Location of discharge sites for fireworks as far away as possible (minimum of 1 mile) from the nearest least tern or snowy plover nesting site; (2) Delineation and law enforcement patrol of shoreline around least tern and snowy plover nesting areas to prevent spectators from coming ashore or anchoring in eelgrass beds; (3) Reduction in shell size to reduce the percussive vibrations associated with fireworks detonations; (4) Development and implementation of a least tern, snowy plover and rail monitoring approach approved by the CFWO; and (5) Development of a plan to mitigate any negative impacts (to least terns, snowy plovers and rails) observed by the monitoring biologist.

The DEIR should discuss the occurrence and location of rafting bird species during the non-breeding season, the anticipated footprint of increased boat traffic, and the likely impacts of increased boat traffic on rafting birds in south San Diego Bay. In addition, the DEIR should specify minimization measures to reduce the impacts of increased boat traffic on rafting birds.

Thank you for the opportunity to comment on the DEIR. We request a meeting with the Port to go over our comments and concerns regarding the Project.

If you have any questions regarding this letter, please contact Sandy Vissman of the Carlsbad Fish and Wildlife Office at (760) 431-9440 or Brian Collins of the San Diego National Wildlife Refuge at (619) 575-2704.

Sincerely,

Digitally signed by DAVID ZOUTENDYK
Date: 2017.05.02 15:43:19 -07'00'

Karen A. Goebel
Assistant Field Supervisor
Carlsbad Fish and Wildlife Office

ANDREW YUEN
Digitally signed by ANDREW YUEN
Date: 2017.05.02 16:18:25 -07'00'

Andrew Yuen
Project Leader
San Diego National Wildlife Refuge Complex

Enclosure

LITERATURE CITED

Personal Communication

Patton, R. 2012. Email distribution of monitoring results from July 4, 2012. Least tern monitoring at San Diego International Airport. 1 page.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

In Reply Refer To:
FWS-SDG-15B0320-16CPA0275

MAY 09 2016

Eileen Maher
Principal, Environmental Conservation
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92101

Subject: San Diego Bay and Imperial Beach Fireworks Shows on July 4, 2016

Dear Ms. Maher:

This letter responds to your request for guidance from the U.S. Fish and Wildlife Service (Service) to reduce potential impacts to sensitive wildlife from the San Diego Bay (Big Bay Boom) and Imperial Beach (IB) fireworks shows on July 4, 2016, funded by the Port of San Diego (Port). We appreciate your efforts to incorporate measures that address wildlife concerns into the 2016 fireworks shows, as the primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States, and is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). We previously provided comments on the Port's Notice of Preparation of a Draft Environmental Impact Report for San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (UPD #EIR-2015-115)(DEIR)(Port 2015) in our letter dated October 6, 2015 (FWS-SDG-15B0320-15CPA0334)(Service 2015).

We are pleased that, consistent with recommendations in our October 6, 2015, letter, no fireworks shows are proposed at the Chula Vista Bayfront or Loew's Coronado Resort. Due to their close proximity to sensitive wildlife, including the federally listed threatened western snowy plover (*Charadrius nivosus nivosus*; snowy plover), as well as the endangered California least tern [*Sterna antillarum browni* (*Sterna a. b.*); least tern] and light-footed Ridgway's (=clapper) rail [Rallus obsoletus (=longirostris) levipes; rail] nesting sites, we recommend that the Chula Vista Bayfront and Loew's Coronado Resort be excluded from future fireworks shows during the nesting season.

The Big Bay Boom and IB fireworks shows will occur in north San Diego Bay (Bay) and IB in the same locations as previous shows. Both shows will last 18 minutes, and be launched from four barges in the north Bay and from the IB Pier. Shells launched within the Bay would be a

maximum of 10-inch shells, and those launched from the IB Pier would be a maximum of 8-inch shells.

As outlined in our October 6, 2015, letter, our primary concern with fireworks shows is the potential impact to wildlife from the fireworks, spectators, and introduction of harmful chemicals and debris into the water. Numerous birds species, including the snowy plover, least tern and Ridgway's rail, use wetlands, shoreline habitats, and/or open water of the Bay and Pacific Ocean in the vicinity of the proposed fireworks shows.

Birds in areas close to fireworks shows are likely to be exposed to the explosive noises, vibrations, and bright flashes of light which may disrupt normal breeding and roosting behavior. Potential avian responses to fireworks include flushing from nests and nest abandonment (Stephensen *et al.* 2012; Weigand and McChesney 2008; Patton 2012, 2013, 2015), although these responses are not always observed (Heinz 2013; Elliott 2014). Reduced avian parental attendance from flushing exposes eggs and/or chicks to night time air temperatures and predators, and may result in changes in hatchability/survivorship depending upon variables such as the length of parental absence, temperature, and predator presence. Illumination and disturbance from fireworks may result in increased visibility of birds, eggs or chicks to predators, particularly in exposed habitat. In addition, spectators of the fireworks shows may disturb or harm breeding or roosting birds, eggs, or chicks (Caffree 1993). Spectator boats traveling within the Bay at night may disturb or collide with rafting birds. Spectators may also leave trash and food waste, which can attract potential predators to sensitive areas. Fireworks launched over water deposit debris and chemical constituents of expended shells into the water, which could indirectly affect birds.

The least tern nests at the San Diego International Airport (SDIA) and Naval Air Station, North Island (NASNI) about1 mile from Bay launch site. The least tern also nests at the mouth of the Tijuana River in the Tijuana Slough National Wildlife Refuge (Refuge) about 1.5 miles south of the IB Pier launch site. The snowy plover nests on the beaches to the north and south of the IB Pier. Nest distribution shifts from year to year, and in 2014, two snowy plover nests were initiated less than 1 mile north and south of the IB Pier launch site (Navy 2015; Patton 2015, pers. comm.). The rail occupies the Oneonta Slough, within the Refuge, about 0.5 mile south of the IB Pier launch site. Recent monitoring estimated 127 rail pairs in the slough in 2016 (Collins 2016, pers. comm.).

Our October 6, 2015, letter recommended several conservation measures for fireworks shows to avoid and/or minimize potential impacts to least terns and snowy plovers. Consistent with our recommendations, the Port proposes to implement the following measures: 1) locating launch sites greater than 1 mile from least tern nesting sites; 2) installing signs to prevent trespass into the Refuge; 3) limiting maximum shell size to 10 inches in the Bay, and 8 inches at IB Pier; 4) limiting show length at 18 minutes; 5) picking up floating and shoreline debris after the event; 6) monitoring least tern nesting at the SDIA; and 7) monitoring water quality after the event in compliance with the Regional Water Quality Control Board fireworks permit. We appreciate the

Port's proposed minimization measures and offer the following comments and suggestions to further reduce the potential for impacts to snowy plovers, least terns, and rails.

Active least tern nests, chicks and adults will likely be present at the SDIA, NASNI and Refuge nesting sites during the fireworks shows. Based on the baseline level of disturbance at these sites and the results of previous monitoring, we anticipate that the Big Bay Boom fireworks show will temporarily disrupt least tern nesting and roosting at SDIA and NASNI (Patton 2013), and will temporarily separate parents from flightless chicks. Spectators that view the Big Bay Boom from the parking lot adjacent to SDIA Oval O-3S could also disrupt or harm nesting or roosting terns. The least tern nesting site at the Refuge was not monitored during past fireworks shows and we do not have information regarding the response of this colony to fireworks. However, due to the greater distance from the launch site (i.e., 1.5 miles) and smaller shell size (i.e., 8-inch) we expect the fireworks show at IB to disrupt least tern nesting to a lesser degree than at SDIA. However, spectators that view the IB show from the beach south of Sea Coast Drive could disrupt or harm nesting or roosting terns at the mouth of the Tijuana River.

While the current proposed launch locations are consistent with our recommendation that launch sites be at least 1 mile from nest sites, we note that least terns nesting at SDIA (about1 mile from the Bay launch site) were observed to flush from nests during past Big Bay Boom fireworks shows (Patton 2012, 2013, 2015). A firework study conducted in San Francisco Bay detected no least tern flushing from nests when fireworks were launched about 2 miles from the colony (Elliott 2014). Therefore, we recommend that the Port increase the distance between the least tern colonies and the Big Bay Boom launch sites as much as possible to reduce the disturbance to a level that does not result in least tern flushing. To reduce the potential for spectator disturbance at the SDIA nesting site, we recommend that the Port close the parking lot that lies adjacent to nesting oval O3-S on July 4. To reduce the potential for spectator disturbance at the Refuge nesting site, we recommend that the Port coordinate with the City of IB and the Refuge staff to assure that, in addition to signage, adequate enforcement personnel are present south of IB Pier to prevent spectators from entering into the nesting site. Specifically, we recommend that a uniformed enforcement agent be stationed at the south end of Sea Coast Drive on the evening of July 4.

Active snowy plover nests, chicks and adults will likely be present on the beaches to the north and south of the IB Pier during the IB fireworks show. We recommend that the Port coordinate with the City of IB and Refuge to assure that signage and enforcement presence is in place to the north of the IB Pier, as well as to the south (recommended above to protect least terns), to reduce spectator foot traffic in snowy plover nesting habitat. Specifically, we recommend that a uniformed enforcement agent be stationed at the Navy's "Camp Surf" on the evening of July 4.

It is likely that Oneonta Slough will support active rail nests, chicks, and adults during the IB fireworks show. We anticipate disturbance to rails, given the close proximity of the IB Pier launch site, and encourage the Port to offset disturbance by contributing to the efforts to improve rail habitat, maintain water quality, reduce human and pet disturbance, and open the mouth of the Tijuana Estuary consistent with the Light-footed Clapper Rail Recovery Plan (Service 1985).

The Port proposes to deploy "No Trespass" signs to reduce the potential for unintended spectator impacts to rail nesting. We also recommend that the Port coordinate with the City of IB and the Refuge staff to assure that adequate enforcement is present to prevent spectators from entering into the Tijuana Slough nesting site. Specifically, we recommend that a uniformed enforcement agent be stationed at the south end of Sea Coast Drive on the evening of July 4 (as recommended above in reference to least tern and snowy plover protection). In addition, we recommend that the Port clean up any trash or food waste left by spectators near least tern, snowy plover and rail nesting sites.

Biological monitoring during anthropogenic activities such as fireworks shows can provide valuable information that increases our understanding of wildlife response to potential disturbance. Information obtained during monitoring may assist in assessment of effects of future activities, and can also help us to refine minimization measures. Biological monitoring during night time activities, such as fireworks shows, presents unique challenges since observations are compromised by lack of light and nocturnal disturbance from the monitoring itself may impact birds. Monitoring nest sites before and after disturbance events can also aid in assessment of impacts, particularly in situations where night time monitoring is problematic. We recommend monitoring of least terns and snowy plovers, as described below, however we do not recommend monitoring of rails at this time due to the potential for disturbance associated with monitoring (Zembal 2016, pers. comm.).

The Port proposes to monitor the least tern colony at SDIA, and we recommend that, similar to previous years, monitoring occur on the following dates and times: July 3 and July 4, 1 hour before, during, and 1 hour after the time of the fireworks show; and July 5, early in the morning. Monitoring should include assessment of nest attendance (or abandonment), and estimates of adult, chick, and fledgling numbers and behavior, including any observed responses to fireworks shells. We recommend that the Port also coordinate with the Navy regarding comparable least tern monitoring at NASNI. We also recommend that the noise and vibration be monitored at SDIA and NASNI. Reporting should include the noise and vibration levels before and during the fireworks show; the location of the night roosts (if possible); observations of spectator disturbance; observations of least tern response to fireworks and spectators; estimated number of adult least terns, active nests, and chicks onsite before and after the fireworks show; and any evidence of harm to least terns.

We recommend that the least tern nesting colony at the Refuge be monitored on July 4 prior to the event, and in the morning on July 5 to assess colony attendance and estimate the number of active nests and chicks present onsite. Reporting should include the location of roosting/nesting area(s) and the estimated number of adult least terns, active nests, fledglings, and chicks onsite, and any observations of nest disturbance or harm to least terns.

No snowy plover monitoring has been proposed by the Port, however we recommend that the Port coordinate with the Refuge and Navy to determine if active snowy plover nests or broods lie within 1.5 miles of the IB Pier launch site on July 3. If active nests or broods occur within this area, we recommend monitoring on July 4 and 5 to assess nest activity and brood presence

before and after the fireworks display. Reporting should include the location of nests and broods, the number of active nests, chicks and adults onsite, and any observations of nest disturbance or harm to snowy plovers.

We appreciate the opportunity to provide recommendations to reduce potential impacts to sensitive wildlife from the Big Bay Boom and IB fireworks shows. Results from our recommended monitoring should aid the preparation of the DEIR for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project. We request that the Port provide a response to our recommendations and a draft monitoring plan for our review by June 1, 2016, and a monitoring report by September 15, 2016. Should you have any questions regarding this letter or need further assistance, please contact Sandy Vissman at (760) 431-9440, extension 274.

Sincerely,

for

Karen A. Goebel
Assistant Field Supervisor

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
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In Reply Refer To:
FWS-SDG-15B0320-15CPA0334

OCT 06 2015

Mr. Jason H. Giffen
Director, Environmental Land Use and Management
San Diego Unified Port District
P.O. Box 120488
San Diego, California 92112-0488

Subject: Comments on the Notice of Preparation of a Draft Environmental Impact Report for San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (UPD #EIR-2015-115), in San Diego County, California

Dear Mr. Giffen:

The U.S. Fish and Wildlife Service (Service) has reviewed the Notice of Preparation of a Draft Environmental Impact Report (EIR) for San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (NOP). The NOP describes the proposed project and was distributed to the Service to request guidance regarding the scope and content of the environmental information to be included in the EIR. The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

The proposed Project involves continued permitting of ongoing and proposed fireworks display events in and around San Diego Bay and the Imperial Beach Oceanfront in San Diego County, California. Current fireworks display events include the "Big Bay Boom" and other smaller events operated by the San Diego Unified Port District's (District's) tenants. Proposed fireworks displays include fireworks on the Chula Vista Bayfront. Fireworks are detonated from flight decks, barges, and/or piers located adjacent to, or in the waters of San Diego Bay or the Imperial Beach Oceanfront. The District estimates that at this time approximately 50 fireworks displays are permitted per year, and anticipates that firework displays within the Project Area are likely to increase at a rate of 2 percent per year. Fireworks displays currently occur year-round, with a duration ranging from 5-20 minutes. Existing events occur at South Embarcadero, North Embarcadero, near Shelter Island, near Harbor Island, Glorietta Bay, and Imperial Beach Oceanfront.

We appreciate the efforts of the District to address the cumulative impacts of multiple fireworks displays in the proposed DEIR, and offer the following comments and recommendations to assist the District in identifying, avoiding, minimizing, and adequately mitigating direct and indirect project-related impacts to fish and wildlife resources, including Endangered and Threatened species:

1. San Diego Bay and the Imperial Beach Oceanfront, including the vicinity of some launch and viewing sites, support resident and migratory sea birds, shore birds, passerines, endangered bird species, sea turtles, fish, and marine mammals. Significant populations of birds use portions of San Diego Bay year round: during the summer months thousands of birds nest, breed, and raise young, particularly in south San Diego Bay; and during the winter months, thousands of migrating or wintering waterfowl take refuge in the Bay. Fireworks displays include significant levels of light, noise, and vibration known in some instances to result in temporary disturbance to wildlife (Patton 2013; Sandoval 2005). Fireworks may also disrupt roosting and exacerbate predation pressure (Caffree 1994). If launched over or near the water, displays may deposit residual debris and chemical constituents into the water and thereby affect water quality (San Diego Regional Water Quality Control Board 2011). Please include in the DEIR a thorough review of the available literature pertaining to the potential or documented impacts of fireworks displays or similar punctuated disturbances on wildlife.

2. To facilitate assessment of the environmental effects of the proposed action, we recommend that the DEIR include: 1) a figure that depicts the precise location of existing and future proposed launch sites; 2) a figure depicting the location of sensitive resource use areas within the vicinity of proposed launch sites (including, but not limited to, Sweetwater National Wildlife Refuge, Chula Vista Wildlife Reserve, South San Diego Bay Unit of San Diego National Wildlife Refuge, San Diego International Airport Least Tern Nesting Area, Naval Base Coronado Delta Beaches, Naval Base Coronado "heron park", Tijuana National Wildlife Refuge, marine mammal haul out areas); 3) a figure that depicts the location and abundance of rare, endangered, and other sensitive species that occur in the vicinity of proposed launch sites (including, but not limited to, federally threatened Western snowy plover (*Charadrius nivosus nivosus*, snowy plover), federally endangered California least tern (*Sternula antillarum browni*, least tern), federally endangered Light-footed clapper rail, recently reclassified as "Ridgeway's rail" (*Rallus longirostris levipes*, clapper rail), Belding's Savannah sparrow (*Passerculus sandwichensis beldingi*, Savannah sparrow), American Peregrine falcon (*Falco peregrinus anatum*, peregrine falcon), gull-billed tern (*Gelochelidon nilotica*)); 4) information regarding the abundance and distribution of water birds use San Diego Bay, Tijuana Estuary, and Imperial Beach (for example, information available from San Diego Bay bird surveys supported by the U.S. Navy and the District, annual San Diego Shorebird Survey, and San Diego National Wildlife Refuge bird surveys).

3. Please include in the DEIR detailed information regarding the number, location, and duration of baseline events that have occurred in recent years, and the number, location, and duration of additional proposed events (i.e. events that have been permitted by the District, but have not yet occurred).

4. The DEIR should include an analysis of the intensity and extent of light, sound, vibration, and debris/fallout anticipated as a result of the fireworks displays, based on the size and number of fireworks shells that will be used. The analysis of the effects of the proposed action should include an assessment of the areas where light, sound, vibration, and debris are expected to have a direct impact on wildlife.

5. The DEIR should include an analysis of the potential indirect effects of the fireworks displays on wildlife resources in the Project Area. Potential indirect effects of fireworks displays include, but are not limited to: disturbance or impacts to resources from spectators, changes in water quality associated with debris or fallout from fireworks.

6. The Carlsbad Fish and Wildlife Office has previously recommended, and continues to recommend that the no fireworks displays occur within the Chula Vista Bayfront during the avian breeding season (generally January-September) due to the close proximity to the abundance of sensitive wildlife resources that occur within and around the Sweetwater National Wildlife Refuge, the South San Diego Bay National Wildlife Refuge (Wildlife Refuges), and the Chula Vista Wildlife Reserve. Similarly, we have recommended and continue to recommend that fireworks displays be minimized at the Loew's Coronado Resort during the avian breeding season due to the proximity of this hotel to protected least tern and snowy plover habitat at Silver Strand State Beach and Naval Base Coronado.

7. The DEIR should include conservation measures to avoid and minimize the potential impacts of the Project on sensitive wildlife. The Carlsbad Fish and Wildlife Office has previously recommended conservation measures be included to existing and ongoing fireworks displays specifically to avoid and/or minimize potential impacts to nesting least terns and snowy plovers, including: 1) Location of discharge sites for fireworks as far away as possible (minimum of 1 mile) from the nearest least tern or snowy plover nesting site; 2) Delineation and law enforcement patrol of shoreline around least tern and snowy plover nesting areas to prevent spectators from coming ashore or anchoring in eelgrass beds; 3) Reduction in shell size to reduce the percussive vibrations associated with fireworks detonations; 4) Development and implementation of a least tern and snowy plover monitoring approach approved by the CFWO; 5) Development of a plan to mitigate any negative impacts (to least terns and snowy plovers) observed by the monitoring biologist.

8. The District estimates that fireworks displays may increase approximately 2 percent per year. The DEIR should analyze the need for an increased number of fireworks displays. We recommend that the District consider limiting the number of fireworks displays that may occur throughout the year at approved launch sites.

We appreciate the opportunity to provide comments on this NOP. Should you have any questions regarding this letter, please contact Sandy Vissman of my staff at (760) 431-9440.

Sincerely,

for: Karen A. Goebel
Assistant Field Supervisor

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In Reply Refer To:
FWS-SDG-3978.4

Jan 11 2007

Mr. Ralph Hicks
Director, Land Use Planning
San Diego Unified Port District
3165 Pacific Highway
San Diego, CA 92112-0488

Subject: Comments on the Draft Environmental Impact Report for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment, City of Chula Vista, California (SCH #2005081077)

Dear Mr. Hicks,

The U.S. Fish and Wildlife Service (Service) and California Department of Fish and Game (Department) (collectively referred to as 'Wildlife Agencies') have reviewed the above-referenced draft Environmental Impact Report (DEIR) and supporting documentation for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (Proposed Project), dated September 29, 2006. The public review period for the DEIR ends January 11, 2007. The comments provided in this letter represent our concerns about the Proposed Project's potential impacts on sensitive biological resources.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act (16 U.S.C. 1531 *et seq.*). The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA) Guidelines, Sections 15386 and 15381, respectively. The Department is responsible for the conservation, protection, and management of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act and other sections of the Fish and Game Code, and administers the Natural Community Conservation Planning (NCCP) program.

The 562-acre Chula Vista Bayfront (Bayfront) is located on the southeastern edge of San Diego Bay in the City of Chula Vista. The subject planning area shares a common border with the Sweetwater Marsh Unit of the San Diego Bay NWR at its northern boundary and the South San Diego Bay Unit of the San Diego Bay NWR at its southern boundary. In 2002, the San Diego Unified Port District (Port) and the City of Chula Vista (City) joined together to prepare a master

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plan for the Bayfront, which includes approximately 500 acres of land area and 62 acres of water area. Proposed uses include hotel, retail, entertainment, conference center, office, residential, civic/cultural, marina and ferry terminal, recreation, parkland, environmental buffers, a public pier, and associated public facilities such as streets, bikeways, pedestrian paths, and parking structures. Key components of the Proposed Project described in the DEIR include:

- A resort conference center and other hotels with a maximum height limit of 300 feet (25 stories);
- Up to 2,000 residential units with a maximum height limit that ranges from 300 feet in the Harbor District to 200 feet in the Otay District;
- Mixed use office and commercial recreation uses with maximum allowable heights ranging from 85 to 200 feet in the Harbor District and 40 to 100 feet in the Sweetwater District;
- Waterfront retail uses and public gathering spaces around the harbor;
- A new commercial harbor, ferry terminal, and realigned navigation channel;
- A 21-acre public park and other open space areas;
- A public promenade and bike trail through the entire Bayfront;
- A new traffic circulation system, storm water system, and the installation of various other public services and facilities to serve the proposed uses; and
- The relocation of the existing power plant to the southern end of the planning area.

The master planning area has been divided into three districts: the northern 129-acre Sweetwater District; the central 280-acre Harbor District; and the southern 153-acre Otay District. Development within the planning area would occur in three phases over an approximately 25-year period. Construction of Phase I is proposed to begin upon project approval and conclude approximately six years later. Phase I components would be concentrated in the Harbor and Sweetwater Districts. Phase II construction would be completed approximately five years after the completion of Phase I and Phase III is expected to be completed approximately 13 years after the completion of Phase II.

As the master plan represents a joint planning effort covering a large area of land and water, a number of jurisdictional issues must be addressed and resolved. The Port currently has jurisdiction over much of the land and water areas, while the City currently exercises jurisdiction over some of the inland portions of the planning area. The Proposed Project includes a land exchange between the Port and a private developer. This land exchange would include the transfer of up to 97 acres of land in the Sweetwater District from a private developer to the Port, in exchange for up to 57 acres of land in the Harbor and Otay Districts from the Port to the private developer. In association with this exchange, lands currently designated for residential use in the Sweetwater District would be redesignated for uses permitted on State tidelands and areas in the Harbor and Otay District would be redesignated to allow for residential development.

The DEIR also addresses the following Project-related actions: an amendment to the Port Master Plan; a coastal development permit for those portions of the project that would occur within the Port's jurisdiction; an amendment to the City's Bayfront Area Plan of the General Plan; amendments to the City's Local Coastal Program, Bayfront Specific Plan, and Bayfront/Town Centre 1 Redevelopment Plan; approval of a dredging permit from the State Lands Commission

in order to realign the existing navigation channel in San Diego Bay; and issuance of permits from the U.S. Army Corps of Engineers, the Department, and the Regional Water Quality Control Board.

The Department and the Service previously commented on the Notice of Preparation (NOP, SCH# 2002081116) for the Bayfront Village Project that was restricted to the 128-acre area currently included in the Sweetwater District. The Department commented in a letter dated September 24, 2002, and the Service provided a similar letter, dated September 19, 2002. The Wildlife Agencies also commented on the NOP for the Proposed Project in a letter dated September 12, 2005. The Service also provided a letter to the Port and City, dated April 22, 2004, that emphasized the importance of the habitats in the south end of San Diego Bay and the need for the Proposed Project to adequately protect the south bay's locally, regionally, and globally important natural resources. We appreciate that, relative to the project previously proposed in 2002, it appears that the currently Proposed Project would result in considerably adverse biological impacts within the Sweetwater District. However, considering the overall intensity of the larger project proposal, we retain many of the concerns that we raised in our previous letters. All of our comments in past letters also apply to the Proposed Project, as described in the DEIR dated September 2006.

A summary of the Wildlife Agencies' primary comments and concerns about the DEIR follows. We are disappointed that the DEIR provides no or inadequate analysis of, and mitigation for, many of the biological impacts about which we previously provided (in letters and electronic mail to, and meetings with, the Port) substantive comments and recommendations, and requested the DEIR thoroughly address. We request a meeting with the Port, the City, and stakeholders to further discuss the Proposed Project and our comments, after we have had an opportunity to review the responses to our comments, and prior to the Port's decision as to whether to revise and recirculate the DEIR (comment 2 below), or well in advance of the Board of Port Commissioners' consideration of the DEIR for certification.

1. The Wildlife Agencies do not concur with the DEIR that significant impacts to biological resources and wetlands have been minimized to a level less than significant (Section 4.8.7). The DEIR does not adequately evaluate all project impacts to biological resources, even at a programmatic level, and the full range of mitigation measures needed to reduce potential impacts to a level less than significant are either not addressed or, in some instances where measures are addressed, future implementation of the measures cannot be assured. We strongly urge the Port to (a) revise the DEIR to adequately identify and analyze the Proposed Project's biological impacts addressed in this comment letter, and to provide appropriate mitigation for the impacts, and (b) to recirculate the revised DEIR for public review and comment.

2. The Wildlife Agencies support a land exchange that eliminates or minimizes the possibility of residential development and its associated direct and indirect impacts to on-site and adjacent sensitive biological resources. We therefore recommend that the Proposed Project be modified to incorporate certain components of both the Modified Land Exchange and the Harbor Park Alternative, as specified in our detailed comments in the Enclosure. We do not support the inclusion of a 2,000 to 5,000 seat amphitheater on

parcel HP-1, which is proposed as part of the Harbor Park alternative, because it would increase disturbance to wildlife that roost and nest within and/or in the vicinity of the project site.

3. Based on information available regarding the Proposed Project, we are especially concerned about its potential direct and indirect impacts to: (a) intertidal wetlands (*e.g.*, Sweetwater Marsh, F&G Street Marsh, J Street Marsh, and the mudflats located north of the Harbor District) and their associated federally and state-listed plant and wildlife species, including the light-footed clapper rail (*Rallus longirostris levipes*) and Belding's savannah sparrow (*Passerculus sandwichensis beldingi*); (b) subtidal bay habitats and their associated fisheries resources, eelgrass beds, and migratory bird foraging and rafting areas; (c) migratory birds, including those birds identified by the Service as Birds of Conservation Concern, that rely on the south San Diego Bay for foraging and resting areas during migration along the Pacific Flyway; (d) colonial nesting seabirds such as the federally and state-listed California least tern (*Sterna antillarum browni*) and federally listed western snowy plover (*Charadrius alexandrinus nivosus*), shorebirds, and waterfowl that nest in proximity to the project site; and (e) species covered by the City's Multiple Species Conservation Program (MSCP) Subarea Plan.

4. The level of detail provided in the DEIR for specific project design, potential project impacts, and appropriate mitigation measures for the Phase I projects is not sufficient to allow adequate project-specific review under CEQA. Therefore, the analyses provided throughout the DEIR should be considered programmatic.

5. Portions of the Proposed Project and lands adjacent thereto are subject to the standards laid out in the City MSCP Subarea Plan. Since the Port does not have a habitat conservation plan/NCCP to guide its development projects, the entire project should meet or exceed the mitigation ratios, guidelines, and standards required by the City's MSCP Subarea Plan to maintain consistency with its application to the on-site and adjacent areas within Plan.

6. The DEIR does not identify the Proposed Project's many indirect impacts to adjacent sensitive habitats and sensitive species located therein, nor does it propose adequate measures to mitigate such impacts. Such indirect impacts, otherwise known as "edge effects," include increased predation, increased disturbances to wildlife, bird strikes and disorientation, shading of adjacent habitat, human encroachment, increased noise, increased illumination, and detrimental changes to hydrology and water quality. A fenced minimum 100-foot wide "no-touch" habitat buffer should be provided around all sensitive habitats, including mitigation habitats, to minimize indirect impacts. Degradation of habitats due to unavoidable indirect impacts should be mitigated, in part, through creation or restoration of similar habitats.

The Wildlife Agencies offer the preceding general comments, and our general and specific recommendations and comments on the adequacy of DEIR in the accompanying Enclosure, to assist the Port and project applicant(s) in ensuring that the Proposed Project's biological impacts are avoided and/or minimized to below a level of significant.

We appreciate the opportunity to comment on the DEIR. For questions regarding this letter, contact: Carolyn Lieberman or Amber Himes at (760) 431-9440 of the Service; and Libby Lucas at (858) 467-4230 or Marilyn Fluharty at (858) 467-4231 of the Department.

Sincerely,

//s//Kathleen Brubaker, for
Therese O'Rourke
Assistant Field Supervisor
U.S. Fish and Wildlife Service

//s//
Michael J. Mulligan
Deputy Regional Manager
California Department of Fish and Game

Enclosure

cc: Marisa Lundstedt, City of Chula Vista
Robert Smith, U.S. Army Corps of Engineers
Chris Means, California Regional Water Quality Control Board
Deborah Lee, California Coastal Commission
Robert Hoffman, National Marine Fisheries Service
Joanna Grebel, California Energy Commission
Andy Yuen, Project Leader, San Diego NWR Complex
State Clearinghouse

WILDLIFE AGENCIES' COMMENTS ON THE DRAFT EIR FOR THE CHULA VISTA BAYFRONT MASTER PLAN AND PORT MASTER PLAN AMENDMENT

The Wildlife Agencies offer the following general and specific recommendations and comments on the adequacy of Draft Environmental Impact Report (DEIR) to assist the San Diego Unified Port District (Port) and project applicant(s) in ensuring project impacts to biological resources are avoided and/or minimized to below a level of significant. Our specific comments are based on the preferred alternative. If the alternative approved for implementation deviates from the preferred alternative presented in the DEIR, we may have additional comments. We request a meeting with the Port, the City, and stakeholders to further discuss the Proposed Project and our comments, after we have had an opportunity to review the responses to our comments, and prior to the Port's decision as to whether to revise and recirculate the DEIR (comment 2 below), or well in advance of the Board of Port Commissioners' and consideration of the DEIR for certification.

The Proposed Land Exchange

1. The Wildlife Agencies support a land exchange that eliminates or minimizes the possibility of includes removal of residential development and its associated direct and indirect impacts to on-site and adjacent sensitive biological resources. We therefore recommend that the Proposed Project implement an alternative that incorporates the following components of both the Modified Land Exchange and the Harbor Park Alternative:

    a. the components of the Modified Land Exchange that avoid placing residential development and its associated impacts adjacent to the J Street Marsh and the Sweetwater Marsh and South San Diego Bay Units of the San Diego NWR;

    b. the components of the Harbor Park Alternative that relocate (i) the Signature Park from the Sweetwater District (S-2) to the Harbor District (H-3), and (ii) a conference hotel from the Harbor District to the Sweetwater District (S-2), to minimize uncontrolled human and animal encroachment into the Sweetwater Marsh Unit and adjacent mudflats;

    c. move the Resort Conference Center (RCC) farther away from San Diego Bay (from H-3 to H-23) to avoid impacts to the F&G Street Marsh and the Bay due to shading, to minimize its potential for losses of listed species from avian predators perching on tall structures, and to reduce the potential for bird strikes; and,

    d. reduce the building heights in the areas of the Sweetwater District (S-1) that are adjacent to the Sweetwater Marsh Unit to avoid impacts related to shading and predator perching.

We do not however support the inclusion of a 2,000 to 5,000 seat amphitheater on parcel HP-1, which is proposed as part of the Harbor Park alternative, because it would increase disturbance to wildlife that roost and nest within and/or in the vicinity of the project site.

Adequacy of Environmental Review under CEQA

2. Throughout the DEIR, there are multiple instances of inadequate identification and analysis (even at a programmatic level) of biological impacts, and inadequate, or inappropriate deferral of, mitigation. Subsequently, the impact analyses and proposed mitigation is insufficiently detailed to assess the biological implications of the Proposed Project. CEQA requires that all anticipated impacts and proposed mitigation be clearly identified in a DEIR and not deferred for future study. This is supported by *Sundstrom v. County of Mendocino*, 202 Cal.App3d 296, which states "the requirement that the applicant adopt mitigation measures recommended in a future study is in direct conflict with the guidelines implementing CEQA....By deferring environmental assessment to a future date, the conditions run counter to that policy of CEQA which requires environmental review at the earliest feasible stage in the planning process."

The lack of inadequate analysis and mitigation in the DEIR undermines the basic purposes of CEQA. These purposes include, but are not limited to the following: (a) informing governmental decision-makers and the public about the potential, significant environmental effects of proposed activities; (b) identifying the ways that environmental damage can be avoided or significantly reduced; and (c) preventing 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 [CEQA Guidelines, section 15002(a)].

Based on the foregoing and ensuing comments and recommendations, we strongly urge the Port to (a) revise the DEIR to adequately identify and analyze the Proposed Project's biological impacts addressed in this comment letter, and to provide appropriate mitigation for the impacts, and (b) pursuant to Section 15088.5 of the CEQA Guidelines, recirculate the revised DEIR for public review prior to its consideration for certification.

This would be particularly appropriate if, for example, there is one or more feasible project alternative(s), or there are mitigation measures, considerably different from those previously analyzed that would clearly lessen the environmental impacts of the Proposed Project, but the Port declines to adopt them [CEQA Guidelines, Section 15088.5(a)(3)]. Our recommendation derives from the lack of basic impact analyses in the DEIR, analyses needed to conform to CEQA. The revisions to the DEIR to be recirculated should be fully responsive to our comments by providing full disclosure of the potential project-related biological impacts, and additional measures necessary to mitigate the impacts to a level less than significant.

3. The DEIR states, "Additional environmental review ...required for Phases II and III projects will be determined pursuant to State CEQA Guidelines Section 15168." However, the project description, impact analysis, and proposed mitigation measures in the DEIR for Phase I projects provide insufficient information to constitute a project-level review under CEQA. Again, the DEIR does not satisfy the basic purposes of CEQA because it lacks the level of detail (particularly with respect to project descriptions, impact analysis, and proposed mitigation) needed for thorough evaluation and review of potential Project-related impacts. For these reasons, as discussed further in subsequent comments herein, the entire DEIR should be considered a programmatic DEIR, and all project components, including those in Phase I, should be subject to subsequent public review and comment.

4. The existing conditions discussion of Land/Water Use Compatibility (Section 4.1 of the DEIR) is generally limited to land uses within the Proposed Project footprint, though the discussion should also address the Proposed Project's compatibility with adjacent uses. The document should describe the land uses and planning policies established for the San Diego Bay National Wildlife Refuge (NWR), which abut the Proposed Project site to the north, south, and west. For this purpose, Section 4.1.1.1 of the recirculated/final EIR should include a discussion of the recently approved Comprehensive Conservation Plan for the NWR. In addition, the recirculated/final EIR should accurately analyze the potentially significant land use compatibility impacts to the NWR that could result from the implementation of various components of the Proposed Project.

Specific Comments

The following comments address specific sections in the DEIR where project information is insufficient for the level of review necessary under CEQA. The recirculated/final EIR should provide a level of detail necessary for adequate analysis and disclosure of biological impacts and determination of appropriate mitigation.

5. Section 4.1.1.1 should be revised to address the NWR, and Figure 4.1-5 should be revised to include not only the current boundary of the Sweetwater Marsh Unit of the NWR, but also the current boundary of the South San Diego Bay Unit of the NWR to the south and west. Suggested language for Section 4.1.1.1 (San Diego Bay NWR Comprehensive Conservation Plan) is provided below.

   g. San Diego Bay NWR Comprehensive Conservation Plan

   The U.S. Fish and Wildlife Service recently completed a Comprehensive Conservation Plan (CCP) for the San Diego Bay NWR (USFWS 2006). The CCP, which provides a 15-year strategy for achieving refuge purposes and contributing towards the mission of the National Wildlife Refuge System, describes why this Refuge was established and outlines the Refuge purposes, vision, goals, and objectives.

The San Diego Bay NWR includes the 316-acre Sweetwater Marsh Unit to the north of the Proposed Project, and the South San Diego Bay Unit, which includes 2,300 acres of land and water to the south and west of the Proposed Project. The Refuge was established to protect, manage, and restore habitats for federally listed species and migratory birds, and to maintain and enhance the biological diversity of native plants and animals on the Refuge. The Refuge includes most of what remains of San Diego Bay's historic coastal salt marsh and intertidal mudflat habitat. Refuge goals include: protecting, managing, enhancing, and restoring the coastal wetland and upland habitats on the Refuge to benefit native fish, wildlife, and plant species; protecting state and federally listed species and migratory birds supported on the Refuge; protecting foraging and nesting habitat for colonial nesting seabirds in the South San Diego Bay Unit; and providing opportunities for public uses that are compatible with Refuge purposes.

6. The project description in the recirculated/final EIR should provide more than only limited acknowledgement that the southern end of the Proposed Project footprint abuts a segment of the South San Diego Bay Unit NWR. A portion of parcel OP-2A directly borders 3000 feet of the NWR. The label "South San Diego Bay Unit of the San Diego Bay National Wildlife Refuge" should be used to identify the NWR on Figures 3-2, 3-3, 3-4, 3-5, 3-7, and 4.8-1. In addition, Section 3.1 and associated graphics should be revised to distinguish between the Sweetwater Marsh Unit and the South San Diego Bay Unit of the NWR. The last sentence in the second paragraph of Section 3.1 should read: "Palomar Street and the South San Diego Bay Unit of the San Diego Bay NWR, which includes the existing salt evaporation ponds, at the southern end of San Diego Bay border the planning area to the south and west."

7. The analysis of compatibility of the Proposed Project with the NWR on page 4.1-77 of the DEIR is inadequate. The significant impacts identified on page 4.1-68 of the DEIR related to public access, lighting, and noise (which should also address fireworks, outdoor concerts, and in-water uses) should also be clearly presented under Criterion 3 in Section 4.1.3 and should be expanded to address both the Sweetwater Marsh and South San Diego Bay Units of the NWR. Factors that should be considered in determining the Proposed Project's compatibility with the NWR include impacts to NWR habitats and wildlife from shading, storm water discharge, changes in topography that could affect current hydrological conditions on the NWR, increased noise levels and increased night lighting and sky glow, increases in predation, unauthorized access onto sensitive habitats, and other factors addressed throughout this comment letter. Corresponding enforceable mitigation measures that would reduce impacts to a level less than significant should also be added to Section 4.1.4. Finally, the Wildlife Agencies do not concur with the conclusion of the DEIR that "strategic" fencing would reduce compatibility impacts to a level less than significant, in part because no amount of fencing will minimize most the negative effects of most of the factors mentioned above. Nevertheless, the entire boundary of the Proposed

Project should have fencing or other suitable barriers that would prevent unauthorized access by humans and pets into sensitive coastal habitats.

8. The Wildlife Agencies consider the DEIR misleading in its classification of wetland resources under different regulatory jurisdictions. For example, the DEIR indicates that seasonal ponds in the Otay District and mulefat scrub in the Sweetwater District are exempt from the U.S. Army Corps of Engineers' (Corps) jurisdiction due to isolation. And, Figure 4.8-6, *Overview of USACE Jurisdictional Resources*, labels these wetlands as "exempt from jurisdiction." However, the Corps has not made this conclusion. Until the Corps designates which areas within the Project footprint are subject to or exempt from their regulation, the EIR should refrain from making such designations. The Wildlife Agencies believe that these seasonal ponds may be subject to the Corps jurisdiction based on information provided in the DEIR. Specifically, the DEIR indicates that the Soil Survey for San Diego County maps tidal flat soils along the eastern edge of the Otay District. Furthermore, the historic footprint (*i.e.*, 1859) of San Diego Bay also occurred within the Otay District (Map 3-1 in San Diego Bay Integrated Natural Resource Management Plan, Navy and Port 2000). We recommend that the recirculated/final EIR reflect wetland delineations that have been verified by the appropriate agencies so that the public can review all impacts to wetlands and waters, and their associated mitigation.

9. Based on the description of the uses to be permitted within the eastern 200 feet of the proposed 400-foot wide "ecological buffer," the Wildlife Agencies request that the nomenclature used for the buffer be changed to avoid any misunderstanding on the part of the public or the decision makers. As described in the DEIR, the 400-foot-wide area does not meet the intent of an "ecological buffer." Specifically, the human activities to be allowed within the eastern 200 feet are not compatible with the purposes of an ecological buffer. A true ecological buffer represents an area where no human activity is allowed except for conservation and restoration purposes. In the case of the Proposed Project, the only ecological buffer is within the 200-foot no touch/mitigation area, with the exception of the proposed trail outlooks. The 100-foot limited use buffer and 100-foot transitional use zone should not be considered ecological buffers because they allow uses that are not compatible with conservation. Therefore, the recirculated/final EIR should rename this 200-foot area to more accurately describe the types of low intensity park uses that are proposed within it. Note that we are not requesting a wider true ecological buffer; we are simply a requesting clarification of the intent and uses that would occur within the 400-foot-wide area that abuts the Sweetwater Marsh Unit.

10. The DEIR does not identify the numbers, heights, or locations of the buildings proposed on each parcel. This lacking information is particularly important for parcels S-1, S-4, H-3, H-13, H-14, and O-1A and O-1B, which are adjacent to preserved wetlands within the NWR or other wetland areas (*e.g.*, Sweetwater Marsh, F&G Street Marsh, and J Street Marsh). Depending on their design and location, the buildings on these parcels could provide raptorial perches that overlook wildlife habitat supporting several sensitive avian species

that are prey for raptors, result in bird strikes, and shade adjacent wildlife habitats. Yet, the DEIR does not include adequate mitigation measures to avoid and minimize biological impacts associated with the buildings.

11. The DEIR does not provide adequate information to enable the reviewer to understand how the existing elevations within the Proposed Project site would be changed or how existing drainage patterns would be altered to accommodate future development. The full project-level impact analysis of Phase I in the recirculated/final EIR should include a detailed grading plan for each of the Phase I development areas. Without this information, it is infeasible to properly assess the Phase I potential effects to adjacent coastal resources.

12. The overall design of the Proposed Project should minimize biological impacts in all three project Phases. Project components of Phase I should not foreclose the potential to avoid or minimize the biological impacts from Phases II and III. For example, to a considerable degree, the design (e.g., height) and location of the buildings (i.e., aspects of the buildings that affect biological resources such as the Pacific Flyway) in Phase I will dictate the same for buildings in Phases II and III. Trade-offs among the three Phases in the design and location of buildings warrant considering the entire project as a whole to avoid or minimize its biological impacts.

13. The project description for Parcel S-2 Signature Park (Phase I) lacks the detail necessary for a full analysis of its impacts. The recirculated/final EIR should include: an as-built 11"x17" rendering of the of the Proposed Project design; a full description, with all permitted uses, anticipated activities, hours of operation, structures, lighting fixtures, and other accessory features fully described; and, a detailed analysis of the impacts associated with each of these proposed elements.

14. The project description for Parcel S-2A Open Space (Phase I) describes the parcel as an existing street and as a project mitigation site. The DEIR provides no description of the condition of the vegetation on site, nor details regarding the possible use of the site for mitigation. If this parcel is to be included in Phase I, then the proposed use of the parcel should be fully described. Decisions regarding use of the site for mitigation and whether or not the existing street segment would be demolished are necessary in order to complete adequate project specific CEQA review. The EIR should address the following: whether the site, if used for mitigation, would become part of the F & G Street Marsh; how might the restored habitat be affected by implementation of the Proposed Project; and what would be the value of the site in terms of conservation.

15. The project description in the recirculated/final EIR should acknowledge that the southern end of the Proposed Project is located in the vicinity of the City of San Diego's MSCP preserve, the Multiple Habitat Planning Area (MHPA). Figure 4.8-1 should be revised to include the boundaries of the MHPA.

16. Figure 4.8-1 should be revised to identify the mudflats located west of the Sweetwater Marsh and north of the Harbor District. The recirculated/final EIR should discuss the importance of this mudflat as a biological resource that provides essential foraging and resting areas for birds migrating along the Pacific Flyway.

17. The recirculated/final EIR should provide the details and purpose of the habitat buffer (*e.g.*, buffer width, vegetative cover, permitted and prohibited uses within) between the J Street Channel and development in the Harbor District or around the F&G Street Marsh.

18. The description of the design of the new F&G Street Marsh Bridge is not of sufficient detail to allow for adequate project-level analysis of potential impacts to wetlands and biological resources in the adjacent NWR. The description lacks important details such as the overall design (*e.g.*, length of the bridge), the type of crossing (*e.g.*, box culvert, open span), and duration of its construction.

19. If the recirculated/final EIR retains (we recommend that it not – comment 31b) the proposed pedestrian bridge at Lagoon Drive between the seasonal wetland (SP-2) and F&G Street Marsh, it should provide an evaluation of how the bridge could affect the restoration potential of these two marshes (*e.g.*, any restoration limitations due to the length and height of the bridge).

20. The recirculated/final EIR should provide the design specifications (*e.g.*, box culvert or open expanse, length, height) of the bridge for the new E Street as it crosses the primary tidal channel connecting the F&G Street Marsh to San Diego Bay (see comment 31d).

21. The design of the Resort Conference Center (RCC; Parcel H-3) is not described sufficiently to fully analyze potential impacts. Important design features that need to be discussed in the project description include the proposed building layout on the site with all building heights indicated, the building surface design (*e.g.*, amount and height of glass), building and landscape lighting proposals, and the major components of the landscape design (*e.g.*, tree placement and potential species mix).

22. The project description for parcel HP-23A states, "Because no specific use is proposed, uses that would generate traffic would be subject to separate environmental review pursuant to CEQA Guidelines 15168." This is a misleading statement in that, regardless of the amount of traffic they would generate, all of the programmatic level components (*i.e.*, all project components of Phase II or III, not just parcel HP-23A) of the Proposed Project would likely be subject to subsequent environmental project-level analysis pursuant to CEQA in order to fully evaluate all of their potential environmental effects. This project-level analysis should occur only after site plans and design for Phases II and III are prepared.

Mitigation for Direct Losses of Habitat and Species

23. Throughout the project description, there is mention of small areas that would be designated as "Wetlands and Mitigation Bank." However, there is no description of what this designation means. It is unclear whether these areas are intended solely for project-related mitigation obligations, or to provide the latter plus mitigation "credits" using excess (*i.e.*, beyond the project-related mitigation obligations) mitigation for other projects. If the intent is the former, the term "Mitigation Bank" should not be used. If the intent is the latter, the project applicant needs to go through the appropriate channels to obtain authorization to sell mitigation credits. In this case, the project applicant should discuss this with the Wildlife Agencies as soon as possible, though it may be that the Wildlife Agencies will accept these mitigation areas as mitigation only for the indirect impacts of the Proposed Project.

24. The DEIR identifies the mitigation for the entire Proposed Project. While this addresses the cumulative impacts of the Proposed Project, recirculated/final EIR should also provide the impacts and associated mitigation broken down per parcel. Assuming that the owners of each individual parcel would be responsible for mitigating the impacts to that parcel, it will be necessary to have a table and/or text description of who would be responsible for what impacts and mitigation per.

25. The recirculated/final EIR should clarify why Table 4.8-5 distinguishes between total acreage and total credits, and which number is intended to account for the mitigation obligations of the Proposed Project

26. Since the clapper rail is not only a federal and state endangered species, but also a State Fully Protected Species, only the Service can authorize its take.[1] Therefore, Mitigation Measure 4.8-4, which addresses direct impacts to light-footed clapper rail (*Rallus longirostris levipes*, clapper rail), should be modified to assure that impacts to clapper rail are avoided year-round because this species is a year-round resident. As the species is secretive and reacts to disturbances by hiding in the vegetation, it is susceptible to being crushed by heavy equipment. Therefore, any work occurring within potential clapper rail habitat may affect this listed species and requires consultation with the Service pursuant to the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). The DEIR should acknowledge that any take must be authorized by the Service and should be expanded to indicate how implementation of the proposed biological monitoring will be assured. Mitigation measure 4.8-7 should be revised to provide assurance that there will be no take of clapper rail.

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1 Pursuant to Section 3511 of the California Fish and Game Code, the light-footed clapper rail is also designated as a State Fully Protected species. This designation prohibits take or possession of this species at any time (i.e., no take authorizations from the State are available). This also applies to the bird's eggs.

27. The statement on page 4.8-37 indicating that gnatcatcher have not been reported in the project vicinity is incorrect. The statement should be revised to state that gnatcatcher have been observed in upland habitat on the Sweetwater Marsh NWR. The impact and mitigation section should also be revised to recognize the project's effect on gnatcatchers. Any potential take, either direct or indirect, of gnatcatchers requires consultation with the Service pursuant to the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

28. Mitigation Measure 4.8-9 B and Mitigation Measure 4.8-10 B should be revised to require that all updated assessments of potential impacts from the Proposed Project and proposed mitigation be submitted to the Wildlife Agencies for review and approval, in addition to being submitted to the Port and/or City.

29. Inappropriately, the DEIR does not require mitigation for losses of raptor foraging habitat (*e.g.*, non-native grassland). Mitigation for project-related losses of raptor foraging habitat should occur at a ratio of 1:1 away from the project site (*e.g.*, east of Interstate 5 or south of the South San Diego Bay Unit) since concentrating raptor habitat, and thus raptors, into the remaining habitat within and adjacent to the project site could compromise the survivorship of sensitive ground nesting birds raptors prey upon.

30. Except for mitigation for impacts to raptor foraging habitat, the Wildlife Agencies recommend that all mitigation for project-related direct and indirect impacts to sensitive habitats occur within or adjacent to the project area.

31. The following comments are specific to the *Mitigation Opportunities for the Chula Vista Bayfront Project in the City of Chula Vista, California (Recon 2006*, Mitigation Plan, and Appendix AA).

    a. To offset loss of wetlands and uplands, the DEIR proposes mitigation within the approximate 200-foot "no-touch" habitat buffer along the western boundaries of the Sweetwater (Parcel SP-1) and Otay (Parcel OP-2A) Districts. The Mitigation Plan (Appendix AA) states, "A carefully designed buffer zone…will lessen the impacts associated with development and create an interface that gradually transitions from undeveloped native landscape to developed areas." The Wildlife Agencies consider the restored habitat within the no-touch buffer zone as mitigation only for indirect impacts to the adjacent sensitive biological resources (*e.g.*, Sweetwater Marsh and associated mudflats and J Street Marsh), not for direct impacts (*i.e.*, habitat losses). Created or restored habitat that is intended as mitigation for loss of sensitive habitat should have a minimum 100-foot no-touch habitat buffer between it and adjacent development to minimize indirect impacts from development to the mitigation site. Therefore, the recirculated/final EIR should identify locations other than the no-touch buffer zone to create or restore habitat as mitigation for habitat losses. The Wildlife Agencies do, however,

concur that the habitat restoration within the buffer should be subject to a monitoring and maintenance program.

b. Rather than replace Lagoon Drive [between the seasonal wetland (SP-2) and F&G Street Marsh] with a pedestrian bridge, the Wildlife Agencies recommend that Lagoon Drive be permanently removed to maximize restoration opportunities within and adjacent to the F&G Street Marsh and the seasonal wetland (SP-2). This would partially meet mitigation obligations for loss of habitat, and would minimize human disturbances to the wildlife that may reside within them.

c. Consistent with our July 20, 2006, letter to the City of Chula Vista concerning the Mapping Conflict within the F&G Street Marsh area of the Chula Vista MSCP Subarea Plan, (FWS-SDG-882.7) we request that Marina Parkway proposed to also be demolished and restored as part of the buffer between the project and F&G Street Marsh, and that the restored area be remapped to again be within the City's MSCP Preserve. This would partially meet mitigation obligations for loss of habitat, and would minimize human disturbances to the wildlife that may reside within F&G Street Marsh.

d. The Wildlife Agencies recommend an open expanse for the bridge of the proposed E Street crossing the primary tidal channel between the F&G Street Marsh and San Diego Bay. In addition, the length and height of the bridge should be maximized. This would ensure that the restoration potential within F&G Street Marsh is not limited by insufficient tidal exchange and that adequate high-tide refugia are provided to accommodate wildlife moving between the Bay and the marsh.

e. Any habitat mitigation proposed within the F&G Street Marsh must be coordinated with, and approved by, the Refuge Manager in accordance with the existing Memorandum of Understanding for the Mitigation Leasehold Overlays on the Sweetwater Marsh Unit. Habitat mitigation and/or changes to the existing tidal channel that connects the F&G Street Marsh to San Diego Bay should also be coordinated with the Refuge Manager to ensure that no adverse effects to NWR resources could result from such actions.

Indirect Impacts and Habitat Degradation

32. The DEIR should acknowledge that indirect impacts associated with development adjacent to sensitive habitats would result in a degradation of habitat. The Proposed Project would introduce new and exacerbate existing anthropogenic negative indirect effects to adjacent biological resources; these effects include increased predation on wildlife, increased disturbances to wildlife, bird strikes and disorientation, shading of adjacent habitat, human encroachment, increased noise, increased illumination, and

detrimental changes to hydrology and water quality. Many of these indirect impacts, also referred to as "edge effects," result in a degradation of habitat. In addition, the DEIR should analyze the adverse effects of human activity within 100 feet of the adjacent Sweetwater Marsh Unit, and does it identify potential impacts related to unencumbered access from the Signature Park into the adjacent wetlands (*i.e.*, a continuous fence to protect coastal resources from human and domestic animal intrusion).

A report published by the Department in 1973 on the natural resources of San Diego Bay states, "direct and indirect impacts upon the Sweetwater marsh complex by any further development will seriously threaten the capacity of the area to support resident and migrant wildlife populations" (Department 1973; page 87). It is primarily the potential indirect impacts associated with development that are of such concern. In 1979, the Department wrote a memo to the San Diego Coast Regional Commission on the Chula Vista Land Use Plan. The memo favors the maintenance of the agricultural operation that existed at that time adjacent to the coastal salt marsh, stating, "It would seem to be more compatible with the marsh than the proposed residential and visitor serving development. The agricultural operation provides an effective buffer between the marsh habitat and urban (or industrial) encroachment" (Department 1979).

The Wildlife Agencies recognize the efforts made to reduce the intensity of the development proposed adjacent to the Sweetwater Marsh. However, despite these efforts, we concur with the sentiments reflected in the preceding paragraph because the overall intensity of development within the Proposed Project area could still result in significant direct and indirect impacts to sensitive habitats and the species they support. The wildlife habitats that occur within or in close proximity to the Proposed Project area (*e.g.*, Sweetwater Marsh and South San Diego Bay Units of the NWR, the F&G Street Marsh, the J Street Marsh, the shoreline and mudflats of San Diego Bay, and the Chula Vista Nature Reserve) are important to the survival of numerous resident and migratory species. As such, future development must retain the biological functions and values of these sensitive habitats. The recirculated/final EIR should reflect project modifications and require habitat restoration and management elements that would mitigate for the direct, indirect, and cumulative impacts from the project. We provide below a more detailed discussion of specific indirect impacts and possible mitigation measures to reduce impacts that should be identified and addressed in the recirculated/final EIR.

Mitigation Measures for All Indirect Impacts

33. Mitigation for indirect impacts that result in permanent degradation of sensitive habitats within or adjacent to the project site should include enhancement or restoration of directly and indirectly avoided in-kind habitat elsewhere within the Proposed Project area at a minimum of a 1:1 ratio. For example, the project description indicates that Parcel HP-5, consisting of wetlands within an existing narrow "L" shaped drainage channel, would remain, and would contain a 50-foot-wide setback on either side to protect against

encroachment into the wetlands. The Wildlife Agencies generally recommend that a minimum of a 100-foot wide buffer be provided between wetlands and development. Although the wetland on Parcel HP-5 is considered open space and un-impacted in the DEIR, this wetland would experience a number of indirect impacts (*e.g.*, shading, night lighting, urban runoff). The recirculated/final EIR should fully address all such impacts to wetlands and other sensitive habitats and should provide appropriate mitigation to reduce the impacts to a level less than significant. Similarly, mitigation for degradation of the wetlands located in the Sweetwater District (SP-2 and SP-1) and the F&G Street Marsh and its tidal tributary should include enhancement of those wetlands and the restoration of similar habitats at a minimum of a 1:1 ratio.

Buffers to Sensitive Habitat and Wildlife

34. In our September 12, 2005, letter, we requested that adequate habitat buffers (*e.g.*, no touch buffers) surround all sensitive biological areas to minimize indirect impacts from adjacent development. These buffers should prohibit human and domestic animal access, consist of only appropriate locally native species, and be free of all project infrastructure (*e.g.*, erosion control devices, fences, brush management, trails, and picnic tables). To prevent human and mammalian access into buffer areas, fencing or other suitable barrier systems should be installed at the outside edge of the habitat buffer prior to the initiation of project construction. Additionally, screening or berms should be incorporated around or within the habitat buffers to protect wetland birds from lighting and noise related-disturbances from beyond the buffer. In concert with the habitat buffer, land uses adjacent to the buffer should include low intensity public use (*e.g.*, walking, biking, and passive recreation) to minimize indirect impacts (*e.g.*, lighting, shading, and noise) associated with high intensity development. We recommend that landscaping adjacent to buffers utilize only native species to conserve water and avoid or minimize pollutant (*e.g.*, fertilizers, pesticides) discharge into wetlands.

Specific Comments

35. In addition to the habitat buffers proposed in the DEIR, a no-touch minimum 100-foot wide habitat buffer should be designed around any wetland in or adjacent to the project site. For instance, buffers should surround the wetlands in SP-1, SP-2, HP-5 (L Marsh), F&G Street Marsh and its associated tidal inlet, J Street Marsh, Telegraph Creek (OP-2A), and the South San Diego Bay Unit of the NWR. These buffers should be incorporated into Parcels SP-1, S-2, HP-11, S-2A, H-13, H-14, HP-6, HP-7, OP-2A, and O-1A. A 100-foot buffer should also be placed along the entire shoreline to prevent human and domestic animal access to the mudflats and salt marsh. As the project is proposed, only parcel H-1A is designed to have a 100-foot buffer along its shoreline.

36. The DEIR inappropriately identifies the 400-foot-wide buffer (Parcel SP-1) between development (S-1, SP-3, and S-2) and Sweetwater Marsh Unit as an "ecological buffer."

Comment 9 explains why this term inaccurately describes the proposed buffer. As discussed in our September 12, 2005, letter, the 200-foot no-touch buffer zone within the Sweetwater District (Parcel SP-1) should include no human activities and should be protected with a permanent fence. As shown in Figure 4.8-24, there is an outlook, fence, and berm proposed within this no-touch buffer. The outlook, fence, and berm all need to be relocated to the 100-foot limited use zone. A permanent fence should be placed along the northern and westerly edge of the entire length of the 200-foot buffer to prevent human and animal encroachment into the habitat buffer and adjacent sensitive habitats. As recommended in our September 12, 2005, letter and discussed at several meetings with Port and City representatives, mitigation for significant direct and indirect impacts to sensitive wetland areas as a result of increased human and domestic animal activity in and around Sweetwater Marsh and adjacent intertidal areas should be provided through installation of appropriate fencing. We continue to recommend a minimum six-foot-high black vinyl chain link fence along the development side of the habitat buffer boundary. Any fencing between development and the NWR should be coordinated with the Refuge Manager. Native cacti, as proposed on page 3-28 of the DEIR, would not adequately mitigate potential impacts related to unauthorized access into sensitive areas from the adjacent park site.

The Mitigation Plan (Appendix AA) indicates that the Transitional Use Zone in SP-1 may incorporate a more landscaped theme. The Wildlife Agencies recommend that landscaping use only native species to conserve water and avoid and minimize pollutant (*e.g.*, fertilizers, pesticides) discharge into wetlands. Landscaping should not include trees that may provide nesting for pest species (*e.g.*, rats) or predator perches with a line-of-sight into the NWR or adjacent mudflats.

The Wildlife Agencies recommend that impacts to the wooly sea-blite population located within SP-1, which is considered a buffer, be avoided.

37. A buffer of at least 200 feet should be provided between wetland resources within the Sweetwater Marsh Unit and the edge of Parcel S.

38. A no-touch habitat buffer should be included between the office buildings proposed on Parcel S-4 and the wetlands to the north, which are located on the NWR.

39. The mudflat shoreline extending north of the Harbor District is used by migratory birds for foraging and resting. Human and animal encroachment into the mudflats would disturb the birds, causing them to move and expend energy otherwise necessary for completion of their migration. The DEIR proposes a buffer and signage along the entire shoreline of the project in the Sweetwater District to help protect the mudflats from human impacts. We recommend that suitable physical barriers (*i.e.*, chain link fence) be provided along the buffer edge farthest from the mudflat shoreline to minimize encroachment from humans and domestic animals into the mudflats.

40. The Wildlife Agencies recommend that the buffer and shoreline north of the J Street Channel (HP-6 and HP-7) be naturalized. For instance, the rip rap could be removed to provide a more natural shoreline, with native upland plants installed between the channel and the proposed promenade. As already indicated, the habitat buffer north of the J Street Channel should be at least 100 feet wide. To maximize the width of the habitat buffer, we recommend that the width of the promenade be reduced from 12 feet to 8 feet.

41. Although parcel OP-2A is designated as an ecological buffer, the project description refers to a pedestrian pathway and a public boardwalk/observation area that could encroach into the buffer. The recirculated/final EIR should identify where encroachment occurs and fully analyze all associated impacts to the ecological buffer within parcel OP-2A, as well as to the adjacent segment of the Refuge, J Street Marsh, and the wildlife these areas support.

42. The DEIR provides no discussion in the project description about parcel O-4 or the buffer area shown immediately to the west of this parcel on Figure 1-1. The recirculated/final EIR should indicate what, if any, uses are proposed between the relocated power plant and the South San Diego Bay Unit of the NWR. The Wildlife Agencies recommend that a 100-foot-wide ecological buffer be provided to minimize or avoid impacts to the adjacent wetland area.

Increased predation on wildlife

43. The DEIR does not adequately address the inevitable project-related increase in levels of predation on sensitive species located on the NWR and other sensitive habitats. The recirculated/final EIR should include an adequate analysis of the impacts related to increased predation as a result of: (1) increases in nocturnal lighting; (2) displacement of foraging raptors and mammalian predators from the project site to adjacent wildlife habitats; (3) increases in the numbers of generalist predators (*e.g.*, rats, ravens, crows, gulls) attracted to the area due to increases in trash; and (4) the introduction of additional cats and dogs as a result of new residential development. The recirculated/final EIR should also propose adequate measures to mitigate these impacts to a level less than significant.

44. The Wildlife Agencies are concerned about the inclusion of the proposed Signature Park on S-2 because it would likely attract generalist predators to the adjacent NWR and mudflats. The Signature Park includes amenities such as lighting, picnic areas, and vending of food and beverages, which could attract generalist predators due to an increase in trash. Though trash containers would be provided, some windblown trash from park users would end up in the adjacent wildlife habitats (Significant Impact 4.5-1), thus attracting predators that also prey on ground nesting birds.

45. The recirculated/final EIR should identify the potential for indirect impacts to wildlife from increased predator perching due to the building heights and designs and types of landscaping proposed on the following parcels (adjacent habitat affected shown in parenthesis): S-1 (Sweetwater Marsh), S-4 (Sweetwater Marsh), H-3 (F&G Street Marsh), H-13 (J Street Marsh), H-14 (J Street Marsh), and O-1A and O-1B (J Street Marsh).

Mitigation Measures

46. We recommend that all relatively tall structures and all landscaping within the project site be situated away from sensitive habitats to reduce predator perches with a line-of-sight into adjacent sensitive habitats, as well as to reduce shading effects on sensitive habitats, and bird strikes (*i.e.*, collisions with reflective glass). For example, development on S-1 and S-4 should be re-oriented so that the buildings (*e.g.*, 125-foot tall buildings proposed on Parcel S-4) and any tall landscaping is located at the southern portion of the parcels while the parking is located at the north end of the parcels. This would minimize the introduction of predator perching with a line-of-sight into the adjacent marshes north and west of the parcels. Figure 3-9 of the DEIR shows that the buildings are proposed to be located at the northern end of the parcels in close proximity to the adjacent sensitive habitats. Similarly, the tallest buildings associated with the RCC should be located on the southeast portion of Parcel H-3. This would also reduce the RCC's shading impacts to the F&G Street Marsh and minimize the potential for bird strikes.

47. While the DEIR acknowledges that increased predation could result from an increase in predator perches with a line-of-site into habitats, no mitigation measures are proposed to avoid and minimize such impacts. The recirculated/final EIR should require that all buildings, signs, lighting fixtures, and tall landscaping with a line-of-site into sensitive habitats be designed and/or placed in such a manner to avoid the introduction of predator perches and thereby reduce the potential for take of sensitive wildlife.

48. To at least partially mitigate for the project-related increase of predation take of federally and/or state listed ground nesting birds (*i.e.*, least tern, western snowy plover, clapper rail, and Belding's savannah sparrow), the recirculated/final EIR should require (a) that the applicant establish a non-wasting endowment that would accrue sufficient interest annually to underwrite the costs of the services of predator control specialists, such as U.S. Department of Agriculture, Wildlife Services, and (b) the in-perpetuity implementation of a predator control on the adjacent NWR (Sweetwater Marsh and South San Diego Bay Units) and other sensitive habitat areas (mudflats west of Sweetwater District, J Street Marsh). The Port should coordinate with the Refuge Manager to determine the appropriate size of the endowment commensurate with the project-related impacts.

49. The Proposed Project would result in a significant impact to San Diego Bay and adjacent wetlands due to wind-blown litter (Significant Impact 4.5-1). To mitigate such impacts,

the project includes trash control measures (*e.g.*, trash containers with attached lids, trash control enclosures). However, this may not be adequate. Chain link fencing should be provided along the entire interface of development and sensitive habitats to capture trash and reduce attraction of predators and pest species into sensitive areas.

Disturbances to Wildlife

50. Disturbances to wildlife associated with the implementation and long-term operation of the Proposed Project should be addressed. For instance, outdoor activities, such as fireworks, concerts, and other light and noise generating activities that could be associated with the resort/conference center, Signature Park, other parkland, harbor, ferry terminal, and various retail/commercial recreation areas, and their impacts to wildlife are need to be described, and their impacts analyzed. Similarly, impacts to migratory, resident, and breeding birds that could result from the increased on-water recreation from redevelopment of the South Bay Boatyard (HW-6) and the Commercial Harbor (HW-3) within the Chula Vista Marina should also be described.

The new commercial harbor is intended to enhance public access to the water, and enhance boating activity on the water. Envisioned for this commercial harbor are water taxis, dinner boats, harbor cruises, visiting historic vessels, and boat rentals, a ferry terminal, and restaurant. Increased boating activity could negatively affect foraging and loafing activities of shorebirds and waterfowl. Increased disturbances to foraging habitat could negatively affect the stability of the adjacent nesting bird colonies (*i.e.*, South San Diego Bay and Sweetwater Marsh Refuge) because disturbance-free foraging areas to obtain food for chicks are important (Rodgers and Smith 1997). Increased boating could also displace water fowl access to feeding areas and result in a subsequent loss of production of young (Drent and Guiguet 1961, Conservation Committee Report 1978, Huffman 1999, Manning 2002). Although the birds can fly to other areas to avoid highly disturbed foraging habitat, such behavioral adaptations can increase the numbers of flights and flight times between foraging and loafing, resulting in energy deficiencies that could translate to reduced productivity and fitness (Manning 2002).

51. Though impacts to wildlife from construction noise are addressed, the DEIR does not adequately address impacts to wildlife from operational noise. The Biology sections of the recirculated/final EIR should include a discussion of operational noise impacts to wildlife. Currently, operational noise is addressed only in Section 4.7 *Noise*. Based on figure 4.7-3, it appears that noise levels that may affect several sensitive avian species could occur within all habitats within the project site [*e.g.*, L Street Marsh (HP-5), Telegraph Creek (OP-2A), ephemeral wetland (S-2A)] and habitats adjacent to the project site (J Street Channel and Marsh, and F&G Street Marsh and its tidal tributary). However, impacts to other habitats adjacent to the project site (*e.g.*, Sweetwater Marsh and South San Diego Bay Units of the NWR, Chula Vista Nature Reserve) cannot be evaluated because the noise contours provided in Figure 4.7-3 do not extend sufficiently

beyond the project boundary. As such, Figure 4.7-3 should be revised to include noise contour that extend 200 feet beyond the project boundary.

Mitigation Measures

52. Fireworks and outdoor concerts that generate noise beyond the development boundary should be restricted to outside the avian breeding season (*i.e.*, January through September, depending on the species) to minimize impacts to nesting and fledging birds.

53. To partially mitigate the Proposed Project's indirect impacts, the recirculated/final EIR should: (a) prohibit boating in the open waters east of the proposed realigned navigation channel and north of the South Bay boat yard to avoid or minimize disturbance to migratory birds feeding along the mudflats and resting in San Diego Bay; (b) require the installation of regulatory signage on buoys and boat markers along the boat channel; and, (c) require increased enforcement by the Harbor Patrol to deter watercraft from going ashore onto sensitive habitat areas (*e.g.*, Chula Vista Wildlife Reserve, northern levees of the Salt Ponds, mudflats along Sweetwater Marsh, J Street Marsh) and adversely affecting the birds and habitat that nest, forage, and rest there, and are subject to indirect project-related impacts.

54. Depending on an analysis of the noise contours in Figure 4.7-3 requested above, it may be necessary to mitigate for traffic related noise. For example, sound walls along the roads adjacent to sensitive habitats may be warranted. Potential mitigation should be addressed in the recirculated/final EIR.

<u>Human Encroachment</u>

55. The Wildlife Agencies are concerned that the Signature Park on Parcel S-2 would invite uncontrolled human and domestic animal encroachment onto the Refuge and the adjacent mudflats, thus disrupting wildlife. The recirculated/final EIR should require that the Proposed Project provide full-time personnel at the Signature Park to enforce restrictions on human and domestic animal access to the NWR and mudflats.

56. Shoreline promenades (HP-3, HP-6, and HP-7) occur immediately north of the J Street Channel and J Street Marsh. A four-foot-high railing is proposed to minimize encroachment into the J Street Channel and Marsh. The Wildlife Agencies recommend that the recirculated/final EIR require that the design of the railing include multiple horizontal railings and/or mesh fencing to ensure that domestic animals do not move under the railing into the marsh.

57. The following comments pertain to the Draft Port Master Plan Amendment (Appendix B to the DEIR; Draft Amendment).

a. Page 33 of the proposed Draft Amendment describes land use designations utilized for Port-owned lands. The Port proposes to modify the "wetland" designation to "wetland and mitigation bank area." Specifically, the Draft Amendment includes language to allow areas within the wetlands on site identified for potential enhancement, restoration, and/or creation opportunities to be utilized as mitigation for future development projects. As indicated in Comment 23, this language may be inappropriate, and should be considered for elimination from the Draft Amendment.

b. The Draft Amendment proposes language (Page 33) that allows passive uses, such as overlooks, picnic areas, and/or spur-trails, within the wetland buffers with the proposed designation of "wetland and mitigation bank area." These proposed modifications are inappropriate. Any wetland area, or their associated biological buffers, should be devoid of all development, including the passive uses proposed to be allowed. If such uses are to be allowed within wetland areas or their associated buffers, the recirculated/final EIR should provide an adequate analysis of the potential impacts to wetlands from these uses and discuss appropriate mitigation. Otherwise, the Port should remove from the Draft Amendment the proposed language allowing such uses.

c. The Draft Amendment also includes language (Page 33) allowing interpretive and educational opportunities within the wetland buffers while, including coastal access. While the proposed language requires that such uses occur in a manner that will ensure the protection and preservation of these sensitive habitat areas. We recommend that all outlooks and interpretive tools occur outside of the 100-foot wetland buffer.

Bird Strikes and Disorientation

58. Despite our recommendations in our September 2005, letter, and in electronic mail to and meetings with the Port, on how the Proposed Project could avoid or minimize bird strikes and/or disorientation from collisions with buildings, the DEIR does not adequately address these impacts to migrating or resident birds. South San Diego Bay has been identified as a significant wintering ground and migratory stopover point along the Pacific Flyway because of its proximity to high-quality coastal salt marsh and San Diego Bay. Much of what remains of San Diego Bay's historical shallow subtidal, intertidal mudflat, and salt marsh habitats within the south bay provides essential foraging and resting areas for ten of thousands of birds migrating along the Pacific Flyway. In recognition of the importance of these remaining habitats, the south bay has been designated a Western Hemisphere Shorebird Reserve Network Site and the Units within the Refuge have each been recognized as Globally Important Bird Areas by the American Bird Conservancy. The recirculated/final EIR should address these important biological resources that occur immediately adjacent to the project boundaries. Additionally, the recirculated/final EIR

should include a map showing potential migration corridors through and/or adjacent to the subject property and how the migration corridor would be affected by the project.

Mitigation measures

59. There is a high potential for impacts to migrating and resident birds colliding with the buildings located on the following parcels: S-1 (Sweetwater Marsh), S-4 (Sweetwater Marsh), H-3 (F&G Street Marsh), H-13 (J Street Marsh), H-14 (J Street Marsh), and O-1A and O-1B (J Street Marsh). The DEIR includes mitigation measures to address these impacts only from buildings greater than 100 feet in height (Mitigation Measure 4.8-24). However, as stated in the DEIR, "both tall buildings and low buildings can be dangerous to birds" (Page 4.8-89). Therefore, such measures should be applied to all buildings that have an unobstructed line of sight to nearby open water or large areas of open space regardless of height. To determine if these measures are adequate, we again recommend that monitoring for bird strikes be implemented during Phase I of project implementation. The recirculated/final EIR should also require that, if there is evidence that bird strikes are occurring, the applicant contact the Wildlife Agencies as soon as possible to discuss potential measures for implementation to reduce these impacts.

60. Buildings should be oriented so the tallest buildings are as far away as possible from San Diego Bay or adjacent habitats.

61. The height limits on Parcel H-3 should be reduced to a maximum of three stories (or 50 feet) to avoid shading impacts to adjacent habitat areas and to minimize the potential for bird strikes.

<u>Shading of Adjacent Habitat</u>

62. Despite our recommendations in our September 12, 2005, letter, and in electronic mail to and meetings with the Port, the DEIR fails to address the biological impacts associated with shading of habitat by buildings and structures. Reductions in available light levels from shading can disrupt photosynthetic processes and impair growth of plants, algae, and phytoplankton in wetlands or waters, and thus modify existing habitats, which in turn can impair their suitability for avian species and other wildlife. We recommended that for each development option, the recirculated/final EIR provide three-dimensional images of any structures that could cast shadows on adjacent freshwater, intertidal, and tidal wetland areas. These images should reflect the maximum allowable floor area ratio, the maximum allowable height, and the minimum contemplated setbacks (*i.e.*, buffers). The acreages of the shaded areas should be quantified by habitat type and described. Based on our review of the DEIR, we anticipate the following project components would impact habitats from shading.

a. Development adjacent to the L-Marsh (HP-5) would consist of 300-foot tall buildings set only 50 feet back from the wetland. These buildings would shade and negatively affect the L Marsh and could potentially affect the J Street Channel and J Street Marsh. Based on an analysis of the potential shading effects of each building on sensitive habitat, the recirculated/final EIR should (a) describe modifications to building designs and/or locations (*i.e.*, reduced building heights or increased width of setbacks), and (b) if shading impacts still occur, require appropriate mitigation consistent with Comment 33.

b. Parcel H-3 has a maximum building height of 300 feet. Depending upon the placement of the buildings on this site, future development could negatively affect the F&G Street Marsh (which would represent a direct impact to resources located on federal owned land) and its tidal inlet. To avoid shading impacts, the maximum height limit on this parcel should be reduced to three stories (or 50 feet). The recirculated/final EIR should (a) describe such modifications to the building designs, and (b) if shading impacts still occur, require appropriate mitigation consistent with Comment 33.

Increased Illumination

63. Despite our recommendations in our September 12, 2005, letter, and in electronic mail to and meetings with the Port, the DEIR does not fully address impacts associated with artificial night lighting (ANL), including direct and indirect (*i.e.*, sky glow, light pollution) ANL. ANL generally threatens wildlife by disrupting biological rhythms and otherwise interfering with the behavior of nocturnal animals (see contributions from Artificial Night Lighting Conference 2002). Nocturnal and migrating birds, migrating bats, insects, fish, and sea turtles are particularly impacted by ANL (Evans Ogden 1996 and citations therein). Migrating birds use the stars and moon for navigation during migrations. These birds can become disoriented when flying through a brightly lit area; this disorientation can lead to injury and/or death. Artificial night lighting also disrupts the behavior of fish and amphibians, and billions of moths and other insects are killed from the lights each year. ANL can also affect aquatic invertebrates that are prey for other animals. Some zooplankton migrate vertically in response to lighting. In the evening, they rise in the water column to feed on drifting microscopic plants (phytoplankton). When daylight approaches they migrate down to avoid predators. However, ANL may keep them from rising and feeding (Moore et al. 2000). Reduced predation on the phytoplankton can result in phytoplankton blooms which deplete the dissolved oxygen in the water and shade aquatic vegetation (Harder 2004). Reduced oxygen levels can then negatively affect fish or other organisms depending on dissolved oxygen in the water column.

Mitigation measures

64. The recirculated/final EIR should provide a delineation of areas with sensitive habitats that are expected to be directly or indirectly exposed to light levels of higher intensity (including increased sky glow) than existing ambient levels. The delineation should be on a large scale aerial photograph (a scaled figure). The recirculated/final EIR should evaluate the direct, indirect, and cumulative biological impacts resulting from the project-related ANL, based on the delineation, and should propose specific measures whose implementation would prevent an increase in existing ambient light levels in sensitive habitats.

65. To minimize the biological impacts from outdoor ANL, we recommend that design standards for all phases of development ensure that outdoor lighting throughout the project study area is minimized and that no project-related lighting falls outside the project boundaries, upon any habitat buffers, habitats, or open water. All lights, including street lights, pedestrian and bicycle path lighting, and any recreational lighting should be directed away from and fully shielded so as to not illuminate adjacent habitats. In addition, no external lighting of buildings (*e.g.*, cosmetic lighting) or other structures should be permitted, no lighted building signs should be permitted beyond the first floor, and all commercial signage should be provided on monument signs rather than pole signs or on the sides of buildings.

66. Lighting proposed for the Signature Park (S-2) and the Shoreline Promenade (HP-3, HP-6, and HP-7) should be placed only where needed for human safety. Lights should be on low-standing (*e.g.*, 2-feet tall) bollards, shielded, and flat-bottomed so illumination is directed downward onto the walkway and does not scatter. Low-pressure sodium bulbs that emit only a narrow range of yellow light should be utilized because monochromatic yellow light, which is not perceived as "natural" light by wildlife, minimizes ecological disruptions.

<u>Increased Freshwater Input, Degraded Water Quality, and/or Erosional Surface Flows</u>

67. The DEIR does not adequately describe or analyze the potential degradation of existing wetlands within and adjacent to the project site due to project-related changes in surface storm water flows, nor does it provide measures to prevent, or mitigation to offset, such degradation. The project-related storm water (freshwater) flows would be discharged into the seasonal wetland in the Sweetwater District (S-2), the F&G Street Marsh and its tidal tributary, the J Street Channel, Telegraph Creek, and the J Street Marsh. Grading in SP-1 and S-1 would increase water flows into Parcel SP-2 (season wetlands) and F&G Street Marsh, and there would be more storm drains draining into the J Street Channel and Telegraph Creek. Increases in storm water flows into relatively rare salt-water wetlands can result in a type-conversion to more common freshwater wetlands. In addition, depending on the velocity of the storm water discharges, the flows could disrupt the

morphology of the receiving waters/habitats by ongoing erosion. Over time, the discharges can seriously damage sensitive habitats. Increases in flows from impervious surfaces associated with urbanization can result in: a) stream bed scouring and habitat degradation; b) shoreline erosion and stream bank widening; c) loss of aquatic species; and d) decreased baseflow (USEPA 1999). Furthermore, the project-related increases in traffic will result in higher concentrations of vehicle-related contaminants (*e.g.*, copper, asbestos, hydrocarbons, and antifreeze) in the storm water flows.

We are particularly concerned about deleterious changes to the salt balance, morphology, hydrology, and water quality of the F&G Street Marsh and its tidal tributary because such changes can negatively affect future restoration of the F&G Street Marsh, and because the light-footed clapper rail has been known to reside there. Conversely, current storm water flows into the L-Marsh (HP-5) would be redirected to the street, potentially reducing water flows to the wetland and thereby also reducing the wetland habitat. While the DEIR acknowledges the expected changes in storm water flows, it does not quantify the changes in flow, nor does it identify the design and location of the best management practices (BMPs) for Phase I to avoid impacts associated with the post-construction surface flows. The recirculated/final EIR should include a thorough discussion of project-related changes in surface flows and how these changes would affect the existing wetlands within and adjacent to the project site.

Mitigation Measures

68. All storm water flows should be treated and filtered prior to entering existing wetlands and San Diego Bay to avoid the introduction of pollutants (*e.g.*, hydrocarbons, sediments, fertilizers, pesticides, and trash).

69. The site designs for the Proposed Project should minimize the project-related increase in dry and wet-weather surface flows, and integrate on-site BMPs that would attenuate the flows (prior to their discharge) to reduce their impacts on the morphology of sensitive habitats to which they ultimately discharge. Examples of BMPs to consider include appropriately sized grass swales and vegetated detention basins. Because these BMPs occupy space, their timely consideration of the requirements that apply to the project site pursuant to the numeric sizing criteria in the Municipal Storm Water Permit is necessary. All BMPs should be within the development footprint, outside of the buffers. The recirculated/final EIR should provide the location(s) and descriptions of the proposed construction and post-construction BMPs, and should discuss the long-term maintenance of the latter.

Marine Biological Resources and In-water Construction

70. To adequately evaluate marine biological resources and potential impacts to these resources, the recirculated/final EIR should:

a. provide a figure indicating the different marine habitat classifications (*i.e.*, intertidal, shallow subtidal, moderate subtidal, deep subtidal, salt marsh, and eelgrass) within and adjacent to the project area;

b. provide a table that identifies the range of depth of different marine habitat classifications, including: (1) intertidal (+7.8 feet to -2.2 feet MLLW (mean lower low water)); (2) shallow subtidal (-2.2 MLLW to -12 feet MLLW); (3) medium subtidal (-12 feet MLLW to -20 feet MLLW), and deep subtidal (deeper than -20 feet MLLW) habitats; and

c. indicate the areas of intertidal habitat and shallow subtidal habitat that are/would be natural (*e.g.*, soft-bottom) vs. artificial (*e.g.*, rip rap, concrete) before and after project development. Soft bottom intertidal habitat provides foraging habitat for wading birds and shorebirds, including the federally listed endangered western snowy plover (*Charadrius alexandrinus nivosus*). Shallow subtidal habitat consisting of either unvegetated soft bottom areas or areas vegetated with eelgrass (*Zostera marina*) are considered significant habitats for birds (including the least tern and brown pelican), fish, benthic invertebrates, and other organisms (including the Pacific green sea turtle).

71. Section 4.9, *Marine Biology,* in the recirculated/final EIR should include a discussion of permanent and temporary losses of foraging habitat for birds that visually search for their fish prey and plunge-dive into the water to capture their fish. Foraging habitat is defined as open water containing suitable fish prey that is available for foraging by plunge-diving birds (*e.g.*, least terns and brown pelicans) by not being obstructed and/or covered by structures (*e.g.*, piers, docks, or boats). This is particularly significant resource at the project site due to its close proximity to the Sweetwater Marsh and South San Diego Bay Units of the Refuge and the Chula Vista Wildlife Reserve (*i.e.*, approximately 1 mile or less), where plunge-diving birds both nest and/or roost during their migration. Additionally, covering open water habitats with structures would reduce light availability in the water column and introduce hard substrate which would likely support a different species composition and biological community than the extant composition. In essence, there could be an ecological type conversion where structures are introduced. We recognize that there is a discussion of the permanent impacts to surface water foraging habitat in the Section 4.8, *Terrestrial Biology*, but the impacts to this resource resulting from in-water construction make it appropriate to include a discussion of these impacts in Section 4.9.

Mitigation measures

72. The Wildlife Agencies concur that increases in structures (*e.g.*, docks, wharfs, piers) covering the San Diego Bay should be offset (Mitigation Measures 4.8-7 and 4.8-8 in the

Section 4.8, *Terrestrial Biology*). Temporary and/or permanent reductions in foraging habitat for sight-foraging birds that feed on fish (*e.g.*, least tern, brown pelican) should be avoided and minimized. We also recommend that a mitigation measure be added that requires that temporary reductions in foraging habitat due to in-water construction activities that result in increased turbidity (*e.g.*, dredging, pile pulling, jetting, and driving) be conducted outside the breeding season of the least tern (April 1 to September 15) to avoid impacts to this listed species.

73. The Wildlife Agencies recommend that losses of intertidal habitat (*i.e.*, 0.03 acre anticipated from redevelopment of HW-3) be mitigated with creation of in-kind habitat and at a minimum 1:1 ratio. Impacts to pickleweed habitat (*i.e.*, salt marsh habitat) should be mitigated at a 4:1 ratio to be consistent with City's MSCP Subarea Plan. As such, Mitigation Measure 4.9-5A should be revised to include mitigation of 0.004 acre of pickleweed.

74. The Wildlife Agencies recommend that dredging activities be surrounded by silt curtains to minimize sedimentation and smothering of adjacent eelgrass.

75. The DEIR indicates that losses in the existing benthic community from dredging activities would be less than significant due to the rapid recolonization of the benthic community in the new area. The Wildlife Agencies request that the recirculated/final EIR provide documentation to support this conclusion. Absent such documentation, we recommend that the dredging activities be coupled with a benthic study to characterize (*e.g.*, rate and community composition) recolonization of the benthic community.

Hazards and hazardous materials/public safety (*i.e.*, contaminants)

76. The DEIR highlights areas where property owners are potentially liable for impacts of contamination. The DEIR notes that known contaminated sites must be remediated to the satisfaction of the Regional Water Quality Control Board, County of San Diego Department of Environmental Health, State Department of Toxic Substances and Disease Control (DTSC) and perhaps others. We would like to work with the above regulatory agencies to ensure that remedial actions at identified sites would be protective of ecological receptors. Such actions include consideration of ecological risk based cleanup goals for contaminated media, and ensuring that contaminated media that are on site do not migrate off site into ecologically sensitive areas such as San Diego Bay and neighboring marsh habitats, especially those in the NWR. In that regard, the recirculated/final EIR should address the following specific comments.

a. Mitigation for hazards posed by clean-up and construction operations should include the preparation and implementation of plans to prevent migration of contaminated material into environmentally sensitive areas. Migration paths of concern for ecological receptors include groundwater that may surface in marshes,

streams or San Diego Bay (especially at the sediment-water interface), and soil that may migrate off site via erosion and surface runoff. Contaminant levels that pose insignificant risk to human health, especially under the commercial/industrial use scenario, may still pose significant risk to ecological receptors, both in terrestrial and aquatic settings. Consequently, contaminant levels deemed to be safe for humans are not necessarily safe for ecological receptors, and measures to prevent off-site migration of hazardous contaminants should be planned and implemented even though risks to humans may not be significant.

b. Actions being taken to address ecological hazards should be noted. For example, clean-up of Parcel HP-5 (*i.e.*, L Marsh) and any potentially contaminated areas should ensure that concentrations of contaminants in materials left on site and/or leaving the site(s) should not meet or exceed concentrations of risk to ecological receptors (*e.g.*, invertebrates, birds).

c. Mitigation Measures 4.12-1, Item B, should mention ecological risks for areas that are to remain open and are being remediated to ecological risk-based goals (*e.g.*, the L Marsh or Unit HP-5). In Item B, replace "(*i.e.*, commercial, residential)" with "(*i.e.*, commercial, residential, ecological)."

d. Contaminant levels suitable for ocean disposal may not be suitable for re-suspension in San Diego Bay. Accordingly, Mitigation Measures 4.5-4 and 4.9-6 should be revised by deleting the following text from part B: "If the sediment would be suitable for ocean disposal, no silt curtain shall be required."

Consistency with the City of Chula Vista's MSCP Subarea Plan

77. The proposed land exchange would bring lands into the City's jurisdiction that were not considered in the development and approval of the City's MSCP Subarea Plan. As such, take of listed species and impacts to covered species on those lands are not authorized by the MSCP. In order to bring those lands into the MSCP, development within the area to be annexed must be consistent with the MSCP and the City's Subarea Plan. An amendment to the Subarea Plan and incidental take permit will be required (Section 5.3.1.2 of the City's Subarea Plan). The recirculated/final EIR should incorporate this requirement and the applicant should begin working with the City and the Wildlife Agencies as soon as possible to start the amendment process.

78. Portions of Proposed Project lie within the boundaries of the City's MSCP Subarea Plan and portions of the proposed land transfer that are currently within the Port's jurisdiction would come under the jurisdiction of the City. Furthermore, the Proposed Project borders portions of the City's MSCP Preserve and is surrounded by adjacent lands that lie within the boundaries of the City's MSCP Subarea Plan. Some portions of Proposed Project site currently lie within the City and some portions of the Proposed Project site that are

currently under the Port's jurisdiction would come under the jurisdiction of the City with the proposed land exchange. Furthermore, the lands within the City are/would be within the boundaries of the City's MSCP Subarea Plan, and portions of the Proposed Project site are adjacent to the City's MSCP Preserve. As an important component of regional conservation planning efforts, the City's MSCP Subarea Plan provides a strong framework for how and where development and habitat conservation occurs within the City. Mitigation ratios established through the negotiations for habitat conservation plans (HCP)/NCCPs are generally lower than those in areas not subject to an HCP/NCCP because the planning assures that mitigation is conducted in a manner and at pre-determined locations agreed to by all parties to create a habitat preserve. The Port is not party to the MSCP or any other HCP/NCCP. We typically expect that the mitigation for project-related habitat losses within a jurisdiction with no HCP/NCCP would be provided at higher ratios than required by an HCP/NCCP to account for the lack of coordination provided by an HCP/NCCP. In this instance, we recommend that the habitat losses throughout the project site, regardless of jurisdiction, meet or exceed the mitigation ratios, guidelines, and standards required by the City's MSCP Subarea Plan to maintain consistency with its application to the on-site and adjacent areas within Plan.

79. The Wildlife Agencies recommend that vegetation classifications provided in Table 4.8-1 *Existing Vegetation Communities and Land Cover Types (acres)* and Figure 4.8-3 *Vegetation Communities and Land Cover Types* be consistent with the vegetation classification for the City's MSCP. The DEIR utilizes alternative vegetation classifications for some habitat types. For instance, coastal brackish marsh in the DEIR is classified as southern coastal salt marsh by the MSCP, seasonal pond in the DEIR is classified as disturbed wetland by the MSCP, and disturbed riparian in the DEIR is classified as disturbed southern coastal salt marsh by the MSCP.

Mitigation Measures

To assure consistency with the MSCP throughout the project site, we provide the following specific comments on the proposed mitigation measures.

80. In order to limit construction disturbance to raptors, we recommend that Mitigation Measure 4.8-1 be modified, as follows.

> *To ensure that no direct or indirect impacts to nesting raptors occur during construction (including clearing and grubbing), construction activities within the area of potential effect for nesting habitat should occur outside of the raptor breeding season (January 15 to July 31), or sooner if a qualified biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting activities are complete. If construction (other than vegetation clearing and grubbing) must occur during the breeding season, prior to initiating any construction-related activities,*

pre-construction surveys must be performed by a City- or Port-approved (depending on the jurisdiction) biologist to determine the presence or absence of nesting raptors within 500-feet of the construction area. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and its results submitted to the City or Port (depending on the jurisdiction) for review and approval prior to initiating any construction activities. If nesting raptors are detected, a mitigation plan shall be prepared by a City- or Port-approved biologist and submitted to both the City and Port for review and approval. The applicant shall implement the mitigation plan to the satisfaction of the City and Port to ensure that disturbance of breeding activities is reduced to a level less than significant. A bio-monitor must be on site during construction until all young have fledged to minimize construction impacts and ensure that no nests are removed or disturbed and no nesting activities are disrupted.

81. In order to limit construction disturbance to burrowing owls, we recommend that Mitigation Measure 4.8-2 be modified, as follows:

To ensure that no direct or indirect impacts to nesting burrowing owls occur during construction (including clearing and grubbing), construction activities within the area of potential effect for nesting habitat should occur outside of the burrowing owl's breeding season (April 15 to July 31), or sooner if a qualified biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting is complete. If construction (other than vegetation clearing and grubbing) must occur during the breeding season, prior to initiating any construction-related activities, pre-construction surveys must be performed by a City- or Port-approved (depending on the jurisdiction)biologist to determine the presence or absence of active burrows within all suitable habitat. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and its results submitted to the City or Port (depending on the jurisdiction) for review and approval prior to initiating any construction activities. If an active burrow is detected during the breeding season, a mitigation plan shall be prepared by a City- or Port-approved biologist and submitted to both the City and Port for review and approval. The applicant shall implement the mitigation plan to the satisfaction of the City and Port to ensure that disturbance of breeding activities is reduced to a level less than significant. Construction setbacks of 300 feet from occupied burrows shall be implemented until the young are completely independent of the nest. A bio-monitor must be on site during construction until all young have fledged to minimize construction impacts and ensure that no nests are removed or disturbed

and no nesting activities are disrupted. If an active burrow is found outside of the breeding season, or after an active nest is determined to no longer be active by a qualified biologist, the burrowing owl would be relocated in coordination with the Wildlife Agencies.

82. In order to limit construction disturbance to migratory birds, we recommend that Mitigation Measure 4.8-3 be modified, as follows:

To ensure that no direct or indirect impacts to nesting migratory birds occur during construction (including clearing and grubbing), construction activities within the area of potential effect for nesting habitat should occur outside of the general avian breeding season (January 15 to August 31), or sooner if a qualified biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting is complete. If construction (other than vegetation clearing and grubbing) must occur during the breeding season, prior to initiating any construction-related activities, pre-construction surveys must be performed by a City- or Port-approved (depending on the jurisdiction) approved biologist to determine the presence or absence of nesting birds within 300 feet of the construction area. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and its results submitted to the City or Port (depending on the jurisdiction) for review and approval prior to initiating any construction activities. If nesting birds are detected, a mitigation plan shall be prepared by a City- or Port-approved biologist and submitted to both the City and Port for review and approval. The applicant shall implement the mitigation plan to the satisfaction of the City and Port to ensure that disturbance of breeding activities is reduced to a level less than significant. A bio-monitor should be on site during construction until all young have fledged to minimize construction impacts and ensure that no nest is removed or disturbed and no nesting activities are disrupted.

83. As indicated on page 3-17 of the DEIR, "The project site is situated entirely within the Chula Vista Coastal Zone." To be consistent with the City's MSCP Subarea Plan, recirculated/final EIR should require that all impacts to riparian scrub be mitigated at a 3:1 ratio, not 2:1 as indicated in Mitigation Measures 4.8-9 and 4.8-10.

84. The following comments relate to the Proposed Project's consistency with the City's MSCP Preserve adjacency guidelines. The recirculated/final EIR should reflect that application of these guidelines to all parcels adjacent to City's MSCP Preserve (*i.e.*, Parcels SP-1, S-4, SP-2, S-2A, HP-11, HP-6, and HP-7), as well any parcels adjacent to sensitive habitats [Sweetwater Marsh and South San Diego Bay Units of the Refuge, San

Diego Bay, the mudflats west of the Sweetwater District, F&G Street Marsh and its associated tidal inlet, L Marsh (HP-5), J Street Marsh, Telegraph Creek, and Chula Vista Wildlife Reserve]. For purposes of this letter, all of the sensitive habitats listed in the brackets above are considered Preserve.

a. In parcels adjacent to Preserve areas, permanent fencing (*i.e.*, a minimum six-foot tall black vinyl chain link fence) should be placed along the boundary between the ecological buffer and the Proposed Project use area. Stands of native cacti, for example as proposed on page 4.8-71 of the DEIR, cannot effectively keep humans and domestic animals out of the Preserve areas.

b. Mitigation Measure 4.8-6 A. should be modified to read as follows.

> *Construction related noise shall be limited adjacent to the Sweetwater Marsh and South San Diego Bay Units of the Refuge, F&G Street Marsh, the mudflats west of the Sweetwater District, and J Street Marsh during the general avian breeding season of January 15 to August 31. During the avian breeding season, noise levels from construction activities must not exceed 60 dB(A) L_{eq}, or ambient noise levels if higher than 60dB(A). Before any construction begins, a qualified acoustician shall prepare and submit to the Port and City for review and approval an acoustical analysis to determine the ambient noise level, anticipated noise level of construction, and whether noise attenuation measures will need to be implemented to reduce the expected noise level to below 60dB(A). If noise attenuation measures or modifications to construction activities are unable to reduce the noise level below 60dB(A), either the applicant must immediately consult with the Wildlife Agencies to develop a noise attenuation plan or construction in the affected areas must cease until the end of the breeding season.*

c. The first sentence of Mitigation Measure 4.8-6 B should read as follows.

> *To reduce the potential for raptors to perch within the landscaping and hunt sensitive bird species from those perches, the following design criteria will be identified in the CVBMP master landscape plan and incorporated into all building and landscape plans with a line-of-sight to the City's MSCP Preserve, buffer zones, and on-site open space.*

d. Mitigation Measure 4.8-6 F indicates that all landscaping plans must ensure that no plants listed in Appendix N of the City's MSCP Subarea Plan are planted in

the project area. However, when referring to landscaping, the City's MSCP Subarea Plan makes reference instead to the "Wildland/Urban Interface: Fuel Modification Standards," or Appendix L, of the Subarea Plan. In addition, it specifies that no invasive non-native plant species should be introduced into areas immediately adjacent to Preserve areas. All project-related landscaping plans should include, to the maximum extent practicable, native plants that are compatible with native vegetation located in the ecological buffers and/or MSCP Preserve.

e. Mitigation Measure 4.8-6 G should provide more specific language as to how the Proposed Project would minimize the release of toxins, chemicals, petroleum products, exotic plant materials, and other pollutants that might degrade or harm the natural environment or ecosystem processes within the Preserve. As discussed above (and as mentioned in Comment 67), it is unclear what BMPs would be used to prevent the release of such pollutants and how the project would meet NPDES (National Pollution Discharge Elimination System) standards and the requirements of the City's Standard Urban Storm Mitigation Plan.

f. Mitigation Measure 4.8-6 J should specify that all trash cans installed on the project site would be animal- (non-human) proof. The proposal to provide trash cans with lids is not enough of a deterrent to scavenging animals.

g. Table 4.8-6 *Mitigation Required for Significant Impacts to Vegetation Communities and Land Cover Types – Port Lands (acres)* should include the following revisions.

i. The mitigation ratio for disturbed seasonal pond (*e.g.*, classified as disturbed wetland per the City's MSCP) should be increased from 1:1 to 2:1 to be consistent with the City's MSCP Subarea Plan.

ii. Impacts and mitigation for losses to non-native grassland and other raptor foraging habitat (*i.e.*, habitat in the Sweetwater District) should be included in the table consistent with the City's MSCP. The mitigation ration for losses to non-native grassland and other raptor foraging habitat is 0.5:1 if mitigated inside Preserve-designated land and 1:1 if mitigated outside preserve-designated land. As explained in Comment 29, mitigation for project-related losses of raptor foraging habitat should occur at a ratio of 1:1 away from the project site.

iii. The acreage of permanent impacts to southern coastal salt marsh during Phase II should be increased from 0.04 to 0.10 to be consistent with the text on page 4.8–75 of the DEIR. The acreage of mitigation provided for

this impact should be appropriately revised to 0.4 acre, as written under Mitigation Measure 4.8-9.

h. Mitigation Measure 4.8-9 should be revised to include mitigation for loss of non-native grassland, disturbed habitat that is raptor foraging habitat (*i.e.*, Sweetwater District), and coastal sage scrub in Phase III.

i. Mitigation Measure 4.8-11 and Table 4.8-9 should be revised to indicate that impacts to Corps jurisdictional waters should be mitigated at a 2:1 ratio to be consistent with the City's MSCP.

85. The DEIR identifies temporary impacts that the project would have on sensitive habitats within the project footprint and indicates that all temporary impacts would be mitigated at 1:1. This is inconsistent with the guidelines established by the City's MSCP Subarea Plan, which requires the same mitigation for temporary and permanent impacts. Therefore, the recirculated/final EIR should account for appropriate temporary impact mitigation according to the mitigation ratios listed in Tables 5-3 and 5-6 of the MSCP Subarea Plan.

86. The recirculated/final EIR should include a map that clearly depicts: a) the jurisdictional boundaries before and after the land exchange; b) vegetation communities within both areas; and c) sensitive species points that are present in both the Port and City's jurisdictions after the land exchange. This will allow a determination of the Proposed Project's effects on habitats and species within each jurisdiction. This information will also be necessary to process the required amendment to the City's MSCP Subarea Plan and incidental take permit.

Growth Inducement

84. The Growth Inducement discussion in the DEIR focuses on the economic effects of the Proposed Project, but ignores the significant effects to the environment that could result from growth in the surrounding area, that is, growth that is related to redevelopment of the subject property. The recirculated/final EIR should expand this section to address the significant effects on the environment, both individually and cumulatively, from growth stimulated by the subject project (*i.e.*, growth that would likely not occur but for the approval and implementation of the Chula Vista Bayfront Master Plan). An evaluation of the effects on air and water quality as a result of this new growth should be provided, as well as a discussion of the potential for even greater impacts (*e.g.*, night lighting, human and pet intrusion, increased noise levels) than the Proposed Project alone would cause to nearby sensitive biological resources.

Mitigation Measure

85. Impacts associated with the growth-inducing effects of project implementation could be reduced if the appropriate planning documents that regulate development in the areas immediately surrounding the project are amended to include specific development and design criteria for new development. Such criteria would include: restrictions on lighted signage; requirements for fully shielded street and other outdoor lights; restrictions on uses that could generate excessive noise impacts, particularly at night; building design standards that address height, lighting, and window design; and requirements for adequately sized open space and public recreation areas to accommodate new residents and their pets.

Unavoidable and Irreversible Significant Environmental Effects

86. The Wildlife Agencies do not agree that implementation of the mitigation measures identified in the DEIR would reduce the impacts to biological resources to a level less than significant. Therefore, this section in the recirculated/final EIR should discuss the unavoidable and irreversible effects that implementation of the Proposed Project would have on the sensitive coastal resources that occur within and adjacent to the project boundaries.

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late 5/1/17

Governor's Office of Planning & Research
MAY 02 2017
STATE CLEARINGHOUSE

May 2, 2017

Ms. Wileen Manaois
Principal, Real Estate Development Department
San Diego Unified Port District
3165 Pacific Highway
San Diego, CA 92101
wmanaois@portofsandiego.org

Subject: Comments on the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project, City of San Diego, San Diego County, California (UPD No. EIR-2015-115; SCH No. 2015081013)

Dear Ms. Manaois:

The Department of Fish and Wildlife (Department) has reviewed the San Diego Unified Port District's (Port District's) San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (proposed project) Draft Environmental Impact Report (DEIR). The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the proposed project (California Environmental Quality Act, [CEQA] Guidelines § 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (CESA; Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq.*

The proposed project consists of (1) an ordinance establishing a Port District Code section (proposed ordinance) to govern existing and proposed new fireworks display events that occur within San Diego Bay and the Imperial Beach Oceanfront that require a discretionary action by the Port District or that are operated by the Port District's tenants, and (2) four proposed new fireworks display events, which would be located adjacent to the National City and Chula Vista Bayfronts and are anticipated to require a future discretionary action by the Port District. Existing fireworks display events are launched from barges, piers, and/or flight decks. The proposed new fireworks displays would occur year round and are anticipated to last between 3 to 10 minutes in duration for non–Fourth of July displays and 15 to 20 minutes for Fourth of July displays. The new fireworks displays are proposed to be launched from barges within the San Diego Bay, and would be governed by the proposed ordinance. All existing and proposed new fireworks display events that either require a discretionary action by the District or those operated by the District's tenants would be subject to all applicable federal, state, and local laws and regulations governing fireworks as well as any additional requirements set forth in the proposed ordinance.

The Department offers the following comments and recommendations to assist the Port District in avoiding, minimizing, and adequately mitigating project-related impacts to biological resources.

General Compatibility

Given the concentration of biological resources within the project area, the San Diego Bay National Wildlife Refuge, the Sweetwater Marsh Refuge Unit, the South San Diego Bay Refuge Unit, and other conservation efforts including federal funding associated with National City and the south bay, the Department is concerned with the compatibility and appropriateness of adding fireworks displays to the south bay that have the potential to adversely impact the region's rich natural resources. The DEIR's analysis should carefully examine the need of the proposed expansion, and consider the mitigation and monitoring requirements necessary to protect south bay habitats and their residents.

San Diego Fireworks Display EIR Notes

The DEIR should include an analysis of direct and indirect impacts to all avifauna nesting within National City and the south bay, including D-Street Fill, Sweetwater Marsh, F and G Street Marshes, J Street Marsh, Paradise Marsh, Chula Vista Wildlife Reserve, and Silver Strand State Beach. The analysis should focus on the area's importance as a regional and international site utilized for nesting, roosting, foraging, and as a migratory stopover within the Pacific Flyway for common and designated sensitive species. The proposed project areas, particularly those proposed within the vicinity of Ecological Refuges and other open spaces within the south bay, host thousands of resident and migratory birds that could be adversely impacted by the proposed project.

The Department believes that based on the available literature including unpublished reports, and other limited publications, common and sensitive species including, but not limited to light-footed Ridgway's rail (*Rallus longirostris levipes;* a CESA and Endangered Species Act [ESA] endangered species, and a State Fully Protected Species [FPS] under Fish and Game Code § 3511); California least tern (*Sternula antillarum browni;* a CESA and ESA endangered species and FPS); Belding's savannah sparrow (*Passerculus sandwichensis beldingi;* a CESA endangered species); western snowy plover (*Charadrius alexandrinus nivosus;* ESA threatened species and a State Species of Special Concern [SSC]); black skimmer (*Rynchops niger;* a SSC); elegant tern (*Thalasseus elegans*); Caspian tern (*Hydroprogne caspia);* double-crested cormorant (*Phalacrocorax* auritus); northern harrier (*Circus cyaneus;* a SSC); and osprey (*Pandion haliaetus*) are likely to exhibit a physiologic response to fireworks-generated flash and noise. Page 4.3-28 of the DEIR identifies that "[t]he flash and noise from the proposed new fireworks display events *are* [emphasis added] expected to generate physiologic response of stress within birds." However, later in the DEIR it is concluded that "the proposed new fireworks display events are not anticipated to result in any long-term or permanent substantial adverse effects on avian species because temporary disturbance from noise and light would be short term and infrequent and would not result in direct mortality of birds, a decrease in productivity, or long-term changes in behavior (e.g., colony abandonment)" (Port District, 2017; p. 4.3-31), concluding that no significant impact would occur. The Department does not believe that the analysis provided in the DEIR adequately supports the conclusion that fireworks displays would not directly impact sensitive avian species throughout San Diego Bay and Imperial Beach. For example, while certain colonies (that are routinely exposed to loud noise) may not be abandoning nests or chicks, vocalizations, flushing behaviors, and other movements indicated that these birds were stressed by the fireworks displays and loud noises they produce (Port

District, 2017). It is unknown how the stress responses elicited from cumulative fireworks displays affect species' energy expenditure, their underlying health, or if the stress affects subsequent nesting attempts. The DEIR suggests that because they have not historically been exposed to continuous loud noise, south bay avian colonies could be comparatively more sensitive to fireworks displays. Additionally, while behavioral observations of California least terns and western snowy plovers in response to fireworks displays are scant, studies for light-footed Ridgway's rail and Belding's savannah sparrow do not exist. For these reasons, the Department continues to stress the importance that the project include a comprehensive mitigation strategy, including a robust monitoring protocol, that minimizes sensitive species' exposure by maximizing spatial buffers from the fireworks display source (e.g., barge, pier, etc.) and sensitive receptors (i.e., nesting and critical roosting and foraging grounds for avian species).

Monitoring

In our comments on the Notice of Preparation for the proposed project (September 8, 2015) we recommended that for sites likely affected by fireworks displays, a monitoring protocol be developed as part of a comprehensive mitigation strategy. The DEIR does not include a monitoring protocol as recommended. Given the data gaps regarding the effects of fireworks displays on sensitive avian species, the DEIR should include an adaptive management plan requiring ongoing monitoring of sensitive receptor sites for individual fireworks displays (e.g., known sensitive species nesting and/or roosting sites). The adaptive management plan should include specific mitigation strategies to further minimize impacts to sensitive receptors (e.g., increase buffer size, temporal restrictions, etc.) and measures to gradually reduce the ongoing monitoring (as a component of the adaptive management plan) should the monitoring demonstrate that the mitigation measures are successful. The Port District should confer with the Department to reduce the interval or intensity of ongoing monitoring requirements. The Department offers the monitoring recommendations below (adapted from U.S. Fish and Wildlife Service [Service] recommendations):

1. Sensitive habitats (e.g., nesting and roosting sites within 1.2 mile of the fireworks) including areas within the vicinity of where spectators may congregate should be surveyed by a qualified biologist prior to, during, and following the fireworks display. Where appropriate, and when less intrusive than direct observation, nest cameras may be used to monitor sites that have no terrestrial or aquatic access. Monitoring activities themselves should not result in undue harassment. At a minimum, monitors should record and/or perform the following:

    a. site location, name of monitor, date and time of observations;
    b. number of adults, nests, and chicks observed within ½ mile of spectator viewing areas;
    c. species behavior prior to, during, and post fireworks displays;
    d. sources of stressors (e.g., light, noise, trespass, debris);
    e. foraging behavior no sooner than 48 hours prior to and no later than 24 hours following fireworks displays;
    f. counts of human and dog tracks intersecting with symbolically fenced areas before and after the fireworks event;
    g. counts of persons within access-controlled areas;
    h. counts of litter items within symbolically fenced areas before and after the fireworks event;

i. counts of illegal pyrotechnics;
j. recommendations, as applicable, to further minimize physiologic response to fireworks displays (e.g., identify known, new, or persisting management needs). Monitoring observations should be evaluated by the Port District to increase buffer distances, further limit noise levels or other actions as appropriate.

The Port District should:

2. Provide monitoring data directly to the Department.
3. Ensure sensitive habitats are symbolically fenced and posted off-limits during events. Conduct repairs to symbolic fencing of any damaged or missing sections of fencing prior to fireworks display permit issuance.
4. Close parking lots and beach access points in the vicinity of sensitive resources, as appropriate.
5. Provide adequate numbers of monitors and patrols (commensurate with anticipated number or spectators, and exposure/accessibility of sensitive resources) prior to spectators congregating and continuing until spectators disperse.
6. Monitor noise at sensitive receptor sites.
7. Ensure monitors and other enforcement personnel receive accurate information regarding the location of sensitive resources.
8. Prohibit pets on beaches and within sensitive resource areas.

Compliance

Monitors should have direct communication with patrols (e.g., San Diego Harbor Police, law enforcement, and private security) to effectively prevent inadvertent and unauthorized impacts to sensitive biological receptors. The DEIR identifies that fireworks displays not only elicit a physiological reaction from sensitive avian species, but that there are additional indirect effects associated with trespass from spectators accessing beach and dune areas closed for breeding and roosting. The Department commends the Port District for increasing the Harbor Police Department presence during fireworks displays, and the DEIR should memorialize the following DEIR language as a mitigation measure of future fireworks display permits. "*Consistent with its current operational practices, the Harbor Police Department would continue to deploy special patrol vessels and conduct in-water law enforcement during fireworks display events*" (Port District, 2017; p. 4.3-33). Additionally, the Port District should coordinate with staff from the Harbor Police Department to determine the number of patrols necessary to protect biological resources and to identify specific/targeted enforcement areas of sensitive resources where unauthorized spectating (e.g., beach access or beaching/mooring) is prohibited.

Environmentally Superior Alternative

The DEIR is not clear how the Quiet Fireworks Display Alternative (e.g., Environmentally Superior Alternative) fails to meet the project objectives. Per the DEIR, "... the Quiet Fireworks Display Events Alternative would not meet the fundamental project objectives" (Port District, 2017; p. ES-10). Of the alternatives analyzed by the DEIR, the Quiet Fireworks Display Alternative best aligns with protecting sensitive natural resources within the immediate proximity of firework displays (e.g., known nesting sites for California least tern, light-footed Ridgway's rail, Belding's savannah sparrow, western snowy plovers, etc.). The DEIR describes four (4) project objectives.

Objective one. Objective one is to develop a Port District ordinance that establishes a Port District Code section with policies and performance standards, for fireworks display events that require a discretionary action by the Port District or those firework display events operated by the Port District's tenants. The Quiet Fireworks Display Alternative would not impede the District's ability to establish policies; conversely, it would assist the Port District by providing specific performance standards that are both measurable and enforceable.

Objective two. The Quiet Fireworks Alternative fulfills project objective two by allowing "...for the continued occurrence of traditional fireworks display events in and around San Diego Bay and the Pacific Ocean near Imperial Beach..." (Port District, 2017; p. 3-2). Furthermore, the Port District is presented with an opportunity to educate local communities regarding San Diego's unique biological resources and recognize the protective measures that the District and the community collectively take. Communal resources can foster a sense of hometown appreciation—achieving objective two by "...providing a popular and region-wide way to celebrate and express civic pride..." while also facilitating fireworks displays.

Objective three. Project objective three seeks to allow "...the continued occurrence of existing and future occurrence of proposed new traditional fireworks display events in and around San Diego Bay and the Pacific Ocean near Imperial Beach...." (Port District, 2017; p. 3-2). The Quiet Fireworks Alternative would not impede the occurrence of current or future fireworks displays and unequivocally "...considers the health, safety, and welfare of people, property, and the environment...." (Port District, 2017; p. 3-2).

Objective four. Finally, there is no evidence that the Quiet Fireworks Alternative fails to achieve project objective four, which aims "[t]o continue to enhance the visitor-serving experience of viewing fireworks display events from various vantage points around District tidelands by providing safe, high-quality fireworks display events using existing and new fireworks technologies as they become available" (Port District, 2017; p. 3-2). Nothing within the Quiet Fireworks Alternative suggests that access to fireworks displays would be limited beyond existing public safety, right of access, or other applicable restrictions.

Regardless of the selected project alternative, acousticians should be utilized to monitor the actual sound levels generated during these events in relationship to sensitive biological receptor sites. Point monitoring of sensitive biological receptors should be made a requirement for each firework display permit until it can be demonstrated that the existing or additional events do not adversely impact these receptor sites.

Alternative 3 – No Salute Fireworks Alternative

The Department appreciates the consideration of project alternatives intended to reduce the noise and light impacts to sensitive receptors, however, Alternative 3 allows fireworks that are equally loud as a typical 3-inch "salute". "The No Salute Fireworks Alternative would have the same characteristics as all of the fireworks display events that compose the proposed project, including the same total pounds of fireworks per event (as outlined in Table 3-2 in Chapter 3, *Project Description*), but would prohibit the use of salute fireworks and limit the noise produced by all fireworks during fireworks display events to a maximum of 140 dB" (Port District, 2017; p. ES-9). Under Alternative 3, fireworks noise would not be minimized below the typical salute fireworks the DEIR describes as being prohibited. As stated in the DEIR, salute fireworks are specifically designed to be loud and bright and "[w]hile the noise level of these fireworks varies by type, a typical linear (unweighted) peak noise level directly below a 3-inch salute exploding at

its normal altitude is 140 decibels (dB) (Journal of Pyrotechnics, Inc. 2012)." Therefore the effect of Alternative 3 only limits fireworks that *exceed* the typical noise generated by current fireworks and/or fireworks specifically labeled as salute fireworks.

Impacts to Nursery Sites

The proposed project has the potential to impact various nursery sites (i.e., avian nesting sites). Based on a literature review of relevant information, the U.S. Fish and Wildlife Service's *Guidelines for Managing Fireworks in the Vicinity of Piping Plovers and Seabeach Amaranth on the U.S. Atlantic Coast* (USFWS, 1997) is a guidance document that evaluates impacts on tern species. Absent updated and site-specific information, the Service's guidelines serve as the best available science for minimizing impacts to terns and plovers. With regard to selecting firework shell size, the Department's literature review suggests a firework display's impacts on avian species is associated the noise and light and not necessarily associated with the shell size of a given firework. Edits below suggest uncoupling firework shell size from the recommended avian buffer. To partially mitigate noise impacts to avian nesting and/or roosting sites the text of MM-NOI-1: *Implementation of Noise-related Conditions of the Proposed Ordinance* (p. ES-41) should be modified accordingly (deletions in ~~strikeout~~ and additions in ***bold italics):***

MM-NOI-1: Implementation of Noise-Related Conditions of the Proposed Ordinance.

The fireworks organizer and operator are required to comply with the following noise related conditions of the proposed ordinance.

Section X.07 – Permits – Conditions of Approval

(e) Protection of Sensitive Species and Habitat. The following conditions shall apply to Fireworks Display Events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1***.2***) mile from any federally or state-listed avian species nesting ***sites***:

1. Location. Fireworks display events shall be located not less than one ***and two-tenths*** (1***.2***) mile from any federally***,*** ~~or~~ state-listed ***or other sensitive*** avian species nesting colony***.***

2. Salutes. Fireworks display events shall not use concussion type, non-color shells such as "salutes" or "reports" during the initial twenty-five percent (25 percent) of the duration of any display (e.g., within the first 5 minutes of a 20-minute display). ***Concussion fireworks (e.g., Salutes or Reports) shall not to exceed 120 linear (unweighted) peak sound pressure level as measured directly under the shell burst occurring at its normal altitude, using a Type 1 sound measuring device with a free-field microphone at a height of 1 meter above the ground.***

Debris

Despite Mitigation Measure MM-BIO-1, the proposed project could cause a considerable amount of plastic and other non-biodegradable materials to fall within San Diego Bay. Mitigation Measure MM-BIO-1 does not fully mitigate the potential for ingestion of firework byproducts that could harm green sea turtles, marine mammals, and/or avian species. Specifically, MM-BIO-1 (d)(2)(B) only prohibits fireworks with plastic casings or non-biodegradable inner components

exceeding five percent of the firework's mass (Port District, 2017; p. ES-16). The proposed addition of Chula Vista Bayfront firework displays alone could cause an additional 34.2 pounds of plastic and other non-biodegradable byproducts to fall directly within San Diego Bay[1]. The DEIR should present the total amount of debris deposited within San Diego Bay that could be caused from existing fireworks shows, and newly proposed additions (e.g., National City and Chula Vista shows) within the DEIR. To the extent feasible, MM-BIO-1 should be revised to prohibit the use of non-biodegradable materials.

Mitigation Measure MM-BIO-1(8), (9), and (10), and MM-WQ-1 should specify that collected firework-generated trash and debris should be weighed dry, not wet, to better achieve a proportional collection weight commensurate with the weight of introduced debris. Mitigation Measure MM-BIO-1(8), (9), and (10) should specify that weight criteria must be fulfilled using firework-generated debris only.

To mitigate impacts associated with increased debris associated with boating activities and increased foot traffic (see Impact-BIO-3, Impact-BIO-4, Impact-BIO-8, and Impact-C-BIO-1) associated with spectators, Mitigation Measure MM-BIO-1 should require the fireworks organizer to collect incidental spectator-generated trash. To accomplish this, the Department recommends the following is incorporated in the DEIR as enforceable mitigation measures for future fireworks display permits:

A) A refundable deposit fee, based on the number of anticipated spectators (e.g., per capita) paid by the fireworks organizer. The refundable deposit fee should be an inflation-adjusted amount to fund two Port District or respective City cleanup personnel, equipment (e.g., truck, boat, nets, bags, personal protection equipment, debris disposal fees, etc.) per 500 spectators. The refundable deposit should be released or prorated based on the Port District's and hosting-city's satisfaction with firework organizer's cleanup.
B) To defray potential costs borne by the firework organizer and/or hosting-city, firework organizer and Port District shall implement Mitigation Measure MM-BIO-2(5) to include daily announcements through digital/social media in conjunction with physical signage and/or press releases. MM-BIO-2 should be revised to require educational programs for each event designed to minimize debris, and prohibit impacts to sensitive resources (e.g., nesting or roosting sites, green turtle foraging areas, and eel grass beds).
C) While MM-BIO-2 requires a minimum of two "...professional security guards to direct persons away from and discourage trespass..." (Port District, 2017; p. ES-22) the number of required security guards should be based on the number of spectators, potential threat to sensitive areas (e.g., fenced vs. unfenced habitats) and mode of spectator access (e.g., land vs. aquatic, or both). Two security guards are inadequate for most locations and the DEIR does not specifically require boat patrols. MM-BIO-2 should be revised to provide security requirements based on site sensitivity and include provisions to increase Harbor Police patrols funded by the firework organizer and/or cooperating local agency.

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[1] Based on the DEIR's Table ES-1 *Proposed New Fireworks Display Events Requiring a Future Discretionary Action by the District.*

We appreciate the opportunity to comment on the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events DEIR. Questions regarding this letter should be directed to Eric Weiss at (858) 467-4289, or eric.weiss@wildlife.ca.gov.

Sincerely,

Gail K. Sevrens
Environmental Program Manager

ec: State Clearinghouse, Sacramento
Sandy Vissman, U.S. Fish and Wildlife Service

References

California Department of Fish and Wildlife (CDFW). 2016. California Least Tern Breeding Survey 2015 Season. March 30, 2016.

Port of San Diego. March, 2017. Draft Environmental Impact Report, San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project. Prepared by ICF.

U.S. Fish and Wildlife Service. 1997. Guidelines for Managing Fireworks in the Vicinity of Piping Plovers and Seabeach Amaranth on the U.S. Atlantic Coast.

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
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DIRECTOR

May 2, 2017

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SAN DIEGO UNIFIED
PORT DISTRICT
REAL ESTATE

Wileen Manaois
San Diego Unified Port District
3165 Pacific Highway
San Diego, CA 92101

Subject: San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project
SCH#: 2015081013

Dear Wileen Manaois:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on May 1, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

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Document Details Report
State Clearinghouse Data Base

SCH# 2015081013
Project Title San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project
Lead Agency San Diego Unified Port District

Type EIR Draft EIR

Description The project consists of 1) an ordinance establishing a District Code section to govern existing and proposed new fireworks display events that occur within San Diego Bay and the Imperial Beach Oceanfront requiring a discretionary action by the District or that are operated by the District's tenants, and 2) four proposed new fireworks display events, which would be located adjacent to the National City and Chula Vista Bayfronts and are anticipated to require a future discretionary action by the District. Discretionary actions for fireworks display events that may require District approval include, but are not limited to, the following: Sponsorship agreement; special event permit; lease and lease amendment; tideland use and occupancy permit; right of entry permit; coastal act categorical determination of exclusion; or coastal development permit.

Lead Agency Contact

Name Wileen Manaois
Agency San Diego Unified Port District
Phone 619 686 6282 **Fax**
email
Address 3165 Pacific Highway
City San Diego **State** CA **Zip** 92101

Project Location

County San Diego
City San Diego, Chula Vista, Coronado, Imperial Beach
Region
Lat / Long 32° 41' 17" N / 117° 8' 23" W
Cross Streets Shelter Island Dr., N. Harbor Dr., Harbor Dr., Glorietta Blvd, Seacost Dr.
Parcel No. 017-032, 061-022, 021-022
Township **Range** **Section** **Base**

Proximity to:

Highways I-5, SR 75, 54, 15, 163
Airports SD Int'l
Railways BNSF, MTS
Waterways San Diego Bay, pacific Ocean, Sweetwater River
Schools Cabrillo, Perkins, MarVista
Land Use Commercial Recreation, Park/Plaza, Specialized Berthing, Public Fishing Pier, and Vista Area. Partially outside port master plan

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Project Issues Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Other Issues; Aesthetic/Visual; Agricultural Land

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Reviewing Agencies Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 11; Regional Water Quality Control Board, Region 9; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Document Details Report
State Clearinghouse Data Base

Date Received 03/17/2017 ***Start of Review*** 03/17/2017 ***End of Review*** 05/01/2017

Response to Comment C-1

The comment notes the State agencies that received the Draft EIR for comment and the date the comment period closed, and includes one attached letter from USFWS and one attached letter from the California Department of Fish and Wildlife (CDFW). The comment states that these comment letters were received by the State Clearinghouse after the end of the state review period, which ended on May 1, 2017. In addition, the comment notes that the project has complied with the State Clearinghouse review requirements for the Draft EIR pursuant to CEQA. A letter from the State Clearinghouse that was received on May 4, 2016 is included as an attachment to this comment letter. This comment letter was received on May 8, 2016, and therefore replaces the previous letter from State Clearinghouse.

The District appreciates the Office of Planning and Research's coordination of the Draft EIR. As indicated, two comment letters were received by the State Clearinghouse. The responses to these individual comment letters are provided under Comment Letter B (USFWS) and Comment Letter E (CDFW).

4.4.4 Comment Letter D: California Coastal Commission

STATE OF CALIFORNIA -- THE NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., *Governor*

CALIFORNIA COASTAL COMMISSION
SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4421
(619) 767-2370

May 1, 2017

San Diego Unified Port District
Real Estate Development Department
3165 Pacific Hwy
San Diego, CA 92101

Subject: Comments on the Draft Environmental Impact Report for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project

Dear Ms. Manaois:

D-1 Commission staff appreciates the opportunity to review and provide comment on the above-referenced environmental document which was received by our San Diego District Office on March 20, 2017. The Commission's ecologist, Dr. Laurie Koteen, has conducted a review and offers the following comments regarding the Draft Environmental Impact Report ("DEIR"), dated March 2017, for the proposed project which consists of: (1) an ordinance establishing a District Code section (proposed ordinance) to govern existing and proposed new fireworks display events that occur within San Diego Bay and the Imperial Beach Oceanfront that require a discretionary action by the District or that are operated by the District's tenants, and (2) four proposed new fireworks display events, which would be located adjacent to the National City and Chula Vista Bayfronts and are anticipated to require a future discretionary action by the District.

D-2 There are many potential concerns raised by the DEIR for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Event. Of primary concern to Commission staff are the biological impacts from excessive noise, light, chemical pollutants and firework debris on birds, marine mammals, fish and other wildlife.

D-3 Overall, staff views fireworks displays as a potentially impactful activity that should be minimized to a few events a year, and very carefully located in areas likely to have the lowest impacts on birds, sensitive habitats and marine life. Fireworks should be scheduled outside of nesting periods, which generally span from February through September, with the exception of the fourth of July. In addition, we have the following comments:

D-4
- The DEIR should contain greater analysis from the literature on studies documenting impacts of fireworks on birds and marine mammals in particular.

D-5
- The DEIR presents a single project without an evaluation of alternatives based on location. The only alternatives evaluated are no fireworks, quiet fireworks, and no "salute" fireworks. Alternatives should also be considered that evaluate impacts of fireworks in different locations in addition to noise impacts. The

D-5 cont. decibel threshold of 140 dB is very high and a lower threshold should be considered as well.

D-6
- To the extent that fireworks can be made of materials with reduced toxicity and more complete combustion of each firework in the air, those avenues should be pursued.

D-7
- Each individual proposed location for firework launches must be evaluated in light of the sensitive resources and species in the immediate vicinity. An area of impact around each potential launch site should be identified based on the expected impact horizon (separately evaluated for noise, light, debris and pollutants). The sensitive species and resources around each site should be carefully mapped, and impacts evaluated in light of the specific species and habitats in each location. Those areas where sensitive species are concentrated should be avoided completely.

D-8
- Human crowd management should also be considered. Large crowds can also impact wildlife and prompt avoidance behaviors and stress. The stress of the large human presence will be felt on top of the stress of the fireworks themselves, elevating the cumulative stress to wildlife. Crowds in the boats in the water must also be considered, and may need to be limited to certain densities.

D-9
- Fireworks should not occur on consecutive nights in the same location, or if this is to occur, cumulative impacts of multiple nights must be considered.

D-10
- A thorough discussion of mitigation of unavoidable impacts is lacking and should be developed based on specific projected impacts for specific locations, species and habitats.

D-11
- Special attention must be paid to potential impacts to sensitive species including the California Least tern, the Western snowy plover, Belding's Savannah sparrow, Ridgeway's rail, and sea turtles, and any others not listed here.

D-12 Thank you again for the opportunity to provide review and comment on the proposed project. If you have any questions or require further clarification, please do not hesitate to contact me at the above office.

Sincerely,

Melody Lasiter
Coastal Program Analyst

Cc (copies sent via e-mail):
Karl Schwing (CCC)
Deborah Lee (CCC)
Laurie Koteen (CCC)
Kanani Brown (CCC)

Response to Comment D-1

This comment is an introductory comment that states that Coastal Commission staff received the Draft EIR at the San Diego District Office. The commenter indicates that the Commission's ecologist reviewed the Draft EIR and provided specific comments for the proposed project.

The District appreciates the Coastal Commission's interest in the proposed project. This comment does not raise any specific issues requiring a response pursuant to CEQA. The specific comments raised in the pages that follow this introduction are listed separately along with the District's individual responses.

Response to Comment D-2

The comment states that the primary concern to Commission staff are potential biological resources impacts from excessive noise, light, chemical pollutants and firework debris on wildlife.

The commenter identifies general issues that are analyzed in detail throughout Section 4.3, *Biological Resources*, of the Draft EIR. As the comment does not raise a specific issue, a specific response cannot be provided. No changes to the Final EIR are required.

Response to Comment D-3

The comment indicates that Commission staff views fireworks displays as potentially impactful activities that should be minimized in occurrence, located in areas that are least impactful to wildlife and habitat, and scheduled outside of nesting periods, with the exception of the Fourth of July. In addition, the commenter notes that additional comments are to follow.

The environmental impacts of the project are fully disclosed and any significant adverse impacts on biological resources would be mitigated to less than significant in Section 4.3, *Biological Resources*, of the Draft EIR. As described in Chapter 3, *Project Description*, of the Draft EIR, the proposed new fireworks display events would be limited to four times per year, with two displays occurring on the Fourth of July. As shown in Table 3-1 of Chapter 3 of the Draft EIR, the remaining two fireworks display events would occur at different periods throughout the year, with one display occurring during the timeframe of January to March, and one display occurring during October to December. Both of these timeframes are generally outside of the avian nesting season. In addition, see response to comment B-6, which states that the proposed barge locations have been sited to minimize the effects of fireworks on biological resources to the maximum extent feasible.

Response to Comment D-4

The comment states that the Draft EIR should provide greater analysis from studies documenting impacts of fireworks on birds and marine mammals in particular. The comment does not specifically state which studies should be included within the Draft EIR.

The Draft EIR included an in-depth discussion of numerous existing studies that analyzed the effects of fireworks on wildlife, including birds and marine mammals. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, an extensive literature review was completed with a focus on effects of fireworks in coastal areas outside of the San Diego region, and the effects of pyrotechnics and loud sounds, in general, on marine resources. In addition, the impact analysis made use of existing biological information for San Diego Bay, including the San Diego Bay Integrated Natural Resources Management Plan prepared by the U.S. Navy in conjunction with the District. Furthermore, general

information was drawn from surveys of the nearshore environment near Imperial Beach Pier, particularly from the 2011–2012 benthic habitat mapping for the U.S. Navy's Silver Strand Training Complex Boat Lanes (Merkel & Associates, Inc. 2011a, 2012), surveys performed offshore of the Imperial Beach Pier for nearshore beach nourishment (Merkel & Associates, Inc. 2011b), nearshore habitat mapping performed by San Diego Association of Governments (SANDAG 2002; Merkel & Associates, Inc. et al. 2004), studies completed for the Naval Base Coronado Naval Outlying Field in Imperial Beach (Tierra Data 2011; Merkel & Associates, Inc. 2014a), and beach monitoring performed in association with the regional beach nourishment program (Merkel & Associates, Inc. 2014b). The results of these studies and surveys were incorporated into the impact analysis and were used to determine potential impacts related to the proposed project. The environmental impacts of the project are fully disclosed and any significant adverse impacts on biological resources would be mitigated to less than significant in the Draft EIR. No changes to the Final EIR are required.

Response to Comment D-5

The comment identifies the alternatives fully analyzed in the Draft EIR and indicates that an alternative based on different locations should also be considered. The commenter also states that the 140 dB threshold is too high, and a lower threshold should be considered.

As discussed in Chapter 7, *Alternatives to the Proposed Project*, of the Draft EIR, one of the alternatives considered but rejected included a Landside Fireworks Display Events on Port Tidelands Alternative. Under this alternative, all proposed new fireworks display events would be required to be held within landside areas under the jurisdiction of the District. The locations of the proposed new fireworks display events as proposed and described in Chapter 3, *Project Description*, of the Draft EIR would be within San Diego Bay. Therefore, with the Landside Fireworks Display Events on Port Tidelands Alternative, the Draft EIR essentially considered an alternative location from what was proposed in Chapter 3. However, as discussed in Chapter 7, the Landside Fireworks Display Events on Port Tidelands Alternative was rejected for various reasons, including a potential for increased acute health risk and risk to public safety, reduced number of public viewing areas, increased potential for fire hazards, and increased traffic impacts because more intersections and roadways may need to be closed within the public safety zone.

Although this comment does not specify why the 140 dB threshold is too high or suggest a lower threshold, the District is providing the following information to address the comment. Distance from sensitive biological resource was one of the factors considered in selecting the launch locations for the proposed new fireworks display events. As discussed in response to comment B-6, the location of the proposed Chula Vista Bayfront launch barge has also been revised for the Final EIR to avoid the Refuge. The geographic location of each launch site is defined by the public viewing area(s) it is intended to serve as well minimum distances from land that are required to provide a safety buffer. As such, there is limited flexibility in where each launch site can be placed. Furthermore, because of the large noise impact distances identified the Draft EIR, it is generally not practical to move a launch site a large enough distance to substantially change the impacts. Therefore, project alternatives were selected that focused primarily on changing the characteristics of the fireworks display events themselves, rather than the launch locations for the displays. The decibel threshold of 140 dB is based on available data for salute fireworks, which are the loudest type of traditional fireworks used and are specifically designed to generate high noise levels. Because this type of firework is currently used as part of the existing traditional fireworks display events, this noise level is anticipated and not unrealistic. It should be noted that the 140 dB limit refers to linear (unweighted) peak noise levels that address very brief (instantaneous) peak noise, which is more

restrictive than typical A-weighted (i.e., dBA) maximum or average noise level limits that are typically used in assessing long-term environmental noise; the noise level limit is also specified directly under the shell burst, rather than at a more distant observation point. As requested in the comment, the Final EIR considers a decibel threshold lower than 140 dB. The noise limit under the No Salute Fireworks Alternative has been reduced in the Final EIR to "130 dB linear (unweighted) peak sound pressure level due to the firework break(s), as measured at a horizontal distance of 15 meters from the launch point at a height of 1 meter above the ground, using a Type 1 sound measuring device with a free-field microphone." However, reducing the noise limit to 130 dB would not allow for any other alternate barge locations because the barges would still need to be sited a minimum of 1 mile from sensitive nesting colonies. The changes are included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment D-6

The commenter suggests that fireworks consisting of materials with reduced toxicity and more complete aerial combustion should be considered.

As part of the proposed ordinance, the District is requiring the use of alternative fireworks technologies to the extent that they are commercially available. These alternative fireworks are produced with pyrotechnic formulas that replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters.

Response to Comment D-7

The comment states that each proposed fireworks launch site location must be evaluated in relation to nearby sensitive biological resources. The comment also suggests that an area of impact be identified around each fireworks launch site for different impact topics including noise, light, debris, and pollutants. Furthermore, the comment states that sensitive biological resources present around each fireworks launch site should be mapped and impacts on those resources should be evaluated for each location. The comment states that areas where sensitive species are concentrated should be entirely avoided.

The proposed project includes four new fireworks display events in San Diego Bay adjacent to the National City and Chula Vista Bayfronts. Section 4.3, *Biological Resources*, of the Draft EIR provides an in depth discussion of the existing habitats and wildlife of the Bay and identifies the specific sensitive habitats and species in the vicinity of the proposed locations for the new fireworks display events. In addition, the general biological habitats, sensitive habitats, wetlands, and locations of sensitive species of the Bay and Imperial Beach Oceanfront are mapped on Figures 4.3-1 and 4.3-2 of Section 4.3 of the Draft EIR. Figure 4.3-2 specifically depicts the locations of habitat protection areas, marine mammal haul-out areas, sensitive habitats such as eelgrass and coastal salt marsh, and sensitive nesting areas for light-footed Ridgway's rail, Belding's Savannah sparrow, Western snowy plover, and California least tern, as well as a 1-mile buffer around these sensitive nesting areas. The locations of each of these sensitive habitats, wetlands, and sensitive species are mapped in relation to the barge locations for both existing and proposed new fireworks display events.

The potential effects of the four proposed new fireworks display events on these sensitive species and habitats were analyzed throughout Section 4.3 of the Draft EIR, including the potential effects associated with fireworks noise, light, debris, and pollutants. Specifically, the potential effects of fireworks noise, light, debris, and pollutants on sensitive species, including native and migratory

wildlife species, are analyzed under Thresholds 1 and 4 of Section 4.3 of the Draft EIR. Additionally, the potential effects of fireworks noise, light, debris, and pollutants on sensitive habitats, including wetlands and wildlife nursery sites, are analyzed under Thresholds 2, 3, and 4 of Section 4.3 of the Draft EIR. The proposed barge locations have been sited to minimize the effects of fireworks on sensitive species and resources. Both the proposed National City and Chula Vista barges would be located approximately 1 mile from sensitive nesting areas within and around San Diego Bay to minimize the visual and audible effects of fireworks to these areas. No changes to the Final EIR are required.

Response to Comment D-8

The comment states that crowd management should also be considered in the EIR. The comment states that large crowds can affect wildlife and result in behavioral changes and stress, which is in addition to the stress caused by fireworks themselves. The comment also states that the effects of boat crowds should be considered and that certain densities may need to be limited.

The potential significant impacts associated with human activities is evaluated in Section 4.3, *Biological Resources,* of the Draft EIR. The proposed new fireworks display events would be located within view of publicly accessible areas such as parks, promenades, publicly accessible piers, and plazas. As a result, the District cannot prohibit access to these areas. However, the proposed ordinance includes several conditions of approval intended to reduce the effects of trespass into sensitive habitat areas, including security, signage, and education measures for publicly advertised fireworks display events. The implementation of these conditions of approval are required by mitigation measure MM-BIO-2.

As discussed in Section 4.3 of the Draft EIR, HPD currently assigns units to major patrol areas and deploys additional units on tidelands including bicycle and vessel units during existing fireworks display events (Brick pers. comm.). The landside patrols provide law enforcement within the landside viewing areas, while the special patrol vessels provide law enforcement on the water. Consistent with its current operational practices, HPD would continue to deploy special patrol vessels and conduct in-water law enforcement during fireworks display events. These existing procedures ensure that boating laws are properly enforced in the Bay. The District will continue to coordinate with HPD and U.S. Coast Guard who are responsible for proper boating practices in the Bay.

In addition, please see response to comment B-21. Based on recommendations received during the public comment period, Section 4.3 of the Draft EIR has been updated to a clarifying mitigation measure (MM-BIO-4) requiring biological monitoring and reporting, and updates to MM-BIO-2 to include clarifying language to augment landside security patrols with in-water security patrols. Changes to mitigation are included in Chapter 3, *Errata and Revisions*, of the Final EIR and are reflected in the project's MMRP.

Response to Comment D-9

The comment suggests that fireworks displays should not occur on consecutive nights in the same location unless the cumulative effects of these events is considered.

The proposed project includes four proposed new fireworks display events, two of which would occur on the Fourth of July. The timing of the two proposed new non-Fourth of July displays is detailed in Table 3-1, which specifies that one display would occur from the months of January to

March, and one display would occur from October to December. Therefore, there would be no potential for the proposed new fireworks display events to occur on consecutive nights. In addition, Chapter 5, *Cumulative Impacts*, of the Draft EIR evaluated the potential impacts associated with the combined effects of the proposed new fireworks display events and the existing fireworks display events that currently occur in San Diego Bay. As discussed in Chapter 5, the implementation of MM-BIO-1 would ensure that fireworks-generated trash and debris are collected and disposed of, and MM-BIO-2 would ensure that indirect effects from increased boat traffic, trespass, and human-generated trash and debris are reduced. The implementation of these mitigation measures would reduce potential cumulative biological resources impacts to a level less than cumulatively considerable. Therefore, no changes to the Final EIR are required.

Response to Comment D-10

The comment generally states that the Draft EIR is lacking a thorough discussion of mitigation of unavoidable impacts, and suggests that mitigation be developed based on specific location, species, and habitat impacts.

As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, all potentially significant impacts on biological resources would be reduced to a less than significant level with the implementation of mitigation measures. Therefore, the proposed project would not result in any significant and unavoidable impacts on biological resources. This comment does not suggest any specific location, habitat, or species and also does not identify any unavoidable impacts for which mitigation is lacking. Therefore, a specific response cannot be provided. No changes to the Final EIR are required.

Response to Comment D-11

The comment states that special attention be paid to sensitive species such as the California least tern, Western snowy plover, Belding's Savannah sparrow, Ridgeway's rail, sea turtles, and any others not previously listed.

Section 4.3, *Biological Resources*, of the Draft EIR identifies the individual protected, rare, sensitive, threatened, and endangered species as designated by USFWS, National Marine Fisheries Service, and CDFW that are expected to be present in San Diego Bay and the Imperial Beach Oceanfront. As discussed in Section 4.3 of the Draft EIR, four avian species listed by USFWS and/or CDFW as federally or state-listed as endangered or threatened have a high potential to occur within San Diego Bay and the Imperial Beach Oceanfront. These include California least tern, western snowy plover, light-footed Ridgway's rail, and Belding's Savannah sparrow. Other sensitive avian species with a high potential to occur include California brown pelican and double-crested cormorant, as well as sensitive raptors such as osprey, northern harrier, and American peregrine falcon. In addition, Section 4.3 specifies that south San Diego Bay supports a population of eastern Pacific green sea turtles. The potential effects of the proposed project on these various species are analyzed under Thresholds 1 and 4 of Section 4.3 of the Draft EIR, which determined that all potentially significant impacts would be reduced to less than significant with the implementation of mitigation measures. No changes to the Final EIR are required.

Response to Comment D-12

This comment concludes the comment letter and provides a contact name and information.

The District appreciates the Coastal Commission's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA.

4.4.5 Comment Letter E: California Department of Fish and Wildlife

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

May 2, 2017

Ms. Wileen Manaois
Principal, Real Estate Development Department
San Diego Unified Port District
3165 Pacific Highway
San Diego, CA 92101
wmanaois@portofsandiego.org

Subject: Comments on the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project, City of San Diego, San Diego County, California (UPD No. EIR-2015-115; SCH No. 2015081013)

Dear Ms. Manaois:

E-1

The Department of Fish and Wildlife (Department) has reviewed the San Diego Unified Port District's (Port District's) San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project (proposed project) Draft Environmental Impact Report (DEIR). The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the proposed project (California Environmental Quality Act, [CEQA] Guidelines § 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (CESA; Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq.*

The proposed project consists of (1) an ordinance establishing a Port District Code section (proposed ordinance) to govern existing and proposed new fireworks display events that occur within San Diego Bay and the Imperial Beach Oceanfront that require a discretionary action by the Port District or that are operated by the Port District's tenants, and (2) four proposed new fireworks display events, which would be located adjacent to the National City and Chula Vista Bayfronts and are anticipated to require a future discretionary action by the Port District. Existing fireworks display events are launched from barges, piers, and/or flight decks. The proposed new fireworks displays would occur year round and are anticipated to last between 3 to 10 minutes in duration for non–Fourth of July displays and 15 to 20 minutes for Fourth of July displays. The new fireworks displays are proposed to be launched from barges within the San Diego Bay, and would be governed by the proposed ordinance. All existing and proposed new fireworks display events that either require a discretionary action by the District or those operated by the District's tenants would be subject to all applicable federal, state, and local laws and regulations governing fireworks as well as any additional requirements set forth in the proposed ordinance.

E-1 cont. The Department offers the following comments and recommendations to assist the Port District in avoiding, minimizing, and adequately mitigating project-related impacts to biological resources.

General Compatibility

E-2 Given the concentration of biological resources within the project area, the San Diego Bay National Wildlife Refuge, the Sweetwater Marsh Refuge Unit, the South San Diego Bay Refuge Unit, and other conservation efforts including federal funding associated with National City and the south bay, the Department is concerned with the compatibility and appropriateness of adding fireworks displays to the south bay that have the potential to adversely impact the region's rich natural resources. The DEIR's analysis should carefully examine the need of the proposed expansion, and consider the mitigation and monitoring requirements necessary to protect south bay habitats and their residents.

San Diego Fireworks Display EIR Notes

E-3 The DEIR should include an analysis of direct and indirect impacts to all avifauna nesting within National City and the south bay, including D-Street Fill, Sweetwater Marsh, F and G Street Marshes, J Street Marsh, Paradise Marsh, Chula Vista Wildlife Reserve, and Silver Strand State Beach. The analysis should focus on the area's importance as a regional and international site utilized for nesting, roosting, foraging, and as a migratory stopover within the Pacific Flyway for common and designated sensitive species. The proposed project areas, particularly those proposed within the vicinity of Ecological Refuges and other open spaces within the south bay, host thousands of resident and migratory birds that could be adversely impacted by the proposed project.

E-4 The Department believes that based on the available literature including unpublished reports, and other limited publications, common and sensitive species including, but not limited to light-footed Ridgway's rail (*Rallus longirostris levipes;* a CESA and Endangered Species Act [ESA] endangered species, and a State Fully Protected Species [FPS] under Fish and Game Code § 3511); California least tern (*Sternula antillarum browni;* a CESA and ESA endangered species and FPS); Belding's savannah sparrow (*Passerculus sandwichensis beldingi;* a CESA endangered species); western snowy plover (*Charadrius alexandrinus nivosus;* ESA threatened species and a State Species of Special Concern [SSC]); black skimmer (*Rynchops niger;* a SSC); elegant tern (*Thalasseus elegans*); Caspian tern (*Hydroprogne caspia);* double-crested cormorant (*Phalacrocorax* auritus); northern harrier (*Circus cyaneus;* a SSC); and osprey (*Pandion haliaetus*) are likely to exhibit a physiologic response to fireworks-generated flash and noise. Page 4.3-28 of the DEIR identifies that "[t]he flash and noise from the proposed new fireworks display events *are* [emphasis added] expected to generate physiologic response of stress within birds." However, later in the DEIR it is concluded that "the proposed new fireworks display events are not anticipated to result in any long-term or permanent substantial adverse effects on avian species because temporary disturbance from noise and light would be short term and infrequent and would not result in direct mortality of birds, a decrease in productivity, or long-term changes in behavior (e.g., colony abandonment)" (Port District, 2017; p. 4.3-31), concluding that no significant impact would occur. The Department does not believe that the analysis provided in the DEIR adequately supports the conclusion that fireworks displays would not directly impact sensitive avian species throughout San Diego Bay and Imperial Beach. For example, while certain colonies (that are routinely exposed to loud noise) may not be abandoning nests or chicks, vocalizations, flushing behaviors, and other movements indicated that these birds were stressed by the fireworks displays and loud noises they produce (Port

E-4 cont.

District, 2017). It is unknown how the stress responses elicited from cumulative fireworks displays affect species' energy expenditure, their underlying health, or if the stress affects subsequent nesting attempts. The DEIR suggests that because they have not historically been exposed to continuous loud noise, south bay avian colonies could be comparatively more sensitive to fireworks displays. Additionally, while behavioral observations of California least terns and western snowy plovers in response to fireworks displays are scant, studies for light-footed Ridgway's rail and Belding's savannah sparrow do not exist. For these reasons, the Department continues to stress the importance that the project include a comprehensive mitigation strategy, including a robust monitoring protocol, that minimizes sensitive species' exposure by maximizing spatial buffers from the fireworks display source (e.g., barge, pier, etc.) and sensitive receptors (i.e., nesting and critical roosting and foraging grounds for avian species).

E-5

Monitoring

In our comments on the Notice of Preparation for the proposed project (September 8, 2015) we recommended that for sites likely affected by fireworks displays, a monitoring protocol be developed as part of a comprehensive mitigation strategy. The DEIR does not include a monitoring protocol as recommended. Given the data gaps regarding the effects of fireworks displays on sensitive avian species, the DEIR should include an adaptive management plan requiring ongoing monitoring of sensitive receptor sites for individual fireworks displays (e.g., known sensitive species nesting and/or roosting sites). The adaptive management plan should include specific mitigation strategies to further minimize impacts to sensitive receptors (e.g., increase buffer size, temporal restrictions, etc.) and measures to gradually reduce the ongoing monitoring (as a component of the adaptive management plan) should the monitoring demonstrate that the mitigation measures are successful. The Port District should confer with the Department to reduce the interval or intensity of ongoing monitoring requirements. The Department offers the monitoring recommendations below (adapted from U.S. Fish and Wildlife Service [Service] recommendations):

E-6

1. Sensitive habitats (e.g., nesting and roosting sites within 1.2 mile of the fireworks) including areas within the vicinity of where spectators may congregate should be surveyed by a qualified biologist prior to, during, and following the fireworks display. Where appropriate, and when less intrusive than direct observation, nest cameras may be used to monitor sites that have no terrestrial or aquatic access. Monitoring activities themselves should not result in undue harassment. At a minimum, monitors should record and/or perform the following:

    a. site location, name of monitor, date and time of observations;
    b. number of adults, nests, and chicks observed within ½ mile of spectator viewing areas;
    c. species behavior prior to, during, and post fireworks displays;
    d. sources of stressors (e.g., light, noise, trespass, debris);
    e. foraging behavior no sooner than 48 hours prior to and no later than 24 hours following fireworks displays;
    f. counts of human and dog tracks intersecting with symbolically fenced areas before and after the fireworks event;
    g. counts of persons within access-controlled areas;
    h. counts of litter items within symbolically fenced areas before and after the fireworks event;

E-6 cont.

i. counts of illegal pyrotechnics;
j. recommendations, as applicable, to further minimize physiologic response to fireworks displays (e.g., identify known, new, or persisting management needs). Monitoring observations should be evaluated by the Port District to increase buffer distances, further limit noise levels or other actions as appropriate.

E-7

The Port District should:

2. Provide monitoring data directly to the Department.
3. Ensure sensitive habitats are symbolically fenced and posted off-limits during events. Conduct repairs to symbolic fencing of any damaged or missing sections of fencing prior to fireworks display permit issuance.
4. Close parking lots and beach access points in the vicinity of sensitive resources, as appropriate.
5. Provide adequate numbers of monitors and patrols (commensurate with anticipated number or spectators, and exposure/accessibility of sensitive resources) prior to spectators congregating and continuing until spectators disperse.
6. Monitor noise at sensitive receptor sites.
7. Ensure monitors and other enforcement personnel receive accurate information regarding the location of sensitive resources.
8. Prohibit pets on beaches and within sensitive resource areas.

E-8

Compliance

Monitors should have direct communication with patrols (e.g., San Diego Harbor Police, law enforcement, and private security) to effectively prevent inadvertent and unauthorized impacts to sensitive biological receptors. The DEIR identifies that fireworks displays not only elicit a physiological reaction from sensitive avian species, but that there are additional indirect effects associated with trespass from spectators accessing beach and dune areas closed for breeding and roosting. The Department commends the Port District for increasing the Harbor Police Department presence during fireworks displays, and the DEIR should memorialize the following DEIR language as a mitigation measure of future fireworks display permits. "*Consistent with its current operational practices, the Harbor Police Department would continue to deploy special patrol vessels and conduct in-water law enforcement during fireworks display events*" (Port District, 2017; p. 4.3-33). Additionally, the Port District should coordinate with staff from the Harbor Police Department to determine the number of patrols necessary to protect biological resources and to identify specific/targeted enforcement areas of sensitive resources where unauthorized spectating (e.g., beach access or beaching/mooring) is prohibited.

E-9

Environmentally Superior Alternative

The DEIR is not clear how the Quiet Fireworks Display Alternative (e.g., Environmentally Superior Alternative) fails to meet the project objectives. Per the DEIR, "... the Quiet Fireworks Display Events Alternative would not meet the fundamental project objectives" (Port District, 2017; p. ES-10). Of the alternatives analyzed by the DEIR, the Quiet Fireworks Display Alternative best aligns with protecting sensitive natural resources within the immediate proximity of firework displays (e.g., known nesting sites for California least tern, light-footed Ridgway's rail, Belding's savannah sparrow, western snowy plovers, etc.). The DEIR describes four (4) project objectives.

E-10 **Objective one.** Objective one is to develop a Port District ordinance that establishes a Port District Code section with policies and performance standards, for fireworks display events that require a discretionary action by the Port District or those firework display events operated by the Port District's tenants. The Quiet Fireworks Display Alternative would not impede the District's ability to establish policies; conversely, it would assist the Port District by providing specific performance standards that are both measurable and enforceable.

E-11 **Objective two.** The Quiet Fireworks Alternative fulfills project objective two by allowing "...for the continued occurrence of traditional fireworks display events in and around San Diego Bay and the Pacific Ocean near Imperial Beach..." (Port District, 2017; p. 3-2). Furthermore, the Port District is presented with an opportunity to educate local communities regarding San Diego's unique biological resources and recognize the protective measures that the District and the community collectively take. Communal resources can foster a sense of hometown appreciation—achieving objective two by "...providing a popular and region-wide way to celebrate and express civic pride..." while also facilitating fireworks displays.

E-12 **Objective three.** Project objective three seeks to allow "...the continued occurrence of existing and future occurrence of proposed new traditional fireworks display events in and around San Diego Bay and the Pacific Ocean near Imperial Beach...." (Port District, 2017; p. 3-2). The Quiet Fireworks Alternative would not impede the occurrence of current or future fireworks displays and unequivocally "...considers the health, safety, and welfare of people, property, and the environment...." (Port District, 2017; p. 3-2).

E-13 **Objective four.** Finally, there is no evidence that the Quiet Fireworks Alternative fails to achieve project objective four, which aims "[t]o continue to enhance the visitor-serving experience of viewing fireworks display events from various vantage points around District tidelands by providing safe, high-quality fireworks display events using existing and new fireworks technologies as they become available" (Port District, 2017; p. 3-2). Nothing within the Quiet Fireworks Alternative suggests that access to fireworks displays would be limited beyond existing public safety, right of access, or other applicable restrictions.

E-14 Regardless of the selected project alternative, acousticians should be utilized to monitor the actual sound levels generated during these events in relationship to sensitive biological receptor sites. Point monitoring of sensitive biological receptors should be made a requirement for each firework display permit until it can be demonstrated that the existing or additional events do not adversely impact these receptor sites.

Alternative 3 – No Salute Fireworks Alternative

E-15 The Department appreciates the consideration of project alternatives intended to reduce the noise and light impacts to sensitive receptors, however, Alternative 3 allows fireworks that are equally loud as a typical 3-inch "salute". "The No Salute Fireworks Alternative would have the same characteristics as all of the fireworks display events that compose the proposed project, including the same total pounds of fireworks per event (as outlined in Table 3-2 in Chapter 3, *Project Description*), but would prohibit the use of salute fireworks and limit the noise produced by all fireworks during fireworks display events to a maximum of 140 dB" (Port District, 2017; p. ES-9). Under Alternative 3, fireworks noise would not be minimized below the typical salute fireworks the DEIR describes as being prohibited. As stated in the DEIR, salute fireworks are specifically designed to be loud and bright and "[w]hile the noise level of these fireworks varies by type, a typical linear (unweighted) peak noise level directly below a 3-inch salute exploding at

E-15 cont. its normal altitude is 140 decibels (dB) (Journal of Pyrotechnics, Inc. 2012)." Therefore the effect of Alternative 3 only limits fireworks that *exceed* the typical noise generated by current fireworks and/or fireworks specifically labeled as salute fireworks.

Impacts to Nursery Sites

The proposed project has the potential to impact various nursery sites (i.e., avian nesting sites). Based on a literature review of relevant information, the U.S. Fish and Wildlife Service's *Guidelines for Managing Fireworks in the Vicinity of Piping Plovers and Seabeach Amaranth on the U.S. Atlantic Coast* (USFWS, 1997) is a guidance document that evaluates impacts on tern species. Absent updated and site-specific information, the Service's guidelines serve as the best available science for minimizing impacts to terns and plovers. With regard to selecting firework shell size, the Department's literature review suggests a firework display's impacts on avian species is associated the noise and light and not necessarily associated with the shell size of a given firework. Edits below suggest uncoupling firework shell size from the recommended avian buffer. To partially mitigate noise impacts to avian nesting and/or roosting sites the text of MM-NOI-1: *Implementation of Noise-related Conditions of the Proposed Ordinance* (p. ES-41) should be modified accordingly (deletions in ~~strikeout~~ and additions in ***bold italics):***

MM-NOI-1: Implementation of Noise-Related Conditions of the Proposed Ordinance.

E-16 The fireworks organizer and operator are required to comply with the following noise related conditions of the proposed ordinance.

Section X.07 – Permits – Conditions of Approval

(e) Protection of Sensitive Species and Habitat. The following conditions shall apply to Fireworks Display Events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1***.2***) mile from any federally or state-listed avian species nesting ***sites***:

1. Location. Fireworks display events shall be located not less than one ***and two-tenths*** (1***.2***) mile from any federally***,*** ~~or~~ state-listed ***or other sensitive*** avian species nesting colony***.***

2. Salutes. Fireworks display events shall not use concussion type, non-color shells such as "salutes" or "reports" during the initial twenty-five percent (25 percent) of the duration of any display (e.g., within the first 5 minutes of a 20-minute display). ***Concussion fireworks (e.g., Salutes or Reports) shall not to exceed 120 linear (unweighted) peak sound pressure level as measured directly under the shell burst occurring at its normal altitude, using a Type 1 sound measuring device with a free-field microphone at a height of 1 meter above the ground.***

Debris

E-17 Despite Mitigation Measure MM-BIO-1, the proposed project could cause a considerable amount of plastic and other non-biodegradable materials to fall within San Diego Bay. Mitigation Measure MM-BIO-1 does not fully mitigate the potential for ingestion of firework byproducts that could harm green sea turtles, marine mammals, and/or avian species. Specifically, MM-BIO-1 (d)(2)(B) only prohibits fireworks with plastic casings or non-biodegradable inner components

E-17 cont. exceeding five percent of the firework's mass (Port District, 2017; p. ES-16). The proposed addition of Chula Vista Bayfront firework displays alone could cause an additional 34.2 pounds of plastic and other non-biodegradable byproducts to fall directly within San Diego Bay[1]. The DEIR should present the total amount of debris deposited within San Diego Bay that could be caused from existing fireworks shows, and newly proposed additions (e.g., National City and Chula Vista shows) within the DEIR. To the extent feasible, MM-BIO-1 should be revised to prohibit the use of non-biodegradable materials.

E-18 Mitigation Measure MM-BIO-1(8), (9), and (10), and MM-WQ-1 should specify that collected firework-generated trash and debris should be weighed dry, not wet, to better achieve a proportional collection weight commensurate with the weight of introduced debris. Mitigation Measure MM-BIO-1(8), (9), and (10) should specify that weight criteria must be fulfilled using firework-generated debris only.

E-19 To mitigate impacts associated with increased debris associated with boating activities and increased foot traffic (see Impact-BIO-3, Impact-BIO-4, Impact-BIO-8, and Impact-C-BIO-1) associated with spectators, Mitigation Measure MM-BIO-1 should require the fireworks organizer to collect incidental spectator-generated trash. To accomplish this, the Department recommends the following is incorporated in the DEIR as enforceable mitigation measures for future fireworks display permits:

E-20 A) A refundable deposit fee, based on the number of anticipated spectators (e.g., per capita) paid by the fireworks organizer. The refundable deposit fee should be an inflation-adjusted amount to fund two Port District or respective City cleanup personnel, equipment (e.g., truck, boat, nets, bags, personal protection equipment, debris disposal fees, etc.) per 500 spectators. The refundable deposit should be released or prorated based on the Port District's and hosting-city's satisfaction with firework organizer's cleanup.

E-21 B) To defray potential costs borne by the firework organizer and/or hosting-city, firework organizer and Port District shall implement Mitigation Measure MM-BIO-2(5) to include daily announcements through digital/social media in conjunction with physical signage and/or press releases. MM-BIO-2 should be revised to require educational programs for each event designed to minimize debris, and prohibit impacts to sensitive resources (e.g., nesting or roosting sites, green turtle foraging areas, and eel grass beds).

E-22 C) While MM-BIO-2 requires a minimum of two "...professional security guards to direct persons away from and discourage trespass..." (Port District, 2017; p. ES-22) the number of required security guards should be based on the number of spectators, potential threat to sensitive areas (e.g., fenced vs. unfenced habitats) and mode of spectator access (e.g., land vs. aquatic, or both). Two security guards are inadequate for most locations and the DEIR does not specifically require boat patrols. MM-BIO-2 should be revised to provide security requirements based on site sensitivity and include provisions to increase Harbor Police patrols funded by the firework organizer and/or cooperating local agency.

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[1] Based on the DEIR's Table ES-1 *Proposed New Fireworks Display Events Requiring a Future Discretionary Action by the District.*

E-23 We appreciate the opportunity to comment on the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events DEIR. Questions regarding this letter should be directed to Eric Weiss at (858) 467-4289, or eric.weiss@wildlife.ca.gov.

Sincerely,

Gail K. Sevrens
Environmental Program Manager

ec: State Clearinghouse, Sacramento
Sandy Vissman, U.S. Fish and Wildlife Service

References

California Department of Fish and Wildlife (CDFW). 2016. California Least Tern Breeding Survey 2015 Season. March 30, 2016.

Port of San Diego. March, 2017. Draft Environmental Impact Report, San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project. Prepared by ICF.

U.S. Fish and Wildlife Service. 1997. Guidelines for Managing Fireworks in the Vicinity of Piping Plovers and Seabeach Amaranth on the U.S. Atlantic Coast.

Response to Comment E-1

This comment is an introductory comment that explains CDFW is providing recommendations to assist the District in avoiding, minimizing, and adequately mitigating project related impacts on biological resources. The comment states CDFW's authority as a Trustee Agency with jurisdiction over natural resources and a Responsible Agency under State CEQA Guidelines section 15381. The comment also summarizes the proposed project analyzed in the EIR.

The District appreciates CDFW's interest in the proposed project. This comment does not raise any issues needing a response pursuant to CEQA. The specific comments raised in the pages that follow this introduction are listed separately along with the District's individual responses.

Response to Comment E-2

This comment notes that CDFW is concerned with the compatibility and appropriateness of adding fireworks displays to the south Bay that have the potential to affect the natural resources. The comment indicates that the Draft EIR should analyze the proposed expansion and consider mitigation requirements to protect the south Bay habitats and their residents.

The commenter has raised two points. The first is a recommendation to consider the need of the proposed expansion of fireworks shows to include new shows in the South Bay, and the second is to consider mitigation and monitoring requirements necessary to protect South Bay habitats and resident resources. It is not necessary under CEQA to evaluate the need for a proposed action, only the environmental effects of the action itself. As such, the Draft EIR does not address project need. Relative to evaluation of mitigation and monitoring necessary, the Draft EIR has reviewed the potential nature, scale, and severity of anticipated impacts associated with the considered actions, including adoption of the proposed ordinance. This is documented in Section 4.3, *Biological Resources*, of the Draft EIR. From this analysis, multiple impacts were identified that would be considered significant without mitigation. The Draft EIR goes on to identify mitigation measures suited to reducing the extent of impacts to a less-than-significant level. In addition, an MMRP is required to be implemented to monitor and report on the success of the mitigation. The MMRP is attached to the Final EIR.

Response to Comment E-3

This comment states that CDFW requests that the Draft EIR include an analysis of direct and indirect impacts on all avifauna nesting within National City and the south Bay. The comment indicates that the analysis should focus on the area's importance as a regional and international site utilized for nesting, roosting, and foraging, and as a migratory stopover within the Pacific Flyway for common and designated sensitive species.

The commenter raises concerns over the resident and migratory avian resources of the project area. This was discussed in Draft EIR and Appendix F, BTR. It was also raised in comments B-7, B-8, B-10 and B-11 by USFWS (Please refer to these responses). Marshlands, nesting areas, and other resource areas within proximity to the proposed new fireworks display events have been identified in Figure 4.3-2, as updated based on USFWS comments. These resource areas have been identified as habitat protection areas along with resource management areas such as designated and other nesting sites. Section 4.3, *Biological Resources,* of the Draft EIR evaluates impacts on these resources and the Pacific Flyway.

Response to Comment E-4

This comment states that CDFW believes that certain common and sensitive species are likely to exhibit a physiologic response to fireworks-generated flash and noise. The comment states that CDFW does not believe that the Draft EIR analysis adequately supports the conclusion that the fireworks displays would not directly impact sensitive avian species throughout San Diego Bay and Imperial Beach.

This comment states that it is unknown how the stress responses from cumulative fireworks display affect species energy expenditure, health, or if the stress affects subsequent nesting attempts. The comment notes that the Draft EIR suggests that because south Bay avian colonies have not historically been exposed to loud noise, the colonies could be comparatively more sensitive to fireworks displays. The comment states that CDFW continues to stress the importance that the project include a comprehensive mitigation strategy, including a robust monitoring protocol, that minimizes sensitive species' exposure by maximizing spatial buffers from the fireworks display source and sensitive receptors.

The Draft EIR analyzes the potential impacts related to physiological stress in birds, and indicates that the stress levels generated may be expected to vary from north to south in the Bay based on habituation to differing ambient conditions. The Draft EIR has also concluded that the extent of impact is anticipated to fall below a level of significance as defined under CEQA. The Draft EIR analyzes each of the identified impacts against thresholds of significance within Draft EIR Section 4.3.4.3. As described in Draft EIR Section 4.3.4.2, *Thresholds of Significance*, biological resources impacts would be considered significant if the proposed project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species, including sensitive avian species. Based on the information presented above, the proposed new fireworks display events may result in short-term and infrequent changes in behavior in sensitive avian species as a result of disturbance from fireworks. However, the proposed new fireworks display events are not anticipated to result in any long-term or permanent substantial adverse effects on avian species because temporary disturbance from noise and light would be short term and infrequent and would not result in direct mortality of birds, a decrease in productivity, or long-term changes in behavior (e.g., colony abandonment). As such, any temporary disturbance would not be considered a substantial adverse effect on a sensitive species. Therefore, as identified in Section 4.3, *Biological Resources,* of the Draft EIR, impacts would be less than significant.

The commenter raised concerns over how nesting birds may respond to cumulative fireworks displays. The biological resource expert retained by the District who assisted in preparation of the Draft EIR evaluated these concerns and determined as follows. The proposed project includes four proposed new fireworks display events, two of which would occur on the Fourth of July and the other two proposed new non-Fourth of July displays are identified as occurring between the months of January to March and between October to December. Therefore, there would not be a potential for accumulation of stress over time from repetitive shows.

The commenter further notes that while there are behavioral observations and studies for California least tern and western snowy plover with respect to response to fireworks, there are no such studies for Ridgeway's rail and Belding's savannah sparrow. This is true, but given that these species nest within vegetation screened nesting habitat and they are secretive at the nest site, they are less likely to exhibit detrimental stress responses than would be the case for birds that nest on open

ground and would thus be exposed to the full effects of light and noise associated with the fireworks events. The lack of information on secretive bird behavior is not taken as an indication of expanded concern for these species, but rather the species behavior would be expected to reduce potential concerns for detrimental effects rather than raise them.

Finally, in light of the concerns raised, CDFW recommended a comprehensive mitigation strategy that includes monitoring protocol. Section 4.3 of the Draft EIR provides a comprehensive mitigation strategy, which has been updated to include a clarifying mitigation measure requiring biological monitoring for the proposed new fireworks display events in south San Diego Bay (MM-BIO-4). It should be noted that all potentially significant impacts on biological resources were determined in the Draft EIR to be less than significant with the implementation of mitigation measures. The addition of the biological monitoring mitigation measure is suggested by USFWS and CDFW, which both have regulatory oversight of biological resources within San Diego Bay, and would not result in any changes to the determinations made in the Draft EIR. Changes to mitigation are included in Chapter 3, *Errata and Revisions*, of the Final EIR and are reflected in the project's MMRP.

Response to Comment E-5

The comment notes that CDFW recommended a monitoring protocol be developed as part of the comprehensive mitigation strategy. The comment indicates that CDFW recommends that an adaptive management plan requiring ongoing monitoring of sensitive receptor sites for individual fireworks displays that should include specific mitigation strategies to further minimize impacts on sensitive receptors and measures to gradually reduce the ongoing monitoring.

Please see response to comment E-4. Based on similar recommendations received during the public comment period, Section 4.3, *Biological Resources*, of the Draft EIR has been updated to include a clarifying mitigation measure requiring biological monitoring for the proposed new fireworks display events in south San Diego Bay (MM-BIO-4). The mitigation measures provided in the Draft EIR and the clarifying mitigation measure requiring biological monitoring provide an adaptive management plan as recommended in this comment. It should be noted that all potentially significant impacts on biological resources were determined in the Draft EIR to be less than significant with the implementation of mitigation measures. The addition of the biological monitoring mitigation measure is suggested by USFWS and CDFW, which both have regulatory oversight of biological resources within San Diego Bay, and would not result in any changes to the determinations made in the Draft EIR. Changes to mitigation are included in Chapter 3, *Errata and Revisions*, of the Final EIR and are reflected in the project's MMRP.

Response to Comment E-6

This comment indicates that sensitive habitats should be surveyed by a qualified biologist prior to, during, and following the fireworks display. Where appropriate, nest cameras may be used to monitor sites that have no terrestrial or aquatic access. CDFW provided a list of standards for the monitors.

Please see response to comment E-4, which added mitigation measure MM-BIO-4 to the EIR to address the suggested monitoring raised in this comment.

Response to Comment E-7

The comment notes that CDFW recommends that the District should (recommendation in italics and District's response follows):

2. *Provide monitoring data to the CDFW*

The District agrees with this recommendation and has incorporated this recommendation into Mitigation Measure MM-BIO-4. See Chapter 3, *Errata and Revisions*, of the Final EIR.

3. Ensure sensitive habitats are symbolically fenced and posted off limits during events

The comment does not define what is meant by a "symbolic fence." The District's biologist identifies that the installation of fencing would result in additional impacts on wildlife resources because it could serve as a predator perch and the installation and removal of fencing would result in increased noise and human disturbance within sensitive habitats. As identified in the EIR as part of Mitigation Measure MM-BIO-2, the fireworks organizer and operator are required to comply with the proposed ordinance, including Section X.07 Permits – Conditions of Approval, (e) Protection of Species and Habitat, which requires security, signage, and education for fireworks display events with public viewing areas within one-half mile of unprotected (i.e., unfenced) federally or state-listed nesting colonies or habitat areas.

4. Close parking lots and beach access points in vicinity of sensitive resources

The closure of parking lots and beach access points within the coastal zone would result in adverse effects on public access, which is contrary to the California Coastal Act. Additionally it would result in the closure of desirable access areas for the fireworks displays event and has the potential to result in increased trespassing into existing non-accessible areas, which may result in greater impacts on sensitive habitat areas. Therefore, this recommendation has not been included in Mitigation Measure MM-BIO-4.

5. *Provide adequate number of monitors and patrols*

The implementation of Mitigation Measures MM-BIO-4, which includes monitoring and an adaptive management plan, will identify if additional security patrols is needed beyond the minimum of two professional security guards that are identified Mitigation Measure MM-BIO-2.

6. *Monitor noise at sensitive receptor sites*

The District agrees with this recommendation and has incorporated this into Mitigation Measure MM-BIO-4. See Chapter 3, *Errata and Revisions*, of the Final EIR.

7. Ensure monitors and other enforcement personnel receive accurate information regarding the location of sensitive resources

The District agrees with this recommendation and has incorporated this into Mitigation Measure MM-BIO-4. See Chapter 3, *Errata and Revisions*, of the Final EIR.

8. Prohibit pets on beaches and within sensitive resource areas

Existing laws, regulations, and applicable agreements adequately restrict unleashed pets on beaches, public parks, and sensitive habitat areas. Chula Vista Bayfront Master Plan Final EIR provides Domestic Animal Control Mitigation Measures (MM 4.8-6 and 4.8-7), which provide provisions to ensure that domestic pets within the Chula Vista Bayfront areas do not impact adjacent sensitive habitat areas. In addition Section 4.1.8 of the Chula Vista Bayfront Master Plan Settlement Agreement requires that all dogs be leashed in all areas of the proposed project at all times except in any designated and controlled off-leash areas. Furthermore, the National City Municipal Code Section 10.52.010 (d) requires owners to leash their dogs at all times within any City parks.

Response to Comment E-8

This comment indicates that monitors should have direct communication with patrols to effectively prevent inadvertent and unauthorized impacts on sensitive biological receptors. The comment states that the CDFW commends the Port District on coordinating with staff from HPD to determine the number of patrols necessary to protect biological resources and identify enforcement areas where unauthorized spectating is prohibited.

As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, HPD currently assigns units to major patrol areas and deploys additional units on tidelands including bicycle and vessel units during existing fireworks display events (Brick pers. comm.). The landside patrols provide law enforcement within the landside viewing areas, while the special patrol vessels provide law enforcement on the water. Consistent with its current operational practices, HPD would continue to deploy special patrol vessels and conduct in-water law enforcement during fireworks display events. These existing procedures ensure that boating laws are properly enforced in the Bay. The District staff will continue to coordinate with HPD and U.S. Coast Guard, who are responsible for lawful boating practices in the Bay. In addition, MM-BIO-2 in Section 4.3 of the Draft EIR has been updated to include clarifying language to augment landside security patrols with in-water security patrols. This clarifying language is consistent with the analysis provided in the Draft EIR and current best practices.

In addition, implementation of Mitigation Measure MM-BIO-4, which includes avian nesting colonies monitoring, will identify if additional security patrols are needed beyond the minimum of two professional security guards that are identified Mitigation Measure MM-BIO-2. The monitors will have direct contact with HPD as needed to prevent inadvertent and unauthorized access.

This clarifying language is included in Chapter 3, *Errata and Revisions*, of the Final EIR and is reflected in the project's MMRP.

Response to Comment E-9

This comment states the author's opinion that it is unclear how the Quiet Fireworks Display Alternative fails to meet the project objectives and that it is the alternative that best aligns with protecting sensitive natural resources within the immediate proximity of fireworks displays. This comment is an introduction to the specific issues raised in comments E-12 through E-15, which are addressed in the responses to those comments below. No further response to this comment is necessary.

Response to Comment E-10

This comment summarizes Objective # 1 of the proposed project and states the Quiet Fireworks Display Alternative would not impede the achievement of this objective. The comment agrees with the conclusion reached in the Draft EIR, which states: "The Quiet Fireworks Display Alternative would meet Objectives # 1 and # 3 because it would include adoption of an ordinance that would establish policies and performance standards that would be applied to fireworks display events occurring in and around San Diego Bay and the Pacific Ocean near Imperial Beach" (Draft EIR, Section 7.5.2.12, p. 7-14). Therefore, no further response is required.

Response to Comment E-11

This comment states the Quiet Fireworks Display Alternative fulfills Objective # 2 by allowing the continued occurrence of traditional fireworks display events in and around San Diego Bay and the Pacific Ocean near Imperial Beach. The comment disagrees with the Draft EIR's determination that the Quiet Fireworks Display Alternative would not meet the portion of Objective # 2 regarding the continuation of traditional fireworks displays. As discussed more fully in the Draft EIR, traditional fireworks displays are defined by the U.S. Department of Alcohol, Tobacco, Firearms and Explosives as large fireworks that are designed to produce visible or audible effects b combustion, deflagration or detonation and typically include fireworks such as salutes and aerial shells (Draft EIR, Section 3.2, p. 3-2, footnote 1). The Quiet Fireworks Display Alternative would not allow the continuance of traditional fireworks displays because the type of fireworks used in this alternative would not achieve the same heights and sounds as the fireworks used in traditional Fourth of July and other celebrations (Draft EIR, Section 7.5.2.12, p. 7-15). The Quiet Fireworks Display Events Alternative was intended to reduce the loud noises associated with traditional fireworks display events by eliminating the loud fireworks, including but not limited to salute fireworks, used in traditional fireworks displays, which are designed to provide entertainment value by making loud noises and intense flashes of light. Unlike traditional fireworks displays, the Quiet Fireworks Display Events Alternative would involve fireworks that are concentrated closer to the ground with fewer aerial shells being employed due to the loud noise that can occur during propulsion of an aerial shell (Draft EIR, Section 7.4.2.2, pp. 7-6–7-7; see also Draft EIR Section 3.3.3, pp. 3-7–3-8 [Description of Pyrotechnic Devices]). For these reasons, the Draft EIR concluded the Quiet Fireworks Display Alternative would not fulfill that portion of Objective # 2 to allow the continued occurrence of traditional fireworks display events in and around San Diego Bay and the Pacific Ocean near Imperial Beach.

This comment next states the District is presented with an opportunity to educate local communities regarding San Diego's unique biological resources and recognize protective measures the District and the community can take. The District agrees with this comment. The unique biological resources in the project area are discussed in detail in Section 4.3, *Biological Resources*, of the Draft EIR, and the educational and protective measures the District, the fireworks organizers, fireworks operators and others in the community can take are set forth in the conditions of approval required by the proposed ordinance, which are specifically intended to protect biological resources in the project area (see Draft EIR, Appendix D, Proposed Fireworks Display Ordinance, Section X.07, subdivisions (a) – (k)). The conditions of approval in the proposed ordinance that address the potential impacts of the proposed new fireworks display events in National City and Chula Vista on biological resources are discussed and recommended in the Draft EIR as Mitigation Measure BIO-1, BIO-2 and BIO-3 (Draft EIR, Section 4.3, pp. 4.3-41–45, 51).

Lastly, this comment states the Quiet Fireworks Display Alternative can achieve the portion of Objective # 2, which refers to fireworks displays as "providing a popular and region-wide way to celebrate and express civic pride." The comment agrees with the Draft EIR's determination that the Quiet Fireworks Display Alternative would partially meet Objective # 2 because fireworks display events would provide a popular and region-wide way to celebrate and express civic pride (Draft EIR, Section 7.5.2.12, p. 7-15). Therefore, no further response is required.

Response to Comment E-12

This comment summarizes Objective # 3 of the proposed project and states the Quiet Fireworks Display Alternative would not impede the achievement of this objective. The Quiet Fireworks Display Alternative would allow the continued occurrence of fireworks display events in and around San Diego Bay and near Imperial Beach in a manner that considers the health, safety, and welfare of people, property, and the environment. However, this alternative would not allow traditional fireworks display events, which are designed to produce substantial visible or audible effects that involve loud noises and intense flashes of light (Draft EIR, Section 3.2, p. 3-2, footnote 1). The Quiet Fireworks Display Alternative would differ significantly from traditional fireworks display events because it would not achieve the same heights and sounds as the fireworks used in traditional Fourth of July and other celebrations. Unlike traditional fireworks displays, the Quiet Fireworks Display Events Alternative would involve fireworks that are concentrated closer to the ground with fewer aerial shells being employed due to the loud noise that can occur during propulsion of an aerial shell (Draft EIR, Section 7.4.2.2, pp. 7-6–7-7; see also Draft EIR, Section 3.3.3, pp. 3-7–3-8 [Description of Pyrotechnic Devices]). The Draft EIR will be revised to reflect that the Quiet Fireworks Display Alternative would partially fulfill Objective # 3 (Draft EIR, Section 7.5.2.12, pp. 7-14–7-15).

Response to Comment E-13

This comment states there is no evidence that the Quiet Fireworks Display Alternative fails to achieve Objective # 4 and that nothing within this alternative suggests that access to fireworks displays would be limited beyond existing public safety, right of access, or other applicable restrictions. Objective # 4 states the proposed project is intended "to continue and enhance the visitor-serving experience of viewing fireworks display events from various vantage points around District tidelands by providing safe, high-quality fireworks display events using existing and new fireworks technologies as they become available" (Draft EIR, Section 7.3, p. 7-2). The comment disagrees with the Draft EIR, which determined the Quiet Fireworks Display Alternative would not meet Objective # 4 because it would be concentrated lower to the ground and, as such, it would limit the vantage points from which fireworks display events would be visible and would decrease the number of spectators that would be able to view the events (Draft EIR, Section 7.5.2.12, p. 7-15). This determination was based on additional information provided in the Draft EIR, which explained that the Quiet Fireworks Display Events Alternative was intended to reduce the loud noises associated with traditional fireworks display events by eliminating the use of loud fireworks, including but not limited to salute fireworks, which are designed to make a very loud bang and an intense flash of light, and instead focus on rich color effects and tight visual choreography in order to provide similar entertainment value. The Draft EIR further explained that the fireworks used in the Quiet Fireworks Display Events Alternative would "include fountains, wheels, cakes (such as crossettes, comets, spinners or turbillions, colored stars, fish or bees, and falling leaves), Chinese lanterns, and lanceworks (United Kingdom Fireworks Review 2016)." In addition, the Quiet

Fireworks Display Events Alternative would involve fireworks that are concentrated closer to the ground with fewer aerial shells being employed due to the loud noise that can occur during propulsion of an aerial shell (Draft EIR, Section 3.3.3, p. 3-8 [Low-Level Fireworks Devices, Set Piece/Ground-Level Fireworks]). Because the Quiet Fireworks Display Events Alternative would rely on fireworks that do not achieve the same heights or the same magnitude of traditional fireworks, they would not be as visible and the viewing area would be smaller than that which exists for the proposed project (Draft EIR, Section 7.4.2.2, pp. 7-6–7-7).

The Quiet Fireworks Display Events Alternative would require the proposed new fireworks display events along the Chula Vista and National City bayfronts to be quiet fireworks display events that would not exceed a noise limit of 120 dBA.[1] For this type of fireworks display event, the pyrotechnicians design a fireworks package that relies on the quieter types of fireworks. These fireworks display events would result in less noise impacts than the proposed project.

Response to Comment E-14

This comment notes that point monitoring of sensitive biological receptors should be made a requirement for each firework display permit until it can be demonstrated that the existing or additional events do not adversely impact these receptor sites.

As identified above in response to comment E-5, the EIR has been updated to include a clarifying mitigation measure requiring biological monitoring for the proposed new fireworks display events in south San Diego Bay (MM-BIO-4). The recommendation to conduct noise monitoring during monitoring of sensitive biological receptors has be included in Mitigation Measure MM-BIO-4. See Chapter 3, *Errata and Revisions*, of the Final EIR. As part of this plan, at least one of the biological observers/monitors will be trained to operate a sound level meter and conduct point monitoring of actual sound levels at sensitive biological receptors.

Response to Comment E-15

This comment states that CDFW appreciates the consideration of project alternatives intended to reduce the noise and light impacts on sensitive receptors, however, Alternative 3 allows fireworks that are equally loud as a typical 3-inch "salute." This alternative would have the same characteristics as all of the fireworks display events that compose the proposed project, including the same total pounds of fireworks per event, but would prohibit the use of salute fireworks and limit the noise produced by all fireworks during fireworks display events to a maximum of 140 dB. The effect of Alternative 3 only limits fireworks that exceed the typical noise generated by current fireworks and/or fireworks specifically labeled as salute fireworks.

Because "salute" (also known as "maroon") fireworks are specifically designed to have a loud report, this type of firework is explicitly prohibited under the No Salutes Alternative, regardless of specific noise level. Fireworks that are not categorized as salutes would typically be noticeably quieter than salutes. Nonetheless, the 140 dB limit was included to avoid any unusually loud non-salute fireworks. The analysis of the No Salute Alternative concludes that "…noise impacts would be reduced under this alternative. However, it is expected that significant and unavoidable impacts related to substantial temporary or periodic increases in ambient noise levels would still occur,

[1] 120 dB maximum A-weighted impulse sound pressure level as measured at a horizontal distance of 15 meters from the testing point at a height of 1 meter above the ground, using a Type 1 sound measuring device with a free-field microphone.

particularly during the Fourth of July fireworks display events. Overall, this alternative would result in reduced noise impacts compared to the proposed project" (Draft EIR, Section 7.5.3.8, p. 7-17). As noted in response to comment D-5, the noise limit under the No Salute Fireworks Alternative has been reduced in the Final EIR to "130 dB linear (unweighted) peak sound pressure level due to the firework break(s), as measured at a horizontal distance of 15 meters from the launch point at a height of 1 meter above the ground, using a Type 1 sound measuring device with a free-field microphone." Reducing the 140 dB limit to 130 dB could further reduce noise impacts under this alternative, however it would not reduce noise impacts to less-than-significant levels and the conclusion of the analysis for the No Salute Alternative would not change. Therefore, no changes have been made to the EIR in response to this comment.

Response to Comment E-16

This comment notes that, with regard to shell size, CDFW's literature review suggests a firework display's impacts on avian species is associated with noise and light and not necessarily associated with the shell size of a given firework.

The District disagrees with this comment. It is noted in Section 3.3.3, *Description of Pyrotechnic Devices*, of the Draft EIR that increased fireworks shell size does correlate to greater impacts associated with noise and light. As noted in response to comment B-31, USFWS agreed that reducing shell size also reduces impacts on sensitive species.

Additionally, this comment notes that the proposed project has the potential to affect various nursery sites (i.e., avian nesting sites). The comment recommends that MM-NOI-1 be changed in four ways:

1. Increasing the exclusion distance from between fireworks and federally or state-listed avian species nesting sites, from 1 mile to 1.2 mile.
2. Revising "nesting colonies to "nesting sites."
3. Broadening the nesting colony definition (from "state-listed avian species" to "state-listed <u>or other sensitive</u> avian species").
4. Adding the following condition to the proposed ordinance: "Concussion fireworks (e.g., Salutes or Reports) shall not to exceed 120 linear (unweighted) peak sound pressure level as measured directly under the shell burst occurring at its normal altitude, using a Type 1 sound measuring device with a free-field microphone at a height of 1 meter above the ground."

Draft EIR Section 4.3, *Biological Resources*, and Appendix F, BTR, provide a summary of substantial evidence of potentially significant wildlife impacts from fireworks displays, and includes extracts from a number of documents, including, among others, *Guidelines for Managing Fireworks in the Vicinity of Piping Plovers at Sea Beach Amaranth on the U.S. Atlantic Coast* (USFWS 1997). Additionally, the Draft EIR and proposed ordinance include measures to avoid direct and indirect impacts on nursery sites, and special-status avian species in particular. Fireworks organizers and operators will implement mitigation measures to attenuate noise and reduce impacts on avian nesting sites, including MM-BIO-1, MM-BIO-2, and MM-NOI-1.

The comment references USFWS's *Guidelines for Managing Fireworks in the Vicinity of Piping Plovers and Seabeach Amaranth on the U.S. Atlantic Coast* (USFWS 1997) and states that these guidelines serve as the best available science for minimizing impacts on least terns and plovers. The biological resource expert retained by the District reviewed this document and determined that the mitigation

measures recommended in the Draft EIR will reduce significant impacts on avian species to a level below significance. These mitigation measures were developed based on comments previously received by USFWS concerning the NOP for the Draft EIR, inclusive of a minimum 1-mile buffer from the nearest least tern and snowy plover nesting site. Although the changes to MM-NOI-1 proposed in the comment may further reduce potential impacts, no additional mitigation is required under CEQA once significant impacts are reduced below a level of significance. Since the additional mitigation proposed in this comment is not needed to reduce impacts below a level of significance, no changes will be made to MM-NOI-1.

In conclusion, no revisions to the Draft EIR have been made in response to this comment. However, as identified in above in response to comment E-5, the Draft EIR has been updated to include a clarifying mitigation measure requiring biological monitoring for the proposed new fireworks display events in south San Diego Bay (MM-BIO-4). The recommendation to conduct noise monitoring during monitoring of sensitive biological receptors has be included in Mitigation Measure MM-BIO-4. See Chapter 3, *Errata and Revisions*, of the Final EIR. Therefore, with the implementation of MM-BIO-4, if it is determined that MM-NOI-1 needs to be adapted based on the result of the monitoring, the District will revise the mitigation measure and condition of the proposed ordinance for fireworks display events that would occur along the National City and Chula Vista Bayfronts.

Response to Comment E-17

This comment states that despite MM-BIO-1, the proposed project could cause a considerable amount of plastic and other non-biodegradable materials to fall within San Diego Bay. MM-BIO-1 does not fully mitigate the potential for ingestion of firework byproducts that could harm green sea turtles, marine mammals, and/or avian species. The Draft EIR should present the total amount of debris deposited within San Diego Bay that could be caused from existing fireworks shows, and newly proposed additions, and MM-BIO-1 should be revised to prohibit the use of non-biodegradable materials.

The Draft EIR analyzes the potential impact on biological resources from fireworks trash and debris and concluded that such impacts would be significant. As a result, the Draft EIR recommends MM-BIO-1 to reduce the amount of non-biodegradable fireworks trash and debris that may fall into the Bay. MM-BIO-1 requires a series of packaging limitations and best management practices designed to prevent fireworks trash and debris from entering the Bay and to clean up and remove from the Bay an amount of trash equivalent to that which could result from the proposed fireworks displays. Although the comment asserts that MM-BIO-1 does not fully mitigate the potential for ingestion of fireworks by-products by affected species, based on the BTR (Appendix F) the Draft EIR concluded that MM-BIO-1 will reduce the potential impacts to a level below significance.

Response to Comment E-18

This comment states that MM-BIO-1 and MM-WQ-1 should specify that collected firework-generated trash and debris should be weighed dry, not wet, to better achieve a proportional collection weight commensurate with the weight of introduced debris, and that MM-BIO-1 should specify that weight criteria must be fulfilled using firework-generated debris only.

In response to the comment, Mitigation Measure MM-WQ-1 has been revised as follows:

10. Within ~~five~~10 (~~5~~10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the dry weight of the fireworks trash and debris collected is less than fifty percent (50%) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront.

Changes to mitigation are included in Chapter 3, *Errata and Revisions*, of the Final EIR and are reflected in the project's MMRP.

In response to the last sentence of the comment "Mitigation Measure MM-BIO-1(8), (9), and (10) should specify that weight criteria must be fulfilled using firework-generated debris only," to clarify, condition (8) and (9) would occur the morning after the fireworks display event and would focus on picking up fireworks trash and debris. As identified in the EIR, MM-BIO-1 and MM-WQ-1 would ensure that fireworks-generated debris is properly cleaned up and disposed of, thereby reducing the amount of unrecovered fireworks debris that could create or contribute substantial additional sources of polluted runoff and substantially degrade water quality. However, as identified in the EIR, uncontrollable factors such as weather conditions, amount of paper incinerated, sunken material, or material that is blown onto land may affect the ability to recover all post-show debris related to fireworks on surface waters (Draft EIR, Section 4.6.4.3, pp. 4.6-36). Therefore, due to these uncontrollable factors, condition (10) was included to provide an additional debris clean-up efforts in the event the fireworks organizer is unable to recover the required amount of trash and debris to meet the requirements of the condition. Condition (10) is not limited to fireworks trash and debris because "Operation Clean Sweep" occurs weeks after many of the allowed fireworks display events have occurred and CEQA specifically allows mitigation that compensates for an impact by replacing or providing a substitute approach or that rectifies an impact by restoring the affected environment. No revisions to the Final EIR or MM-BIO-1 were made in response to this comment.

Response to Comment E-19

This comment indicates that MM-BIO-1 should require the fireworks organizer to collect incidental spectator-generated trash to mitigate for Impact BIO-3, Impact BIO-4, Impact BIO-8 and Impact C-BIO-1. To accomplish this, CDFW recommends additional mitigation measures for future fireworks display permits. The Draft EIR determined that Impact BIO-3, Impact BIO-4, Impact BIO-8 and Impact C-BIO-1 would be mitigated to a level below significance by the implementation of MM-BIO-1. Once a significant impact has been mitigated to a level below significance, CEQA does not require a lead agency to adopt additional mitigation measures. Therefore, although the additional mitigation proposed in the comment is not necessary or required, a response to each suggested recommendation is provided below in responses to comments E-20 through E-22 for informational purposes.

Response to Comment E-20

This comment states that a refundable deposit fee, based on the number of spectators should be paid by the fireworks organizer. The refundable deposit fee should be an inflation-adjusted amount

to fund two Port District or respective City cleanup personnel, equipment per 500 spectators, and the refundable deposit should be released or prorated based on the Port District's and hosting city's satisfaction with firework organizer's cleanup.

As part of the District's existing special event process, the District provides additional clean-up efforts for any special events including publicly advertised firework display events such as the Fourth of July fireworks display events that utilized Port tideland parks as public viewing areas. The comment does not provide supporting evidence for the need of the refundable deposit fee in order to further reduce impacts on biological resources. Therefore, this change has not been made in the EIR.

Response to Comment E-21

This comment indicates that the District should include daily announcements through digital/social media in conjunction with physical signage and/or press releases and recommends that MM-BIO-2 should be revised to require educational programs for each event designed to minimize debris, and prohibit impacts on sensitive resources. MM-BIO-2 is revised as follows:

5. **Education.** Beginning not less than seven (7) days before fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) located within one-half mile of federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall implement a public education program using <u>daily announcements on</u> social media, press releases, and information posted at parks, boat launch facilities, marinas, yacht clubs and other viewing locations, to educate potential viewers regarding appropriate viewing and boat docking areas, to discourage trespass into sensitive wildlife habitat, and to reminds viewers of appropriate viewing behavior in and near sensitive nesting colonies and habitat areas (e.g., appropriate disposal of trash, prevention of illegal fireworks, and safe boating procedures).

Changes to mitigation are included in Chapter 3, *Errata and Revisions*, of the Final EIR and are reflected in the project's MMRP.

Response to Comment E-22

This comment states that the number of security guards are inadequate for most locations and the Draft EIR does not specifically require boat patrols. CDFW recommends that MM-BIO-2 should be revised to provide security requirements based on site sensitivity and include provisions to increase HPD patrols funded by the firework organizer and/or cooperating local agency.

Please see response to comment D-7 related to CDFW's recommendation for additional patrol. The implementation of Mitigation Measures MM-BIO-4, which includes monitoring and an adaptive management plan, will identify if additional security patrols are needed beyond the minimum of two professional security guards that are required by Mitigation Measure MM-BIO-2.

Response to Comment E-23

This comments states that CDFW appreciates the opportunity to comment on the Draft EIR.

The District appreciates CDFW's interest in the proposed project. This comment does not raise any environmental issues needing a response pursuant to CEQA.

4.4.6 Comment Letter F: Coastal Environmental Rights Foundation

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May 2, 2017

San Diego Unified Port District
Wileen Manaois
Real Estate Development Department
3165 Pacific Highway
San Diego, Ca 92101-1228

Via Electronic Mail
Wmanaois@portofsandiego.org

Re: Draft Environmental Impact Report Fireworks Display Events Project
CERF Comments Regarding Inadequacy of CEQA Review

Dear Ms. Manaois:

F-1 Please accept these comments on behalf of the Coastal Environmental Rights Foundation (CERF) in regard to the San Diego Unified Port District ("Port") Draft Environmental Impact Report ("DEIR") for the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project ("Project"). CERF is a nonprofit environmental organization founded by surfers in North San Diego County and active throughout California's coastal communities. CERF was established to aggressively advocate, including through litigation, for the protection and enhancement of coastal natural resources and the quality of life for coastal residents.

For years, CERF has played a key role in addressing and challenging various unlawful firework events in the region. On numerous occasions CERF has notified the Port of its regulatory obligations with respect to fireworks event approvals, including CEQA review. While the Port's commitment to conduct CEQA review now is a step in the right direction, the DEIR itself lacks the requisite analysis and mitigation measures. As detailed below, unless these issues are addressed, the DEIR will remain legally deficient.

A. The Project Will Result in Significant Water Quality Impacts

F-2 San Diego Bay is listed as impaired for numerous constituents, including many commonly associated with fireworks. The entire Bay is listed for PCBs, while segments of the Bay are listed as impaired for copper, zinc, mercury, benthic community effects, sediment toxicity, bacteria, PAHs, and chlordane. (See DEIR, pp. 4.6-9-10). To assess the Project's water quality impacts, including the potential to "further affect" impaired water bodies, the DEIR relies on Big Bay Boom monitoring data. The DEIR's analysis is flawed in numerous respects.

F-3 First, the DEIR incorrectly notes for 2016, "two fireworks barges...collected samples immediately (within 1 to 2 minutes) following the end of the fireworks display event." (DEIR, p. 4.6-22; see also, p. 4.6-23, Table 4.6-6). However, the 2016 Big Bay Boom Water Quality Monitoring Report reveals: "The 0-foot distance sample next to the barge was collected using an auto sampler tied to the side of the barge. **Sample collection at this location commenced approximately 5-minutes prior to the conclusion of the fireworks show**." (2016 Big Bay Boom Water Quality Monitoring Report, p. 2, footnote 2, emphasis added). Because the final five minutes of the fireworks event represent the most concentrated discharge of pollutants ("the finale") the samples taken prior to the finale do not accurately reflect water quality impacts.

F-4 Then, based on an analysis of limited SeaWorld and Big Bay Boom monitoring data, the DEIR concludes "the proposed new fireworks display events would not violate any water quality standards or waste discharge requirements, and potential impacts would be less than significant." (DEIR, p. 4.6-29). The Big Bay Boom sampling data does not support such a conclusion. Rather, the sampling data indicates prevalent water quality exceedances for copper.

F-5 For example, in 2014, two out of three post-event total copper samples exceeded the California Toxics Rule (CTR) and were higher post-event. (2014 Big Bay Boom Water Quality Monitoring Report, Appendix A). That same year, all dissolved copper samples were higher post-event. (*Id*.). In 2015, the monitoring data revealed CTR exceedances for all pre- and post-event dissolved copper samples.[1] (2015 Big Bay Boom Post Event Report and Monitoring Data, p. A-1). Lastly, despite the fact that some of the samples were taken prior to the finale, the 2016 samples similarly showed copper exceedances. Nearly half of the 32 samples showed CTR exceedances for copper, and the Seaport Village zero foot post-event samples were nearly double those of the pre-event samples. (2016 Big Bay Boom Water Quality Monitoring Report, Appendix A). In summary, the Big Bay Boom data – though limited and imperfect – reveals fireworks do result in appreciable copper discharges to receiving waters. Because San Diego Bay is already impaired for copper, any additional amount of copper (no matter how slight) in fireworks discharge residue would contribute to an exceedance of an applicable water quality standard (i.e. the CTR). (See MS4 Permit, § II.2.a.; General Fireworks Permit, § IV.A. and B.).

F-6 In addition, the Regional Board concluded larger firework events result in levels of pollutants such as arsenic, copper, mercury, tin, zinc and phosphorous above water quality criteria and that the "discharge of pollutants associated with larger fireworks events has the reasonable potential to cause or contribute to an exceedance of the narrative sediment quality objectives stated in section VI.A.3.c of the [Final Permit]." (General Fireworks Permit, p. F-17). Larger fireworks events include Fourth of July events – not just the Big Bay Boom.

F-7 Thus, the DEIR's conclusion that new fireworks events will not violate water quality standards or waste discharge requirements is contrary to existing evidence. Likewise, the finding that the proposed ordinance – which enables fireworks events such as the Big Bay Boom – would not result in water quality impacts is directly undermined by the aforementioned data.

F-8 The DEIR's reliance on mitigation measure WQ-1 does not reduce such impacts to a less than significant level. (*Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1168 [finding no evidence that GHG reduction measures would function as enforceable and effective mitigation measures]; see *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1116 ["We agree with appellants that there is no substantial evidence that the mitigation measures are feasible or effective in remedying the potentially significant problem of decline in water levels of neighboring wells."]).

F-9 Operation Clean Sweep, a once-per-year clean-up conducted in late August, neither addresses the temporal water quality impact caused by the majority of debris from year-round fireworks shows or bears any discernable relation to the type and scale of the impact caused by fireworks debris.

[1] The DEIR address only dissolved copper monitoring data. (See, DEIR, Figure 4.6-2). However, Big Bay Boom sampling included total copper as well. Applying the California Toxics Rule conversion factor for the saltwater total recoverable fraction (.83), the total/unfiltered copper data can be analyzed as well. (See 40 C.F.R. §131.38 (b)(2) notes).

F-9 cont.

> Amec Foster Wheeler (2016) indicates that the weight of the debris recovered from the detonation barges combined with the dry weight of the debris collected from the surrounding waters should equal approximately one-half of the total display weight. **Therefore, if the total weight of recovered debris is less than this, it can be assumed that this unaccounted portion remains in the water and surrounding habitat**.
>
> Based on the trash generation percentages described above, it can be assumed that approximately 228 pounds of debris would be generated by each of the proposed new Fourth of July fireworks display events and approximately 57 pounds of debris would be generated by each of the proposed new non-Fourth of July displays, some of which may remain in the water following the display and **potentially degrade sensitive habitats or wetlands within the south Bay**.
>
> (Appendix F, pp. 29-30, emphasis added).

As reflected in the post-event monitoring reports for all major firework events under the General Fireworks Permit, no dischargers come close to retrieving 50 percent of the total weight of aerial fireworks shells and the required General Fireworks Permit BMPs are generally ineffective in mitigating impacts from fireworks debris.[2] (See Appendix F, Biological Technical Study p. 29; see also, Enclosure). As a result, significant amounts of debris will result in continuing impacts to water quality which have not been adequately addressed in the DEIR.

B. The Project Will Result in Significant Wildlife Impacts

F-10

As noted by the wildlife agencies, Chula Vista bayfront fireworks will likely result in significant wildlife impacts. “The Carlsbad Fish and Wildlife Office has previously recommended, and continues to recommend that the no fireworks displays occur within the Chula Vista Bayfront during the avian breeding season (generally January-September) due to the close proximity to the abundance of sensitive wildlife resources that occur within and around the Sweetwater National Wildlife Refuge, the South San Diego Bay National Wildlife Refuge (Wildlife Refuges), and the Chula Vista Wildlife Reserve.” (US FWS NOP Comments, p. 3). The DEIR fails to adequately address the wildlife agency concerns, offering minimal restrictions within the proposed ordinance. Most notably, restriction of concussion salutes during the initial 25 percent of a display fails to ensure the *remainder* of the display will not result in significant impacts. (See DEIR, p. 4.8–27).

F-11

Likewise, the DEIR fails to substantiate how required eelgrass surveys and potential resultant mitigation will account for fireworks-related impacts. (Appendix D, p. 10; Appendix F, p. 31). Even direct, physical habitat destruction from tugboats and barges will not be evident through simple spatial surveys, much less impacts due to fireworks residue and debris deposition. Long-term impacts to eelgrass due to such deposition within sensitive habitat will therefore remain significant and unmitigated.

[2] See enclosed debris management summary. The Del Mar Fairgrounds, with a substantial portion of the fireworks deposition area over land, has historically retrieved far more debris than the Big Bay Boom. In the best year, only 35 percent of total weight was successfully retrieved.

C. The DEIR's Failure to Analyze VMT-Related Impacts Violates CEQA

F-12 The DEIR fails to analyze both air quality impacts and greenhouse gas emissions associated with the Project's visitor traffic, ostensibly because "regional traffic patterns related to the fireworks display events cannot be accurately analyzed because of the limitations of traffic modeling and uniqueness of the events." (DEIR, pp. 4.2-24; 4.4-17-18). The is entirely improper.

F-13 "Drafting an EIR or preparing a negative declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can." (14 Cal. Code Regs.§15144). As the lead agency performing the environmental analysis, the Port sits as the trier of fact and there is "no rule of law that allows an agency to escape that responsibility simply because the factual question is difficult." (*Poet, LLC v. State Air Resources Board* (Cal. Ct. App., Apr. 10, 2017, No. F073340) 2017 WL 1325296, at *17). Though perfection in evaluation of environmental effects is not required, the Port must analyze what is "reasonably feasible" and provide "adequacy, completeness, and a good faith effort at full disclosure." (14 Cal. Code Regs. §15151).

F-14 Appendix J, the Traffic Assessment, concludes "Since it is difficult to assess what transportation related impacts are associated with the actual fireworks display event and what impacts are associated with the Fourth of July holiday, specific travel related impacts cannot be assessed through a conventional traffic impact analysis approach, which would include intersection and roadway level of service analyses." (Appendix J, p. 6). However, Big Bay Boom proponents have consistently boasted massive attendance and Port tidelands activation as a direct result of the fireworks displays.[3] Reports of Big Bay Boom traffic impacts and traffic planning are ubiquitous.[4] Big Bay Boom sponsors themselves acknowledge traffic impacts of the event and strongly suggest spectators take public transit because of traffic impacts, although pre-purchased, reserved parking is available for the event.[5] The Port itself offers free shuttle service for spectators until 11 PM.[6]

F-15 The Big Bay Boom is featured as an event that "activates" Port Tidelands and is specifically meant to "bring business to the Port Tenants."[7] Indeed, the first few criteria for evaluating Port Tidelands Activation Program grant recipients include "[t]he number of people the event will attract to the Port Tidelands" and "[t]he ability of the event to...[a]ttract diverse visitors and demographics

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[3] http://www.procopio.com/articles/view/procopio-attorneys-successfully-defend-san-diego-bay-fireworks-display ["As one of the largest pyrotechnic displays in the nation, the "Big Bay Boom" draws 750,000 people each year..."]

[4] http://www.nbcsandiego.com/news/local/Big-Bay-Boom-Transportation-Parking-385242631.html ["San Diego's biggest 4th of July fireworks show, the Big Bay Boom, goes down Monday, and is expected to draw up to a half-million patriotic spectators. With that large of a crowd, organizers of the Port of San Diego's 16th annual Big Bay Boom urge visitors to use public transportation to get to the big event, including the MTS trolley and buses."]

[5] https://www.bigbayboom.com/locations/transportation/ and https://www.bigbayboom.com/locations/guaranteed-san-diego-bay-parking/

[6] https://www.bigbayboom.com/locations/harbor-island/

[7] https://www.bigbayboom.com/donate/about-the-fireworks-show/ ["The Port of San Diego's Big Bay July 4th Fireworks Show was established in 2001 to bring business to the Port Tenants and to benefit the San Diego Armed Services YMCA's family service programs for our military families including our wounded warriors at Balboa Naval Hospital."]

F-15 cont. to District Tidelands."[8] Attendance for the Tidelands Activation Program is estimated at 500,000 people and the sponsor's application form notes "The Big Bay Boom is a fireworks show of unquestionable quality and prominence, attracting huge numbers of people to the Port tidelands on land and water." (AS YMCA Application and Evaluation Form FY 2017-2018).

F-16 Lastly, the Transportation Assessment itself is replete with references to spikes in traffic just prior to and just after the fireworks event. (Appendix J, p.13; p. 15 ["There was an average increase of 480% in pedestrian activity, and an average increase of 224% of cyclist activity in the hours before and after the Big Bay Boom event."]; p. 17 ["As shown, the highest traffic volumes for the majority of the roadway segments were observed between8:00 PM and 9:00 PM, just prior to the start of the Big Bay Boom event."], p. 18).

F-17 Thus, the Port's claim that it is "difficult" to assess traffic impacts of fireworks events is specious at best. "The fact that a single methodology does not currently exist that would provide the Port with a precise, or 'universally accepted,' quantification...does not excuse the preparation of any health risk assessment—it requires the Port to do the necessary work to educate itself about the different methodologies that are available." (*Berkeley Keep Jets Over the Bay Committee v. Board of Port Com'rs* (2001) 91 Cal.App.4th 1344, 1370). Here, methodologies are available and traffic data has been collected. (See, Appendix J, pp. 11-45; p. 55 ["higher traffic volumes were typically observed before and after the sample event" and "traffic congestion was observed on the freeway facilities serving the Big Bay Boom viewing areas up to three hours after the conclusion of the event."]). The DEIR also identifies the additional information purportedly necessary to adequately calculate VMT. This information is readily available, especially in light of the Port's willingness to ascribe a number to the Big Bay Boom's Tidelands' activation, as well as the DEIR's conclusion that a spike in traffic just before and after the Big Bay Boom fireworks event can be attributed to event spectators. The Port's reluctance to assess GHG emissions or air quality impacts associated with spectator traffic in light of this data is a blatant violation of CEQA.

D. Conclusion

F-18 Unless the Port updates its EIR with the aforementioned analysis and incorporates adequate mitigation measures, the DEIR will not withstand judicial scrutiny. We urge the Port to conduct the requisite analysis prior to release of the Final EIR and to include mitigation and avoidance measures which address the significant water quality impacts associated with the Project. Thank you for your consideration of these comments.

Sincerely,

COAST LAW GROUP LLP

Marco A. Gonzalez

Livia B. Beaudin
Attorneys for CERF

[8]https://www.portofsandiego.org/recreation/tidelands-activation-program.html#types

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Encl. Big Bay Boom Tidelands Activation Program Application
Selected Articles
Fireworks Post Event Monitoring Reports (via Dropbox)
Post Event Debris Management Statistics
Big Bay Boom Monitoring Data Summary 2014-2016

ENCLOSURE

Port of San Diego
Tidelands Activation Program
Application & Evaluation Form FY 2017-2018

SIGNATURE EVENT

ORGANIZATION	EVENT	DATE (S)
Armed Services YMCA of the USA - San Diego Branch	Port of San Diego Big Bay Boom July 4th Fireworks Show	7/4/2018

Event Contact: H. P. "Sandy" Purdon **Phone:** 619-822-1177

Location: North San Diego Bay with barges located off Shelter Island, Harbor Island, North Embarcadero, Seaport Village/South Embarcadero/Coronado Ferry Landing

Description: The Port of San Diego Big Bay Boom started in 2001 with two barges and now has grown to 4 barges located around North San Diego Bay. Spectators can view the show from Shelter Island, Harbor Island, North Embarcadero and the Seaport/South Embarcadero/Coronado Ferry Landing. The event consists of approximately 20 minutes of spectacular fireworks choreographed to music and simulcast on radio and television available to over 25 million people in Southern California.. There is no admisson charge and viewing is also available from recreational boats and commrecial charter boats on the bay.

Attendance: 500,000

Event Admission Fee: There are no admission charges.

Funding History:	Funding		Services	
FY	Requested	Granted	Requested	Granted
16-17	$250,000	$145,000	$50,000	$50,000
15-16	$200,000	$145,000	$50,000	$50,000
14-15	$200,000	$145,000	$50,000	$50,000

FY2017 / 2018 Financial Information:

Funding Requested	Fee Waivers/ Services Requested	Event/Program Budget Expenses	% of Budget Requested
$200,000	$140,185	$550,000	49%

Surplus Projections

With requested sponsorship	With no sponsorship	With staff recommended sponsorship
$0	($190,185)	$95,000

Recipients of proceeds: The proceeds of the event stay with the Armed Services YMCA of the USA - San Diego Branch. They collect all the funds and pay the expenses. This amount is usually about 10% of the total gross budget.

Staff Recommendation & Comments

Funding:	$145,000	Services:	$140,185

Comments: The Big Bay Boom is a fireworks show of unquestionable quality and prominence, attracting huge numbers of people to the Port tidelands on land and water. For the past three years, the Port has provided $145,000 in funding and a full range of services at varying values. The show's producer, acting on behalf of the applicant, has indicated to Port staff that the costs of producing the show have risen substantially. These include a $33,000 increase in barges and fireworks for 2018. It is also noted that the Port's costs for supporting the Big Bay Boom with services from the San Diego Harbor Police, General Service Department and their contractors totals $140,185. This number does not include the Port's funding of an Environmental Impact Report (EIR) to entitle fireworks on San Diego Bay. Currently in process, the EIR is expected to cost over $400,000. Staff recognizes the rising cost of the show; however the Port has funded the entirety of the EIR and staff therefore recommends that the Port's sponsorship funding remain stable at $145,000 for the July 4, 2018 Big Bay Boom and that the Port provide all required Port services, at a value of $140,185.

Big Bay Boom: Parking, Transit & Where to Watch

All of the transportation and parking info you need for this year's Big Bay Boom 4th of July fireworks celebration

By Beatriz Cabanas

More than 14,000 pounds of explosives light up the San Diego Embarcadero during the city's annual Big Bay Boom.

San Diego's biggest 4th of July fireworks show, the Big Bay Boom, goes down Monday, and is expected to draw up to a half-million patriotic spectators.

With that large of a crowd, organizers of the Port of San Diego's 16th annual Big Bay Boom urge visitors to use public transportation to get to the big event, including the MTS trolley and buses.

If you choose to drive, there will be free parking available at Qualcomm Stadium. From there, you can buy a trolley ticket and travel to several spots along downtown San Diego and the Embarcadero considered prime Big Bay Boom fireworks viewing locations.

Port of San Diego
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Make your 4th of July #BigBayBoom transportation plans now! Click the link & strategize your ride: bit.ly/1LKEh8y

1:35 PM - 30 Jun 2016

3 2

The Big Bay Boom offers six locations around the San Diego Bay from which spectators can take in the 4th of July show:

TRENDING STORIES

1 VIDEO Gunman Wanted Ex to Hear Rampage: SDPD Chief

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5 VIDEO Violence Hit Too Close to Home for Apt Residents

WEATHER FORECAST

San Diego, CA

68° Few Clouds
Feels Like 68°

Radar

Forecast

Maps

- Harbor Island
- North Embarcadero
- Seaport Village
- South Embarcadero
- Coronado Ferry Landing

Free shuttle services will be offered to spectators heading to the Shelter Island and Harbor Island viewing spots.

The Shelter Island shuttle will pick up visitors from the corner of Carleton and Rosecrans streets in Point Loma. Street parking is available around that area, though it will be limited. The last return shuttle from Shelter Island (at the Gazebo point) runs at 11 p.m.

Meanwhile, the Harbor Island shuttle service will give visitors a ride from the corner of McCain Road and N. Harbor Drive, west of Airport Terminal 2. The drop off location for Harbor Island will be the San Diego Harbor Police Headquarters, and spectators can walk to their viewing point from there. Those hopping on the Harbor Island shuttle can park at the airport parking lot on McCain Road and N. Harbor Drive, where parking is $12, cash, per car. The final free return shuttle from Harbor Island runs at 11 p.m., too.

The North Embarcadero, Seaport Village, South Embarcadero and the Coronado Ferry Landing viewing points offer limited parking on or around the areas.

North Embarcadero parking is available from Grape Street to Broadway including the B Street Pier. There are various lots and streets from Harbor Drive to Pacific Highway as well.

For Seaport Village and South Embarcadero, parking is available in the Seaport Village and Hilton parking lots. Specifically at Seaport Village, visitors who park before 3p.m. pay $5 for the first three hours, $3 every 30 minutes thereafter. Validation is available with a minimum $10 purchase. Non Validated self-parking is $8 per hour. After 3p.m., there is a flat rate of $25 per car.

Seaport Village also has valet parking available. Before 3p.m., the fees are $15 up to five hours, $30 up to 10 hours and $40 max over 10 hours. After 3p.m., restaurant reservations can valet for $30 and all others can valet for $50.

Finally, parking at the Coronado Ferry Landing is available in the shopping area as well as public street parking in the general vicinity.

The Big Bay Boom starts at 9 p.m. sharp, so plan accordingly. It's sure to be a blast.

For NBC 7's extensive guide on more than a dozen 4th of July fireworks shows across San Diego County, click here.

Published at 1:41 PM PDT on Jul 1, 2016

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PORT OF SAN DIEGO
Big Bay Boom

Countdown to July 4th, 2017

063 DAYS 09 HRS 11 MINS 47 SECS

HARBOR ISLAND

Harbor Island Parking

Parking is very limited on Harbor Island and full by early afternoon. Your best bet might be to take the free shuttle bus service from the Port of San Diego. Once all parking is taken there, the Harbor Police will close it. Please be patient as the attendance will be very large. We **strongly encourage** you to use our transportation partners.

Free 4th of July Special Bus Shuttle Service to Harbor Island

Goldfield Stage will provide Free shuttle service to Harbor Island. Pick up will be at the corner of McCain Road and North Harbor Drive west of Airport Terminal 2. Passengers will be dropped off and picked up after the show at the San Diego Harbor Police Headquarters. The final shuttle run will be at 11 p.m. Park at the airport parking lot off McCain Road and North Harbor Drive west of Airport Terminal 2. ***Please note that shuttle service is free, however parking at this lot will be $12.00 (cash) per car*. Click to download Shuttle Pickup and Drop Off locations (PDF file)

Hotels in Harbor Island

- Sheraton San Diego Hotel Check Web site for rates

Transportation and Parking
Guaranteed San Diego Bay Parking
Shelter Island
Harbor Island
North Embarcadero
Coronado Ferry Landing
Boaters

FIREWORKS START AT 9 PM!

8:00 pm – Watch Live on TV Fox 5 (San Diego) or KTLA 5 (Los Angeles)

9:00 pm – Listen to Fireworks synchronized to music on the Radio THE MIGHTY 1090 AM and MAX FM 105.7

- Homewood Suites Liberty Station Hotel Check Web site for rates

Restaurants in Harbor Island

- Island Prime Restaurant
- Tom Ham's Lighthouse Restaurant

TRANSPORTATION AND PARKING

Suggestions for Parking, Shuttles and Transportation

WATCH FROM THESE OFFICIAL LOCATIONS

Fireworks displayed from four barges on San Diego bay. Where to watch

THE CHARITY WE BENEFIT:

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Contribute to the Armed Services YMCA charity to support the Big Bay Boom and the services for our military families and Wounded Warriors.

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San Diego July 4th Fireworks on San Diego Bay – Big Bay Boom

The Port of San Diego's Big Bay Boom July 4th Fireworks Show benefits the Armed Services YMCA's family service programs for our military families including our wounded warriors at Balboa Naval Hospital. San Diego has thousands of military personnel deployed and the families left behind often face specific challenges that the Armed Services YMCA helps them resolve.

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http://www.sfgate.com/bayarea/article/New-permits-may-be-required-after-Super-Bowl-show-6821787.php

New permits may be required after Super Bowl show trashed beach

By Kimberly Veklerov Updated 4:25 pm, Wednesday, February 10, 2016

IMAGE 3 OF 3

Volunteers picked up trash after Friday's Super Bowl fireworks show.

State officials are mulling whether to require new permits for firework companies after pyrotechnic debris washed up on parts of San Francisco's shoreline after two Super Bowl shows.

Five volunteers from Shark Stewards, a nonprofit that advocates ocean health, collected 30 pounds of trash, including more than 1,000 pieces of plastic, Saturday — a day after the second Super Bowl fireworks show off the Embarcadero, according to David McGuire, the organization's director. The haul included cardboard casings, plastic caps, and what appeared to be unspent shells.

McGuire and other environmental advocates are worried the fireworks debris they collected is only half the story.

“It’s not like we just clean up the beach and it goes away,” he said. “How many pounds of that plastic is still out there?”

Macy’s, which put on the shows, hired Pyro Spectaculars to launch the fireworks from a barge at the start and end of Super Bowl week. After the first show on Jan. 30 — which National Park Service officials said deposited in Aquatic Park enough firework junk to fill four 50-gallon trash containers — Macy’s officials said they took additional steps to minimize pollution. The fireworks company changed its materials, secured them better on the barge and collected debris after the show, said Orlando Veras, a Macy’s spokesman.

But when Shark Stewards volunteers did their regular cleanup of the shoreline the next day, which usually focuses on cigarette butts, they found another load of pyrotechnic litter — though not as large as what park officials found the week before.

“This is unacceptable when we’re doing something for our entertainment and it’s adding to this plastic load,” McGuire said, referring to the millions of tons of plastic that enter the ocean every year.

In the wake of the cleanup efforts, a watchdog group that fights ocean pollution is now urging regional water agency officials to require Clean Water Act permits for companies to launch fireworks.

“We haven’t heard of this kind of debris coming onto the shore during our 26 years watch-dogging the Bay,” said Sejal Choksi-Chugh, director of the group, San Francisco Baykeeper.

And regional water control officials are listening.

Lila Tang, a division chief of the San Francisco Bay Regional Water Quality Control Board, said agency officials are looking into the possibility of mandating Clean Water Act permits for firework shows over bodies of water, and there’s a good chance they will enact the measure. Ideally, Tang said, the requirement would be statewide rather than

region by region. The board may also investigate what happened during the Super Bowl shows and fine those responsible.

The permit action wouldn't be without precedent. The San Diego water quality office began requiring the permits in 2011, according to Ben Neill, a water resource control engineer in San Diego.

The permits require companies launching fireworks to show proof ahead of time that the pyrotechnics will not pollute the water.

"The companies need to step up and clean up their mess," Choksi-Chugh said. "It's pretty unacceptable that nonprofits have to step in."

Kimberly Veklerov is a San Francisco Chronicle staff writer. E-mail: kveklerov@sfchronicle.com Twitter: @kveklerov

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PROCOPIO ATTORNEYS SUCCESSFULLY DEFEND SAN DIEGO BAY FIREWORKS DISPLAY

San Diego, CA - The law firm of **Procopio, Cory, Hargreaves & Savitch LLP** successfully represented pro bono client San Diego Armed Services YMCA ("SDAS") against threats from a local environmental group to shut down the annual San Diego Bay Independence Day Fireworks display. As one of the largest pyrotechnic displays in the nation, the "Big Bay Boom" draws 750,000 people each year and generates around $40,000 in proceeds for the SDAS. In addition, the event provides substantial social and economic benefits to the community as a whole.

The Coastal Environmental Rights Foundation ("CERF"), has claimed that any fireworks displays over water require a permit and California Environmental Quality Act ("CEQA") analysis. In October of last year, CERF's legal threats led to the cancellation of a San Diego Bay fireworks display scheduled for New Years Eve. In late June, CERF filed complaints against the City of San Diego alleging that their La Jolla fireworks display would violate state environmental law. CERF threatened the same for the SDAS' July 4th Big Bay Boom.

The Procopio team that represented SDAS included Partner **Robert G. Russell**, Senior Counsel **Walter E. Rusinek** and Associate **Kevin M. Davis** and was led by Procopio Partner **John J. Lormon**.

"John Lormon was the key person in our successful reviews by the Regional Water Quality Control Board and our "exemption" from the California Coastal Commission," said Sandy Purdon, Executive Producer and Founder of the Big Bay Boom. "If it hadn't been for John and Procopio, we could be facing a far different circumstance with the Big Bay Boom July 4th Fireworks Show. If I had to name a MVP for this effort to save the July 4th fireworks show for San Diego Bay it would be John Lormon."

Even with the exemption in place, for business reasons the SDAS sought to resolve all possible legal exposures. Therefore, on June 24th, Lormon negotiated a settlement with CERF that provided the client with the certainty needed to keep in-kind volunteers in place and the show on schedule. Lormon also

obtained concurrence from the Port District that the Imperial Beach Pier portion of the show was excluded from Port coastal jurisdiction.

About Procopio, Cory, Hargreaves & Savitch LLP

With more than 110 attorneys in San Diego and Carlsbad, Procopio, Cory, Hargreaves & Savitch LLP is one of the largest full-services business law firms in Southern California. We are a local law firm with a global network that gives us the ability to serve our clients' interests throughout the world. Procopio is dedicated to understanding the businesses and industries of our clients and collaborating with them to develop tailored strategies. We advise companies at every stage in the corporate life cycle, helping them to plan, finance and operate their businesses. Since 1946, our success has been derived from our commitment to our clients and our ability to maximize the value we provide to them. Our goal is to continue building long-term relationships with our clients through a steady, team-oriented approach. For additional information, please visit www.procopio.com.

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Post-Event Fireworks Reports

Big Bay Boom

Year	Net Explosive Weight (lb dry weight)	Debris Collected (lb dry weight)	%
2011	750	15	2.00%
2012	(not reported)	(not reported)	
2013	(not reported)	5	
2014	6130	386	6.30%
2015	5342	760	14.23%

22nd Ag

Year	Net Explosive Weight (lb dry weight)	Debris Collected (lb dry weight)	%
2011	461.2	110	23.85%
2012	477.3	133.8	28.03%
2013	508	112	22.05%
2014	490	170	34.69%
2015	(not reported)	(not reported)	

Summary of 2014 BBB Fireworks Water Quality Monitoring Analytes

Type	Analyte	Analysis Method	Unit	RL	MDL	CTR	BBBFS-1-PRE	BBBFS-1-POST	BBBFS-2-PRE	BBBFS-2-POST	BBBFS-3-PRE	BBBFS-3-POST
Metals	Arsenic, Total	EPA 1640	µg/L	0.03	0.0122	36	1.52	1.48	1.52	1.5	1.54	1.49
	Arsenic, Dissolved	EPA 1640					1.4	1.5	1.36	1.49	1.48	1.55
	Barium, Total	EPA 1640		0.1	0.0503	N/A	10.9	6.33	6.05	6.14	6.22	6.53
	Barium, Dissolved	EPA 1640		0.05	0.0252		7.12	6.34	6.08	6.19	6.13	6.35
	Cadmium, Total	EPA 1640		0.03	0.00567	9.3	0.0737	0.0838	0.0824	0.0828	0.0835	0.0864
	Cadmium, Dissolved	EPA 1640					0.0727	0.082	0.0798	0.0869	0.0868	0.0864
	Chromium, Total	EPA 1640		0.5	0.164	50	ND < 0.5	0.277 J	0.321 J	0.263 J	0.293 J	0.298 J
	Chromium, Dissolved	EPA 1640					0.695	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5
	Cobalt, Total	EPA 1640		0.05	0.00486	N/A	0.0856 B	0.0792 B	0.0855 B	0.0777 B	0.0759 B	0.0961 B
	Cobalt, Dissolved	EPA 1640					0.0379 B,J	0.0337 B,J	0.0326 B,J	0.0346 B,J	0.0371 B,J	0.0452 B,J
	Copper, Total	EPA 1640		0.03	0.00898	3.1	2.72 B	3.74 B	3.51 B	3.45 B	3.23 B	3.87 B
	Copper, Dissolved	EPA 1640					1.95 B	2.67 B	2.45 B	2.52 B	2.48 B	2.67 B
	Lead, Total	EPA 1640		0.03	0.0135	8.1	0.292	0.342	0.373	0.319	0.327	0.397
	Lead, Dissolved	EPA 1640					0.044	0.0296 J	0.0231 J	0.0368	0.0247 J	0.0493
	Mercury, Total	EPA 7470A		0.05	0.0321	0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05
	Mercury, Dissolved	EPA 7470A					ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05
	Molybdenum, Total	EPA 1640		0.05	0.0243	N/A	16.3	13.3	12.9	13.1	13.3	13.3
	Molybdenum, Dissolved	EPA 1640					16.7	13.3	12.4	12.4	13.3	12.2
	Nickel, Total	EPA 1640		0.05	0.00607	8.2	0.533	0.65	0.717	0.596	0.637	0.671
	Nickel, Dissolved	EPA 1640					0.381	0.645	0.52	0.537	0.59	0.655
	Potassium	EPA 6020		1000	74.4	N/A	239000	253000	439000	242000	261000	236000
	Potassium, Dissolved	EPA 6020					268000	279000	275000	269000	262000	264000
	Selenium, Total	EPA 1640		0.05	0.0121	71	0.0559	0.0615	0.0323 J	0.0494 J	0.0332 J	0.0717
	Selenium, Dissolved	EPA 1640					0.0742	0.0276 J	0.0213 J	0.0278 J	0.027 J	0.0296 J
	Silver, Total	EPA 1640		0.05	0.00822	N/A	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05
	Silver, Dissolved	EPA 1640					ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05	ND < 0.05
	Thallium, Total	EPA 1640		0.03	0.0087	N/A	ND < 0.03	ND < 0.03	ND < 0.03	ND < 0.03	ND < 0.03	ND < 0.03
	Thallium, Dissolved	EPA 1640					ND < 0.03	ND < 0.03	ND < 0.03	ND < 0.03	ND < 0.03	ND < 0.03
	Tin, Total	EPA 6020		10	1.72	N/A	2.37 J	ND < 10	ND < 10	ND < 10	3.02 J	ND < 10
	Tin, Dissolved	EPA 6020					3.32 J	3.4 J	2.11 J	2.36 J	ND < 10	ND < 10
	Titanium, Total	EPA 6020		10	1.32	N/A	5.98 J	7.71 J	4.27 J	4.56 J	8.88 J	1.96 J
	Titanium, Dissolved	EPA 6020					3.14 J	9.96 J	1.78 J	5.56 J	1.52 J	3.32 J
	Vanadium, Total	EPA 1640		0.05	0.0332	N/A	2.12	2.63	2.69	2.69	2.68	2.71
	Vanadium, Dissolved	EPA 1640					4.37	2.41	2.4	2.45	2.48	2.41
	Zinc, Total	EPA 1640		1	0.147	81	9.55	8.76	8.89	7.5	8.18	10.1
	Zinc, Dissolved	EPA 1640		0.5	0.0736		5.15	6.6	7.02	6.71	8.33	8.14
Nutrients	Perchlorate, Total	EPA 331.0 (M)	µg/L	10	0.29	N/A	ND < 10	ND < 10	ND < 10	0.99 J	ND < 10	1.4 J
	Phosphorus, Total	EPA 365.1		50	20	N/A	25 J	28 J	26 J	33 J	29 J	33 J
SVOC	Bis(2-Ethylhexyl) Phthalate	EPA 8270C	µg/L	4.8	1.5	N/A	ND < 4.8	ND < 4.8	ND < 4.8	ND < 4.8	ND < 4.8	ND < 4.8

J = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated; B = Analyte was present in the associated method blank

RL = reporting limit; MDL = minimum detection level; ND = not detected above indicated concentration

PRE = Pre-show stations; POST = Post-show stations

µg/L = micrograms per liter

CTR = California Toxics Rule, Continuous Concentration Criteria for saltwater (2000)

Table A-1.
Summary of 2015 BBB Fireworks Water Quality Monitoring Analyte Concentrations

Type	Analyte	Analysis Method	Unit	RL	MDL	CTR	BBBFS-1-PRE	BBBFS-1-POST	BBBFS-2-PRE	BBBFS-2-POST	BBBFS-3-PRE	BBBFS-3-POST
Metals	Arsenic, Total	EPA 1640	µg/L	0.03	0.0122	--	1.41	1.45	1.37	1.4	1.43	1.41
	Arsenic, Dissolved	EPA 1640				36	1.3	1.29	1.33	1.32	1.3	1.34
	Barium, Total	EPA 1640		0.05	0.0252	--	6.53	6.25	6.64	6.64	6.63	6.56
	Barium, Dissolved	EPA 1640				--	6.64	6.41	6.54	6.32	6.57	6.38
	Cadmium, Total	EPA 1640		0.03	0.00567	--	0.052	0.0473	0.0483	0.0446	0.0513	0.0454
	Cadmium, Dissolved	EPA 1640				9.3	0.0382	0.0287J	0.0358	0.0312	0.0328	0.0279J
	Chromium, Total	EPA 1640		0.5	0.164	--	0.421J	0.448J	0.501	0.467J	0.464J	0.488J
	Chromium, Dissolved	EPA 1640				50	0.283J	0.282J	0.322J	0.284J	0.294J	0.324J
	Cobalt, Total	EPA 1640		0.05	0.00486	--	0.0727	0.0694	0.0704	0.0672	0.0708	0.067
	Cobalt, Dissolved	EPA 1640				--	0.0438	0.0451J	0.0375J	0.0445J	0.0503	0.0338J
	Copper, Total	EPA 1640		0.03	0.00898	--	3.47	3.37	3.46	3.52	3.41	3.33
	Copper, Dissolved	EPA 1640				3.1	**3.85**	**3.70**	**3.34**	**3.19**	**3.14**	**3.22**
	Lead, Total	EPA 1640		0.03	0.0135	--	0.267	0.241	0.362	0.28	0.227	0.266
	Lead, Dissolved	EPA 1640				8.1	0.0392	0.0493	0.064	0.0224J	0.0255J	0.0173
	Mercury, Total	EPA 7470A		0.05	0.0321	0.05	**0.0807**	**0.0607**	0.0459J	**0.0525**	0.0420J	0.0456J
	Mercury, Dissolved	EPA 7470A				--	ND	ND	ND	ND	ND	ND
	Molybdenum, Total	EPA 1640		0.05	0.0243	--	12.6	12.1	13	12.5	12.8	12.6
	Molybdenum, Dissolved	EPA 1640				--	12.8	12.4	12.7	12.5	12.5	12.6
	Nickel, Total	EPA 1640		0.05	0.00607	--	0.662	0.643	0.61	0.562	0.66	0.591
	Nickel, Dissolved	EPA 1640				8.2	0.701	0.498	0.205	0.419	0.331	0.62
	Potassium, Total	EPA 6020		10000	744	--	352000	369000	354000	361000	367000	372000
	Potassium, Dissolved	EPA 6020				--	384000	376000	387000	358000	373000	363000
	Selenium, Total	EPA 1640		0.05	0.0121	--	0.0411J	0.0482J	0.0547	0.0463J	0.0463J	0.0421J
	Selenium, Dissolved	EPA 1640				71	0.0506	0.0504	0.0476J	0.0463J	0.0503	0.0506
	Silver, Total	EPA 1640		0.05	0.00822	--	ND	ND	ND	ND	ND	ND
	Silver, Dissolved	EPA 1640				--	ND	ND	ND	ND	ND	ND
	Thallium, Total	EPA 1640		0.03	0.0087	--	ND	ND	ND	ND	ND	ND
	Thallium, Dissolved	EPA 1640				--	ND	ND	ND	ND	ND	ND
	Tin, Total	EPA 6020		10	1.72	--	ND	ND	ND	ND	ND	ND
	Tin, Dissolved	EPA 6020				--	ND	ND	ND	ND	ND	ND
	Titanium, Total	EPA 6020		10	1.32	--	3.36J	5.30J	ND	4.94J	3.07J	6.49J
	Titanium, Dissolved	EPA 6020				--	6.06J	3.91J	7.75J	2.80J	4.03J	1.60J
	Vanadium, Total	EPA 1640		0.05	0.0332	--	3.19	3.11	3.26	3.09	3.2	3.18
	Vanadium, Dissolved	EPA 1640				--	2.85	2.87	2.9	2.8	2.85	2.9
	Zinc, Total	EPA 1640		0.500	0.0736	--	7.72	9.32	8.18	8.87	10	7.53
	Zinc, Dissolved	EPA 1640				81	8.51	8.63	5.72	5.73	6.3	8.2
Nutrients	Perchlorate, Total	EPA 331.0 (M)	µg/L	40	1.2	--	ND	ND	ND	ND	ND	ND
	Phosphorus, Total	EPA 365.1		50	20	--	28J	29J	30J	28J	30J	29J
SVOC	Bis(2-Ethylhexyl) Phthalate	EPA 8270C	µg/L	4.8	1.5	--	ND	ND	ND	ND	ND	ND

Notes:

J = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated

RL = reporting limit; MDL = minimum detection level; ND = not detected above indicated concentration

PRE = Pre-show stations; POST = Post-show stations

µg/L = micrograms per liter

CTR = California Toxics Rule, Continuous Concentration Criteria for saltwater (2000); CTR for metals applies to dissolved fraction, with the exception of mercury

red = surpasses CTR threshold

DRAFT *Big Bay Boom 2016 Chemistry Summary Table*

Type	Analyte	Units	MDL	Reporting Limit	CTR	NE Stations								SE Stations								BBBFS-Barge Blank
						BBBFS-NE-1-PRE	BBBFS-NE-1-POST	BBBFS-NE-1-POST-REP	BBBFS-NE-2-PRE	BBBFS-NE-2-POST	BBBFS-NE-3-PRE	BBBFS-NE-3-POST	BBBFS-NE-3-POST-REP	BBBFS-SE-1-PRE	BBBFS-SE-1-POST	BBBFS-SE-1-POST-REP	BBBFS-SE-2-PRE	BBBFS-SE-2-POST	BBBFS-SE-3-PRE	BBBFS-SE-3-POST	BBBFS-SE-3-POST-REP	
Metals	Aluminum, Filtered	µg/L	0.227	1.00	36.0	2.57	3.13	2.52	2.41	3.14	3.38	3.49	3.12	2.54	3.88	3.51	2.42	2.9	2.39	2.8	2.4	2.51
	Aluminum, Total	µg/L	0.227	1.00		12.9	11.8	16.4	8.9	11.5	12.7	11	12.8	10.5	42.7	33.1	11.2	14.5	8.12	13	15.6	11.3
	Antimony, Filtered	µg/L	0.0154	0.050		0.137	0.133	0.134	0.143	0.132	0.135	0.138	0.128	0.138	0.135	0.144 B	0.147	0.129 B	0.147	0.153 B	0.167 B	0.143
	Antimony, Total	µg/L	0.0154	0.050		0.154	0.147	0.145	0.141	0.141	0.164	0.131	0.128	0.164	0.158	0.168	0.144	0.154	0.149	0.126	0.157	0.139
	Arsenic, Filtered	µg/L	0.0122	0.030		1.32	1.32	1.38	1.41	1.26	1.21	1.37	1.33	1.4	1.33	1.36	1.23	1.34	1.43	1.26	1.47	1.27
	Arsenic, Total	µg/L	0.0122	0.030		1.41	1.47	1.38	1.38	1.42	1.57	1.27	1.35	1.29	1.36	1.36	1.32	1.32	1.49	1.36	1.36	1.25
	Barium, Filtered	µg/L	0.0252	0.050		8.16	7.27	7.18	8.02	7.62	7.98	7.54	7.38	8.49	8.26	8.6	8.25	7.48	8.94	8.07	7.64	8.3
	Barium, Total	µg/L	0.0252	0.050		8.89	7.31	7.32	8.37	7.22	8.6	7.37	7.82	8.61	8.43	8.86	8.29	7.71	9.07	8.18	8.51	8.44
	Beryllium, Filtered	µg/L	0.0635	0.500		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Beryllium, Total	µg/L	0.0635	0.500		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.244 B,J	ND
	Cadmium, Filtered	µg/L	0.00567	0.030	9.30	0.0766	0.0645	0.0597	0.0747	0.0653	0.0713	0.0647	0.0602	0.0741	0.0766	0.0778	0.0774	0.07	0.075	0.0712	0.0752	0.0718
	Cadmium, Total	µg/L	0.00567	0.030		0.0768	0.0644	0.0618	0.0822	0.0619	0.0788	0.0691	0.0564	0.0776	0.0772	0.0776	0.0806	0.0744	0.0778	0.0765	0.0516	0.0717
	Chromium, Filtered	µg/L	0.164	0.500	50.0	ND	0.221 J	0.191 J	ND	0.168 J	ND	ND	0.21 J	ND	0.202 J	0.169 J	ND	ND	ND	0.179 J	ND	ND
	Chromium, Total	µg/L	0.164	0.500		0.19 J	0.222 J	0.28 J	0.194 J	0.201 J	0.183 J	0.24 J	0.199 J	0.204 J	0.299 J	0.347 J	ND	0.212 J	0.169 J	0.234 J	0.2 J	0.167 J
	Cobalt, Filtered	µg/L	0.00486	0.050		0.267 B	0.222 B	0.198 B	0.235 B	0.202 B	0.268 B	0.224 B	0.197 B	0.24 B	0.237 B	0.214 B	0.248 B	0.195 B	0.25 B	0.192 B	0.173 B	0.193 B
	Cobalt, Total	µg/L	0.00486	0.050		0.236 B	0.182 B	0.233 B	0.146 B	0.171 B	0.205 B	0.169 B	0.269 B	0.225 B	0.266 B	0.267 B	0.33 B	0.223 B	0.247 B	0.192 B	0.154 B	0.232 B
	Copper, Filtered	µg/L	0.00898	0.030	3.10	3.05	2.47	2.39	2.83	2.16	3.06	2.43	2.14	**3.13**	**4.56**	**4.53**	**3.3**	2.67	**3.29**	2.56	2.78	2.61
	Copper, Total	µg/L	0.00898	0.030		3.25	2.7	3.02	2.94	2.2	3.05	2.32	2.47	3.37	5.58	6.41	4.14	3.56	3.48	2.98	2.53	3.11
	Iron, Filtered	µg/L	0.0634	0.500		8.39	10.7	6.54	8.29	10.6	10.3	12	9.73	8.56	9.83	9.16	8.17	9.27	7.58	9.47	9.51	8.45
	Iron, Total	µg/L	0.0634	0.500		37.4	39.7	52.5	31.3	39.3	36.4	38.9	35	34.5	130	124	34.9	46.6	24.6	43.3	37.9	37
	Lead, Filtered	µg/L	0.0135	0.030	8.10	0.0455	0.0544	0.06	0.0511	0.0608	0.0514	0.0607	0.0764	0.0485	0.0694	0.114	0.0562	0.0712	0.0688	0.0819	0.075	0.0746
	Lead, Total	µg/L	0.0135	0.030		0.119	0.108	0.124	0.153	0.132	0.129	0.13	0.118	0.12	0.175	0.182	0.095	0.134	0.145	0.157	0.0856	0.113
	Manganese, Filtered	µg/L	0.0336	1.00		6.9 B	3.29 B	3.21 B	6.1 B	3.17 B	6.44 B	3.57 B	3.56 B	8.02 B	6.1 B	6.75	7.98 B	4.82	8.31 B	4.82	4.64	4.7 B
	Manganese, Total	µg/L	0.0336	1.00		8.78 B	4.12 B	4.9 B	7.41 B	3.96 B	7.62 B	4.58 B	4.33 B	9.27 B	9.16 B	9.83 B	11 B	6.35 B	9.31 B	6.19	5.08	5.87 B
	Mercury, Filtered	mg/L	0.0000321	0.00005		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury, Total	mg/L	0.0000321	0.00005	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum, Filtered	µg/L	0.0243	0.050		13.3	12.8	12.7	13.1	13.4	12.9	13.2	12.6	13.8	12.8	13.1	13.2	12.3	13.5	13.8	13.3	13
	Molybdenum, Total	µg/L	0.0243	0.050		13.1	12.3	12.5	13.2	12.9	13.8	12.8	12.9	12.7	12.4	12.3	12.7	12.1	12.6	12.1	14.4	12.4
	Nickel, Filtered	µg/L	0.00607	0.050	8.200	3.35 B	2.95 B	2.64 B	2.92 B	2.62 B	3.43 B	2.99 B	2.64 B	2.89 B	2.89 B	2.55 B	3.03 B	2.5 B	3.07 B	2.41 B	2.09 B	2.47 B
	Nickel, Total	µg/L	0.00607	0.050		2.65 B	2.3 B	3.08 B	1.41 B	2.03 B	2.28 B	1.95 B	3.63 B	2.58 B	2.81 B	2.84 B	5.26 B	2.6 B	2.87 B	2.12 B	1.86 B	2.84 B
	Potassium, Filtered	mg/L	0.0744	1.00		289	279	274	285	273	278	278	268	278	284	284	278	281	277	277	275	275
	Potassium, Total	mg/L	0.0744	1.00		288	281	277	270	277	281	275	272	276	287	280	276	279	274	281	325	271
	Selenium, Filtered	µg/L	0.0121	0.050	71.0	0.0215 B,J	0.0365 B,J	0.0229 B,J	0.0863 B	0.028 B,J	0.0351 B,J	0.0271 B,J	0.0235 B,J	0.0286 B,J	0.0257 B,J	0.0317 J	0.0314 B,J	0.0237 J	0.0406 B,J	0.0271 J	0.0377 J	0.0204 B,J
	Selenium, Total	µg/L	0.0121	0.050		0.0311 J	0.027 J	0.0222 J	0.0419 J	0.0401 J	0.0397 J	0.0258 J	0.0428 J	0.0207 J	0.0391 J	0.0382 J	0.0404 J	0.0316 J	0.0295 J	0.0423 J	0.0345 J	0.0359 J
	Silver, Filtered	µg/L	0.00822	0.050		0.0357 J	ND	ND	0.0176 J	0.0177 J	0.0146 J	ND	ND	0.027 J	ND	ND	ND	ND	ND	0.0134 J	ND	ND
	Silver, Total	µg/L	0.00822	0.050		ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0161 J	ND	ND	ND	ND	ND	ND	ND
	Thallium, Filtered	µg/L	0.0087	0.030		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium, Total	µg/L	0.0087	0.030		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Tin, Filtered	mg/L	0.00172	0.010		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Tin, Total	mg/L	0.00172	0.010		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Titanium, Filtered	mg/L	0.00132	0.010		0.00784 J	0.00838 J	0.0064 J	0.0139	0.00701 J	0.00836 J	0.00756 J	0.00736 J	0.00889 J	0.0093 J	0.0108	0.00756 J	0.0109	0.0092 J	0.00457 J	0.00992 J	0.0093 J
	Titanium, Total	mg/L	0.00132	0.010		0.00959 J	0.00556 J	0.00257 J	0.0173	0.00794 J	0.0063 J	0.00202 J	ND	0.00175 J	0.0105	0.00458 J	0.00309 J	0.00282 J	ND	0.0025 J	0.0216	0.0115
	Vanadium, Filtered	µg/L	0.0332	0.050		3.04	2.9	2.87	2.92	2.91	3.11	3.04	2.88	3.12	3.07	3.06	3.09	2.93	3.17	2.93	2.88	2.96
	Vanadium, Total	µg/L	0.0332	0.050		3.24	2.89	3.22	2.62	2.79	3.08	2.7	3.07	3.28	3.56	3.66	4.05	3.29	3.08	3.08	2.65	3.05
	Zinc, Filtered	µg/L	0.0736	0.500	81.0	7.2	3.98	4.4	6.46	5.09	7.16	6.83	7.46	7.91	5.57	7.58	10	7.6	11.1	11.8	7.6	8.52
	Zinc, Total	µg/L	0.0736	0.500		9.17	4.41	5.22	7.57	5.37	7.78	6.27	7.19	8.48	6.69	8.54	12.3	8.51	12.8	12	6.63	8.6
Nutrients	Perchlorate	µg/L	0.500	20.0		3.9 J	2.8 J	6.4 J	0.82 J	0.98 J	ND	2.3 J	5.6 J	0.87 J	5.6 J	4.8 J	0.71 J	0.56 J	ND	0.5 J	4.5 J	NA
	Phosphorus, Total	mg/L	0.020	0.050		0.025 J	ND	0.058	ND	ND	0.027 J	ND	0.040 J	ND	0.030 J	0.05	ND	0.044 J	ND	0.023 J	0.057	NA
SVOC	Bis(2-Ethylhexyl) Phthalate	µg/L	1.50	4.80		ND	ND*	ND*	ND*	ND*	ND	ND*	ND*	ND*	ND	ND	ND*	ND	ND	ND	ND	NA

Notes:

SVOC - semivolatile organic compounds

B - Analyte was present in the associated method blank.

J - Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

* - the reporting limit for Bis(2-Ethylhexyl) Phthalatethese in these samples was 4.9 µg/L instead of 4.8 µg/L.

NA - not analyzed

MDL - minimum detection limit

µg/L - micrograms per liter

mg/L - milligrams per liter

CTR - California Toxics Rule, Continuous Concentration Criteria for saltwater (2000); CTR for metals applies to dissolved fraction, with the exception of mercury

red - surpasses CTR threshold

Entered by CCS on 7/26/16

QC: TH on 08/09/2016

Response to Comment F-1

This comment is an introductory comment indicating that the Coastal Environmental Rights Foundation (CERF) is providing comments on the Draft EIR and believes the Draft EIR is legally deficient.

The District appreciates CERF's interest in the proposed project. This general comment does not raise any issues needing a response pursuant to CEQA. The specific comments raised in the pages that follow this introduction are listed separately along with the District's individual responses.

Response to Comment F-2

This comment summarizes the list of impairments for San Diego Bay as described in the Draft EIR. The comment also restates the methodology used in the Draft EIR for determining the water quality effects of the proposed new fireworks display events. The comment further states that the Draft EIR's analysis is flawed for various reasons that follow.

The comment repeats information provided in the Draft EIR related to existing water quality conditions in the San Diego Bay and indicates that the Draft EIR relies on the Big Bay Boom water quality monitoring data. The commenter indicates that the analysis is flawed in numerous respects, which are listed in subsequent comments to which the District responds below. No further response is required.

Response to Comment F-3

The comment cites information from the Draft EIR regarding the water quality monitoring methodology for the 2016 Big Bay Boom and objects that the Draft EIR incorrectly notes these results.

The statement in the 2016 Big Bay Boom Water Quality Monitoring Report that sample collection was initiated approximately 5-minutes prior to the conclusion of the fireworks show is incorrect. This statement is an oversight by the report preparer, which is the same firm that prepared the water quality technical report for the proposed project. The actual sample collection scenario occurred in the following manner:

To allow for samples to be collected immediately adjacent to the fireworks barge at the end of the show, Amec Foster Wheeler staff constructed a sample collection apparatus consisting of a peristaltic pump contained within an enclosed plastic barrel. The pump's tubing extended from the peristaltic pump into the surface waters of the Bay, then back into a certified clean 1-gallon glass collection bottle located inside the barrel. The collection devices were attached to the side of the barges upon arrival at the launch site. There were two devices attached to each of two barges (the barge off of the Midway Museum and the barge off of Seaport Village). On each barge, one peristaltic pump was pre-programmed to begin collection at 9:20 pm and the other was set to begin collection at 9:22 pm. All the pumps were pre-programmed at the dock during the mobilization process at the G Street Mole Pier several hours before the fireworks show began. The goal of pre-programming the water sampling pumps for these two collection times was to ensure that samples were captured immediately following the 20-minute-long fireworks show that was planned to start at 9:00 pm. The field collection datasheets in the 2016 Big Bay Boom Final Report on pages 183 and 184 (of the 187-page PDF) verify that the "Time 0" post-show samples were collected at 21:20 and 21:22. The collection times were staggered by 2 minutes to ensure that samples would be collected

immediately at the end of the show, or as close as possible if the show start time was delayed by a few minutes.

This reference to samples being collected 5 minutes prior to the end of the show has been corrected in the 2016 Big Bay Boom Report and a revised report will be submitted to the Regional Water Quality Control Board (RWQCB) with a more accurate description of the post-show collection times. Because the samples actually were taken at the end of the show, they accurately reflect water quality impacts.

Response to Comment F-4

The comment states that the analysis of limited SeaWorld and Big Bay Boom monitoring data does not support the conclusion in the Draft EIR that the proposed project would not violate water quality standards or waste discharge requirements. The comment states that the monitoring data indicates water quality exceedances for copper.

This comment repeats information provided in the Draft EIR and states an objection that the analysis is not supported by monitoring data. There is no clear relationship between the fireworks display timing and copper levels in the surface waters. The Big Bay Boom monitoring shows that exceedances of the dissolved copper California Toxic Rule (CTR) criterion were just as likely to occur before the fireworks event as after the event. This is true whether the samples were analyzed for dissolved or total copper in the collected Bay water samples. A more detailed discussion is provided in response to comment F-5 below.

As discussed in Section 4.6, *Hydrology and Water Quality*, of the Draft EIR, water quality monitoring of the Big Bay Boom fireworks display events since 2013 has shown no substantial degradation of water quality when comparing ambient chemical levels (pre-show) with post-show levels. The proposed new fireworks display events would be substantially smaller than the Big Bay Boom and, therefore, would result in substantially less amounts of fireworks-generated chemical residues falling into the Bay. No sediment monitoring has been conducted as part of the existing Big Bay Boom monitoring program, but SeaWorld has conducted considerable sediment testing in Mission Bay, and its fallout zone is shallower and has more restrictive current and tidal flow compared to the anticipated launch sites for the proposed new fireworks display events. As the San Diego RWQCB noted in the General Permit, SeaWorld events likely represent the maximum firework pollutant loading conditions and cumulative effects in the San Diego region, including the Pacific Ocean, with respect to potential impacts of fireworks on water and sediment quality. While SeaWorld's testing has found an increase of some chemicals within the sediments in the fireworks fallout zone, the observed increase has not resulted in any toxicity or benthic community impacts. As such, it is anticipated that the proposed new fireworks display events would not result in any sediment toxicity or benthic community impacts, as these displays would be smaller, would occur much less frequently, and would be held in an area subject to greater current and tidal flow than the SeaWorld fireworks displays. Consequently, the Draft EIR determined that the proposed new fireworks display events would not violate any water quality standards or waste discharge requirements, and potential impacts would be less than significant.

Response to Comment F-5

The comment summarizes the results of the Big Bay Boom water quality monitoring for 2014, 2015, and 2016 for total copper and total dissolved copper. The comment states that some of the samples

in each of these monitoring years indicated copper exceedances of the CTR and were higher post event. The commenter further states that any additional amount of copper discharged into San Diego Bay would result in an exceedance of an applicable water quality standard because the Bay is listed as impaired for copper.

There is no clear relationship between the fireworks display timing and copper levels in the surface waters. The Big Bay Boom monitoring shows that exceedances of the dissolved copper CTR criterion were just as likely to occur before the fireworks event as after the event as detailed below. This is true whether the samples were analyzed for dissolved or total copper in the collected Bay water samples.

Specifically, dissolved copper analyses conducted following the 2014 Big Bay Boom Fireworks found no CTR exceedance of the dissolved copper criterion (3.1 micrograms per liter [µg/L]). Dissolved copper analyses conducted following the 2015 Big Bay Boom Fireworks found that all samples, whether collected before or after the show, exceeded the CTR dissolved copper criterion (3.1 µg/L). The pre-show samples ranged from 3.14 to 3.85 µg/L and the post show samples ranged from 3.13 to 3.70 µg/L. Dissolved copper analyses conducted following the 2016 Big Bay Boom Fireworks at the Midway Museum launch site found no CTR exceedances either before the show or after. Dissolved copper analyses conducted following the 2016 Big Bay Boom Fireworks at the Seaport Village launch site found all three pre-show samples exceeded the CTR criterion ranging from 3.13 to 3.30 µg/L. Two of the five post-show samples (including site replicates) exceeded the dissolved copper CTR criterion (both in the "Time 0" samples) and ranged from 4.53 to 4.56 µg/L. While the "Time 0" post-show samples with dissolved copper concentrations of 4.53 and 4.56 µg/L collected in 2016 adjacent to the Seaport Village fireworks barge exceeded the CTR criterion, and were the highest concentrations observed between 2014 and 2016, the "Time 0" post-show samples collected adjacent to the Midway Museum launch barge (2.47 and 2.39 µg/L) did not exceed the CTR dissolved copper criterion and were lower that the pre-show sample (3.05 µg/L).

Based upon these collective findings, there is no clear temporal relationship between the fireworks displays and copper levels in the surface waters within the sample collection footprint. Dissolved copper CTR criterion exceedances were just as likely to occur before the fireworks events as after the events. With regard to using the copper conversion factor (0.82), 40 CFR § 131.38 (note to Table 2 of paragraph (b)(2)) reads: "The term 'Conversion Factor' represents the recommended conversion factor for converting a metal criterion expressed as the total recoverable fraction in the water column to a criterion expressed as the dissolved fraction in the water column." Using the copper conversion factor is not necessary since dissolved copper levels were analyzed for the Big Bay Boom monitoring event and these results can be compared directly to the CTR dissolved copper criterion of 3.1 µg/L. In addition, as was observed for dissolved copper measurements, the samples analyzed for total copper at each station within the study area were just as likely to be greater before the fireworks events as after the events. These findings represent the natural variability of copper levels in the surface waters within the study footprint based on dynamic environmental conditions.

As evidenced above, there is no clear connection between the copper levels observed in the Big Bay Boom samples and the fireworks displays. It is understood that portions of the Bay are Clean Water Act 303(d)-listed for copper and copper levels that exceed the CTR criterion have obverted in the collected Bay water samples; however, based upon the Big Bay Boom findings, it does not appear that the fireworks are the source of this copper; rather these observed copper levels reflect ambient conditions. As such, no changes to the Final EIR are required.

Response to Comment F-6

The comment cites the San Diego RWQCB's General Fireworks Permit, which concluded that larger firework events result in levels of certain pollutants above water quality criteria and have the potential to cause or contribute to an exceedance of sediment quality objectives of the permit. The comment states that larger fireworks events include Fourth of July events other than just the Big Bay Boom.

The section of the Fireworks General Permit Fact Sheet to which the comment refers specifically addresses the SeaWorld fireworks shows. The RWQCB was concerned that larger (than usual) shows conducted in the shallow, semi-enclosed embayment in Mission Bay where SeaWorld's launch platform is located would cause or contribute to an exceedance of narrative sediment quality objectives. As this does not refer to the Big Bay Boom or the San Diego Bay, no changes to the Final EIR are required.

Response to Comment F-7

The comment states that the Draft EIR's conclusion that the proposed new firework display events would not violate water quality standards or waste discharge requirements is undermined by the previously stated data.

Please see responses to comments F-3 through F-6. There has been no clear temporal pattern linking the copper levels observed in the Bay water samples to the Big Bay Boom fireworks displays. At individual collection locations, higher copper levels were sometimes found in pre-show samples and sometimes post-show for both total and dissolved forms of copper. In addition, for the 2016 Big Bay Boom monitoring event, while CTR exceedances (both pre- and post-show) were observed for the samples collected adjacent to the Seaport Village launch barge, no such exceedances were observed in the samples collected off of the Midway Museum (even though the collection operations were identical). No changes to the Final EIR are required.

The comment also states that the proposed ordinance "enables" fireworks events like the Big Bay Boom. This comment is incorrect. The proposed ordinance applies to all fireworks display events, including existing events that like the Big Bay Boom that are not subject to CEQA. Thus, rather than "enabling" existing events, the proposed ordinance requires events that otherwise would not be subject to environmental review under CEQA to comply with the conditions of approval set forth in the proposed ordinance. As discussed in the Draft EIR, the proposed ordinance will have beneficial, not adverse, impacts on the environment making existing fireworks display events subject to its provisions.

Response to Comment F-8

The comment states that mitigation measure MM-WQ-1 does not reduce water quality impacts discussed in comments F-2 through F-7 to a less-than-significant level and cites multiple case law citations.

The comment states an opinion regarding MM-WQ-1, but does not provide any facts or data in support of the opinion. Legal citations and attorney arguments do not constitute substantial evidence. Accordingly, no further response is possible or required.

Response to Comment F-9

The comment states that Operation Clean Sweep does not address water quality impacts from debris resulting from year-round fireworks shows or correlates to the type and scale of the impact caused by fireworks debris. The comment cites text from Appendix F of the Draft EIR regarding the estimated quantity of debris that would be expected to remain in the water following each proposed new Fourth of July fireworks display event. The comment suggests that the required General Fireworks Permit BMPs are generally ineffective based on post-event monitoring reports for all major fireworks events under the General Permit.

As stated in Section 15370 of the State CEQA Guidelines, mitigation can include "rectifying an impact by repairing, rehabilitating, or restoring the impacted environment" and "compensating for the impact by replacing or providing substitute resources or environments." Mitigation measure MM-WQ-1 requires a series of actions by the fireworks organizer to collect fireworks trash and debris that makes up 50 percent of the net weight of the fireworks launched during the fireworks display event. These actions begin immediately after the fireworks display event and include follow-up trash collection efforts in the vicinity of the launch area the following day. In the event that less than 50 percent is collected, "Operation Clean Sweep" is intended to rectify or compensate for the remaining amount of fireworks trash and debris by recovering other trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront, thereby compensating for the impact by removing an equivalent amount of non-fireworks related trash and debris from these water bodies.

In addition, the comment incorrectly states the significance determination conclusions in Section 4.6, *Hydrology and Water Quality*, of the Draft EIR. As stated on page 4.6-36 in Section 4.6 of the Draft EIR, MM-WQ-1 would ensure that fireworks-generated debris is properly cleaned up and disposed of, thereby reducing the amount of unrecovered fireworks debris that could create or contribute substantial additional sources of polluted runoff and substantially degrade water quality. However, uncontrollable factors such as weather conditions, amount of paper incinerated, sunken material, or material that is blown onto land may affect the ability to recover all post-show debris related to fireworks on surface waters. Because of these various factors, the Draft EIR concludes that impacts would be significant and unavoidable. Accordingly, the Draft EIR adequately acknowledges the contribution of fireworks trash and debris to significant water quality impacts. No changes to the Final EIR are required.

Response to Comment F-10

The comment states that Chula Vista Bayfront fireworks will likely result in significant wildlife impacts, that USFWS recommends no fireworks display events occur at the Chula Vista Bayfront during the avian breeding season, that the Draft EIR offers only minimal restrictions to address wildlife agencies' concerns, and that the restriction of concussion salutes during the first 25 percent of a display fails to ensure the remainder of the show will not result in significant wildlife impacts.

Section 4.3, *Biological Resources*, of the Draft EIR analyzes potential impacts on wildlife and concludes the proposed new Fourth of July fireworks display events at the Chula Vista and National City Bayfronts will have significant impacts on biological resources. The Draft EIR recommends specific mitigation measures to address these impacts and determined that the recommended measures would reduce impacts below a level of significance. The Draft EIR thus analyzes potential wildlife impacts and proposes mitigation measures for the three fireworks display events at the Chula Vista Bayfront, which were previously authorized by the Chula Vista Bayfront Master Plan

Settlement Agreement. Although the Fourth of July fireworks display event would occur during the avian breeding season, the Draft EIR indicates that the other two events at the Chula Vista Bayfront would occur outside the avian breeding season. The District also addresses concerns expressed by the wildlife agencies in the responses to comments they provided in Comment Letter B (USFWS) and Comment Letter E (CDFW). All potentially significant biological resources impacts would be less than significant with the implementation of mitigation, including the restriction on concussion salutes. No further response is required.

Response to Comment F-11

The comment states that the Draft EIR fails to substantiate how eelgrass surveys and potential subsequent mitigation will account for fireworks-related impacts. The comment also states that direct habitat destruction and impacts from fireworks residue and debris deposition would not be evident through spatial surveys and that long-term impacts on eelgrass would be significant and unmitigated.

The comment has raised concerns over the ability to detect impacts on eelgrass from fireworks display events and has stated that direct and indirect impacts would not be detectible through surveys. The proposed surveys would be completed in accordance with the California Eelgrass Mitigation Policy (CEMP) (NMFS 2014), as stated in the Draft EIR. The methods for survey and impact analysis under the CEMP are tailored to the detection of impacts based on the nature and scale of the potential effect. For the proposed activities, surveys would make use of sidescan sonar and bathymetric swath survey technologies that provide a comprehensive acoustic image of the seafloor in the area of potential impact. The image creates a raster image with a pixel size of approximately 6 centimeters on a side. At this resolution, the imagery allows for detection of vessel propeller scarring, grounding, and other direct impacts at a high resolution. As a result, surveys provide a good tool for detection of physical impacts associated with fireworks related activities. The CEMP provides explicit direction on mapping eelgrass impacts and mitigation of impacts inclusive of replacement ratios, monitoring methods, and success standards and progress milestones. This standard has been adopted by resource and regulatory agencies throughout the state in order to ensure consistency in methods for surveying, assessing impacts, mitigating, and monitoring of eelgrass mitigation.

Fireworks residue and debris deposition do not have a potential to affect eelgrass habitat at the potential discharge scales anticipated from the contemplated and ongoing activities. Eelgrass is a very resilient plant that is not particularly susceptible to marine sediment contaminants and has even been considered and tested as a potential tool for sediment bioremediation through capitalizing on root uptake and binding of metals and transformation of organic compounds. However, because of the rapid rate of growth, senescence, and degradation to detritus, eelgrass shows little promise for long-term sequestering conserved contaminants without eelgrass harvest. Eelgrass can persist and thrive in metal and organic compound enriched sediments and thus is not expected to be damaged by low-level discharges of pollutants. Relative to potential for eelgrass impact from debris deposition, at high levels, eelgrass may be damaged by debris accumulation due to smothering or loss of suitable substrate. This can happen with major macroalgal blooms or discharges of significant detrital wastes into the intertidal or subtidal environment (e.g., wood and pulp waste around mills and log storage areas in the Pacific Northwest). However, in general, eelgrass is a detrital trap and benefits from capture and stabilization of detritus in the beds in a manner that supplies carbon and other nutrients to the sediment through decay. Eelgrass is well adapted to accumulate low levels of debris and sediments within the beds as a result of the trapping

properties of the bed structure. In general, the majority of the debris in an eelgrass bed is derived from eelgrass leaf decay, but beds also regularly accumulate macroalgae, salp mucus strings, bryozoa, negatively buoyant anthropogenic wastes, and other debris. At low accumulation rates, this does not result in damage to eelgrass beds.

The conclusions of the Draft EIR with respect to potential eelgrass impacts (Impact-BIO-6) and recommendations for mitigation measure MM-BIO-3, including implementation of compensatory mitigation as required under the CEMP, remain unchanged. No changes to the Final EIR are required.

Response to Comment F-12

The comment states that the Draft EIR fails to analyze air quality and GHG emissions from visitor traffic and cites information provided in the Draft EIR, which explains the inability to assess traffic-related impacts associated with fireworks display events through a conventional traffic impact analysis. The comment asserts this is improper. The comment also quotes various sources regarding the large number of people attracted by the Big Bay Boom event.

The comment repeats information provided in the Draft EIR and does not identify in what way the methodology used in the Draft EIR to analyze potential transportation impacts is improper or provide any evidence in support of the comment's assertions. No alternative methodology is suggested in this comment. In addition, the information regarding the number of people who attend the Big Bay Boom and their use of public transit, shuttles and pre-purchased reserved parking is consistent with the information provided in the Transportation Assessment (Appendix J of the Draft EIR). As discussed in Section 4.10, *Transportation, Circulation, and Parking*, of the Draft EIR, the forecasted traffic impacts associated with the proposed new fireworks display events on the Chula Vista and National City Bayfronts are based on data gathered from previous Imperial Beach Fourth of July Show events and not Big Bay Boom. No further response is required.

Response to Comment F-13

The comment cites the California Code of Regulations and case law and states that the District must analyze what is reasonably feasible and provide adequacy, completeness and a good faith effort at full disclosure.

This comment cites sections of the California Code of Regulations and case law relating to environmental review under CEQA, but does not raise an environmental issue relating to the Draft EIR. As the comment relates to legal rather than environmental issues, no further response is required.

Response to Comment F-14

The comment cites an excerpt of the methodology provided in the Traffic Assessment (Appendix J). The comment states that the Big Bay Boom boasts a massive attendance and that the Big Bay Boom sponsors suggest spectators take public transit because of traffic impacts, although pre-purchased parking is available for the event. The comment identifies the free shuttle service provided by the District.

The comment repeats information provided in Appendix J of the Draft EIR. The comment also describes existing conditions related to the Big Bay Boom event, which are part of the

environmental setting, not the proposed project. The environmental impacts of the proposed project are fully disclosed in the Draft EIR. As discussed in Section 4.10, *Transportation, Circulation, and Parking*, of the Draft EIR, the proposed project would result in significant and unavoidable traffic impacts due to increases in vehicular, pedestrian, and bicycle volumes and temporary congestion, as well as an inadequate supply of parking. Mitigation measure MM-TRA-1, as described in Section 4.10 of the Draft EIR, requires implementation of an Event Transportation and Parking Management Plan to facilitate the movement of vehicular, pedestrian, and bicycle traffic. The Event Transportation and Parking Management Plan would further help to safely accommodate the additional vehicular, pedestrian, and bicycle traffic accessing the individual event locations and reduce potential conflicts between different modes of transportation, thereby improving the safety of roadway, bicycle, and pedestrian facilities. In addition, the Event Transportation and Parking Management Plan would improve vehicle, bicycle, and pedestrian circulation, consequently improving the performance of roadway, bicycle and pedestrian facilities. Regarding the significant impacts on parking, the Event Transportation and Parking Management Plan would include measures and tools to deal with parking, such as offsite parking arrangements, promotional programs with rideshare vendors, a joint event/transit ticketing program with MTS, and expanded shuttle operations, among others. Therefore, no change to the Final EIR is required.

Response to Comment F-15

The comment states that the Big Bay Boom is featured as an event that activates Port Tidelands and is intended to bring business to the Port tenants. The comment states the attendance for the Tidelands Activation Program is estimated at 500,000 people.

The Draft EIR agrees that the Big Bay Boom fireworks display event is a large event that attracts many spectators. The comment relates to an existing condition, not the effects of the proposed project. Therefore, the comment does not raise any environmental issues requiring a response.

Response to Comment F-16

The comment cites information from the Traffic Assessment (Appendix J) regarding the changes in traffic volumes that were observed prior to and just after the Big Bay Boom event.

The comment repeats information provided in Appendix J of the Draft EIR and does not raise any environmental issue regarding the adequacy of the analysis in Appendix J or in Section 4.10, *Transportation, Circulation, and Parking*, of the Draft EIR. Accordingly, no further response is warranted or possible.

Response to Comment F-17

The comment cites case law related to a lead agency being required to inform itself about different methodologies available. The comment also states that methodologies and data are available to assess traffic impacts and calculate vehicle miles traveled (VMT). The comment states that the Draft EIR identifies the additional information necessary to calculate VMT, and that this information is readily available. The comment states that the lack of analysis of GHG emissions or air quality impacts associated with spectator traffic violates CEQA.

This comment suggests that the Draft EIR ignored traffic impacts associated with the proposed new fireworks display events and that information is available to adequately calculate VMT. The potential impacts on transportation and traffic that may result from the proposed project are

analyzed in Section 4.10, *Transportation, Circulation, and Parking*, of the Draft EIR. The Draft EIR clearly describes the characteristics of the proposed new fireworks events that affect the methodology selected to analyze potential impacts. Among other information, the Draft EIR explains that VMT cannot be accurately estimated given a multitude of uncertainties in estimating the number of visitors, how visitors arrived at the event, how far patrons traveled, routes taken, where patrons parked, and whether or not patrons were at the viewing locations specifically for fireworks or there for other reasons. For instance, one could estimate overall attendance for the shows, but attendance information would need to be location-specific, include a breakdown of mode shares and travel distance and travel path, as well as cover all shows on all days, while also estimating the portion of visitation attributed directly to the shows and the portion of visitation attributed to the typical park area attendance. Assumptions could be made for each of the data requirements above; however, these assumptions would be based on region travel patterns or data associated with other events (such as concerts) and may not accurately project the VMT associated with the unique event being analyzed. Given these reasons, it would be too speculative to estimate VMT associated with the fireworks events and any results would be unreliable.

The *Berkeley* case the commenter cites also goes on to cite various sections of CEQA that support the approach taken in the Draft EIR. For example, State CEQA Guidelines Section 15144 states that a lead agency "must use its best efforts to find out and disclose all that it reasonably can," and State CEQA Guidelines Section 15145 states, "if, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact." The analysis satisfies its CEQA requirement to disclose and not speculate about VMT from visitor traffic.

Furthermore, the Draft EIR analyzes the potential impacts of the proposed new fireworks events on air quality in Section 4.2, *Air Quality and Health Risk*, and on GHG emissions in Section 4.4, *Greenhouse Gas Emissions, Climate Change, and Energy*. The analysis of air quality and GHG emissions from visitor traffic similarly satisfies its CEQA requirement to disclose and not speculate about air quality and GHG emissions and related impacts. Under Threshold 2 in Section 4.2 of the Draft EIR, analysis is provided that evaluates hourly background monitoring on both event and non-event days, and concludes that visitor-related vehicle traffic for infrequent fireworks display events has minimal effect on background air quality and results in minimal GHG emissions far below thresholds as identified in Section 4.4 of the Draft EIR. Thus, because the Draft EIR makes an effort to disclose all that it reasonably can, the Draft EIR is consistent with CEQA and no further analysis is warranted.

Response to Comment F-18

This comment concludes the comment letter and provides a contact name and information.

The District appreciates CERF's interest in the proposed project. This comment does not raise any issues needing a response pursuant to CEQA.

4.4.7 Comment Letter G: Fireworks & Stage FX America

Fireworks & Stage FX America

(619) 938-8277, Fax (619) 938-8273
P. O. Box 488
Lakeside, CA 92040

April 18, 2017

Matt Valerio
Port of San Diego
3165 Pacific Highway
San Diego, CA 92101

Dear Mr. Valerio:

G-1 Thank you so much for the opportunity to discuss the proposed Fireworks Display Ordinance and allow us to comment on the draft EIR. We proudly support a clean San Diego and will do all we can to make sure that fireworks have a minimum impact on our vital ecosystems.

Attached are our initial comments and some questions. Some of the language is confusing and needs clarification. We hope we can provide any input to make these clear and easy to enforce. We have also included the Best Management Practices from Meeting Facilitators, LLC, a SDRWQB Permittee and the company we work with when doing shows on the harbor.

Please feel free to contact me with any questions you may have. We look forward to working with you to continue our fireworks tradition in a safe, clean and responsible manner.

Sincerely,

J. Scott Danielson, Sales & Operations Manager
324170

Comments to Plan: C=Comment, Q=Question

E#S.2.3 Project Objectives Page ES3 Footnote 1.

G-2 . . . and other display pieces that exceed the limits of explosive materials for classification as "consumer fireworks." Q-Does this by reference exclude consumer fireworks?

G-3 They also include fused set pieces containing components that together exceed 50 milligrams of flash powder. These devices do not contain 'Flash Powder'.

G-4 Table ES-1 Proposed New Fireworks Display Events . . .
Q-Only Chula Vista, National City and Chula Vista are listed. Does this preclude other singular commercial events or are those grandfathered in under the proposed ordinance?

G-5 ES.4.2 Summary of Project Alternatives Alternative 2 Quiet Fireworks Pages ES-8 "and mine fireworks"
Mine Fireworks are inherently quiet and including them in the same class as salutes is incorrect.

G-6 Footnote 2: "120 dB maximum A-weighted impulse sound pressure level as measured at a horizontal distance of 15 meters from the testing point at a height of 1 meter above the ground, using a Type 1 sound measuring device with a free-field microphone."
Q - Is this measuring the lift of the firework or the break. As the break will occur several hundred feet in the air would it not be more appropriate to measure from a spectator area?

G-7 Mitigation Measure(s) MM-AQ-2(d) 1. Chemical Composition B. All fireworks display events shall use alternative fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such alternative fireworks are not commercially available.
Q-Can we reword to say that 'as fireworks that replace perchlorate with other oxidizers become commercially available' instead of requiring a variance since none currently exist.

G-8 MM-BIO-1: Page ES-16 Implementation of Biological Resources (d) 2. Packaging A.C-Please add the phrase "Non-Required" before the word labels. Reason: We cannot remove State and Federal required labels prior to discharge.

G-9 MM-BIO-1: Page ES17 (f) Best Management Practices (2) ~~barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the fireworks launch area to contain debris.~~ Strike this entire sentence. Other than wires that should be secured to avoid displacement (see item 3), very little debris is generated at this area. The danger posed by such a barrier far outweighs any potential environmental benefit. What studies show that a 6' barrier is any benefit? Would a 4' barrier be effective? 2'? What if a portion of the barrier goes into the water from winds and waves generated by boat traffic and wind under tow?

G-10 Pages ES-19 (9) "Five Persons" is an arbitrary number that does not take into consideration the size of the display, the devices used or the weather conditions at the time of the display. While it is fine to require clean up, it should be at the discretion of the Fireworks Company as to the number required.

G-11 Pages ES-19 (10) "Within five (5) business days . . . " This time is not adequate. Current state law allows for 10 days for reporting and they must allow time for the trash to dry prior to weighing. It didn't go into the harbor wet.

G-12 Page ES-19 (10) "If the weight of the fireworks trash and debris collected is less than fifty percent (50 percent) of the net weight of Fireworks launched during the fireworks display event" Dependent upon the size and type of fireworks, the fireworks composition can exceed 95% of the weight of the fireworks and that will have been turned into smoke during the display. In some cases (comets and mines) it is 99.9% of the weight of the device and is total consumed while rising. It would be physically impossible to collect 50% of the weight in fireworks trash.

G-13 Pages ES-21 and ES-22 Implementation of biological species . . . We are unclear as to who is responsible for this based on confusing definitions.

G-14 Pages ES-31 & ES-32 Chemicals and Packaging . . . We cannot remove State and Federal required labels prior to discharge.

G-15 Page ES-33 – 6' Wall: The danger posed by such a barrier far outweighs any potential environmental benefit.

G-16 Page ES-34 – Five Days same objection as before, This time is not adequate. Current state law allows for 10 days for reporting and they must allow time for the trash to dry prior to weighing. It didn't go into the harbor wet. Dependent upon the size and type of fireworks, the fireworks composition can exceed 95% of the weight of the fireworks and that will have been turned into smoke during the display. In some cases (comets and mines) it is 99.9% of the weight of the device and is total consumed while rising. It would be physically impossible to collect 50% of the weight in fireworks trash.

G-17 Page ES-34 "Five Persons" is an arbitrary number that does not take into consideration the size of the display, the devices used or the weather conditions at the time of the display. While it is fine to require clean up, it should be at the discretion of the Fireworks Company as to the number required.

G-18 Page ES-37 Please clarify definitions for who is responsible for trash receptacles, etc.

G-19 Page ES-38 Cumulative Impacts – No allowance has been made for the consideration that fireworks debris is biodegradable.

G-20 Page ES-46 Transportation Related Conditions – Make sure that is on the sponsor.

G-21 Page 3-1 What is a sponsorship agreement? Who can sign it? Is it required for private events?

G-22 3.3.4 Fireworks Chemical Constituents Table 3-3 The following compounds are not in use in commercial fireworks and may be prohibited and should be removed from this list:

Cesium:
Lithium
Phosphorus (may be used in some Military ordinance but not in fireworks)

It should be noted that the following chemicals are rarely used and being replaced in Commercial Fireworks

Zinc
Antimony

G-23 Page 3-7 We object to the term Chemical Residue

G-24 Page 4.1 The only fireworks display event that currently occurs along the Coronado Bayfront is the Fireworks Show Over Glorietta Bay.

This is incorrect. There are also private shows for Loews Coronado.

G-25 Page 4.2-22 Particle Size Distribution. Fireworks made in India do not fall under the same stringent requirements as Fireworks made in the U. S. Hence the Khaparde study should be discounted, especially as to chemicals in the fireworks.

G-26 Page 4.2-23 Fireworks Material Deliveries: This assumption is entirely incorrect. A typical delivery for an average show will arrive in a 16' parcel van (or smaller) from either Lakeside or Alpine. From Lakeside it is 50 miles round trip. This incorrect assumption is also reported on page 4.4-17

G-27 Page 4.2-24 Visitor Traffic. This section should not apply or be considered relevant to the fireworks displays not associated with an advertised event such as the Big Bay Boom or San Diego Pops. 4.4-17

G-28 Page 4.2-24-4.2-25 Health Risk Assessment. "Fireworks contain a mixture of ingredients and metals that are used to project and detonate the fireworks and generate colors. Fireworks can influence the particulate matter directly by emitting firework-related species (such as certain heavy metals) and other particles that include both light and heavy metals, elemental and organic carbon, and perchlorate compounds." Analyzing chemicals in the fireworks cannot be taken into assumption once they have functioned. Because a certain chemical may be included in a compound, once ignited it's form is changed and must be analyzed on that basis. Raw amounts of chemicals are NOT being discharged into the atmosphere or waterways.

G-29 Page 4.3-1 Impact-BIO-2: Private shows should be exempt from most mitigation measures other than post show clean up as they do not generate foot traffic or trash from the public. Generally they are so small they make little or no impact.

G-30 Page 4.3-43 Item 9: Requiring five persons per barge for cleanup regardless of the size of the display is punitive and not well thought out. There is a big difference between a Big Bay Boom barge and a San Diego Pops barge in terms of fireworks discharged, weight, debris, etc.

G-31 Item 10: 5 Business days does not allow materials to dry to be weighed. State law requires 10 days for fireworks reports. State law should be followed.

G-32 Page 4.3-44 Section X.07 Conditions of Approval. Small private events should be exempt from these items since members of the general public are not invited and no additional impact is generated from an audience. This would significantly impact San Diego's Convention and Tourist Business which is responsible for most non-4th of July Displays other than the San Diego Pops.

G-33 4.3-47 While we do not dispute that some material does wind up in the bay, we must also take into account the biodegradable nature of the material. Much is like papier Mache and should quickly dissolve. This should be accounted for in the calculation.

G-34 4.3-49 Effects or Proposed Ordinance on Existing Fireworks Display Events. It is stated that this would have no substantial adverse effect on existing fireworks displays but this assumption is incorrect. Mitigation requirements as proposed will cost Tens of Thousands of dollars for existing non-profit organizations like the San Diego Pops. They would require the Symphony to expend Thousands of Dollars in clean up personnel for armored shore line which is mostly inaccessible when post display clean up in the form of boat cleanup has already taken place.

G-35 4.3-60 Effects of Proposed ordinance on Existing Fireworks Display Events: This section states that it "does not propose any change in the number or nature of the existing fireworks display events" but this isn't correct. It used a 2015 number that was exceeded in 2016. Since the small private fireworks displays like the Midway fluctuate depending on San Diego's vital tourist trade and have little or not impact on the port, a higher volume of these shows should be allowed. Also the ordinance does not allow for new Barge Shows to service the tourist trade should they arise. These generate both sales tax revenue and again have a small footprint comparatively to large shows lik G-30 ig Bay Boom.

G-36 4.5.2.1 Existing Hazards Related to Pyrotechnic Devices. Many of the chemicals listed, like Arsenic, while used in the distant past, are specifically banned from use in Fireworks. We suggest you speak with modern manufacturing companies to find out the chemicals they are using.

G-37 4.6-34 Section 3 Wires: Wires are secured in a number of ways and not just tied to nails. A more secure way is to attach them to the mortar themselves. This section should be changed to "Wires should be secured to prevent them from being pulled out and falling into the water." Rather than prescribing a method

.

G-38 Section 9: Again no consideration is given to the size of the display in the number of persons required. This should be based on the size of the display, and not an arbitrary number. Also the number of persons assigned to operation clean sweep is arbitrary and does not take into account the size of the display. This should be based on show size, not barge Number. This would mean the symphony would have to provide 44 people to operation clean sweep while the Big Bay Boom would only have to provide 8.

G-39 Section 10: Reporting. Again an arbitrary number has been chosen that does not coincide with other agencies. This should be a minimum of 10 days.

General: Explanations and commentary are in blue.

G-40 Section_.03 Definitions. This section is unclear on the roles of Fireworks Operators, Fireworks Organizers and Sponsors. Many sections are unclear as to who is responsible for what. We request that you clean up this section to better define those roles. Sponsors hire Fireworks Companies (licensed by the State of California) and Companies hire operators (licensed by the State of California). Customarily, and by contract, Sponsors provide Firing Sites, Security, etc. unless otherwise negotiated. This should be clearly defined in the ordinance.

G-41 "Alternative fireworks" as defined do not exist nor are any in commercial production that we are aware of. This section should be struck.

G-42 Section_5. Permits – Application

The 60 day requirement should be changed to a 10 day permit requirement like the Fire Department and State Law. We suggest instead of issuing permits on individual events, it might be simpler to issue a blanket permit like the Water Quality Board and receive reports. This will simplify making sure all requirements are met because permittees will have satisfied insurance and all other standard requirements in advance of being issued their annual permit.

G-43 Section_7. Location. There are other events such as conventions that launches fireworks from a barge not at any of the stated locations. Provisions should be made to service this vital convention business that generates millions of dollars in revenues.

G-44 Section B. U. S. S. Midway Museum – 23 events are not enough. This fluctuates between seasons. This will severely impact our revenues and cut out sales tax revenues generated by Fireworks Displays. Destination management companies will have their revenues impacted as well since they generally mark up our services to their clients. Since these shows have little or no impact on the port tenants or residents more displays should be allowed. We suggest that this be changed to 80 since these are low-impact with a high dollar return to the Midway and the Port.

G-45 Section C. San Diego Symphony Summer Pops; With the potential for their permanent new entertainment venue this number should be increased. We suggest a minimum of 50.

G-46 (d) Chemical Composition: Currently there are no Commercially Available fireworks that meet this requirement. This section should be struck on those grounds or worded that as they become commercially available they will be used on the bay.

2. Packaging

G-47 a. Please add the words *'non-required'* labels to the section. There are certain Federal and State Labeling requirements and it would be illegal to remove them.

e. Protection of Sensitive Species and Habitat

G-48 3. Security: Please change to read For '*advertised or non-private*' Fireworks Display Events. Private shows like the Midway do not advertise or bring people into public viewing areas. Also, *'Fireworks Organizer'* should be changed to *'Sponsor'*. It is usually and customary for the Sponsor to provide security on displays and generally a matter of contract between Fireworks Companies and Sponsors.

G-49 4. Signage: For '*advertised or non-private*' Fireworks Display Events . . . Also, *'Fireworks Organizer'* should be changed to *'Sponsor'*, for the reasons listed above.

G-50 5. Education: Beginning not less than Seven (7) days before '*advertised or non-private*' Fireworks Display Events with public . . .". Also, *'Fireworks Organizer'* should be changed to *'Sponsor'*.

(f) Best Management Practices.

G-51 2. While well intentioned, please strike *Unless prohibited by the municipal fire marshal with jurisdiction over the Fireworks Display Even, barges shall be equipment with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the Fireworks launch area to contain debris*. This is simply a safety issue on many levels. From an operator safety standpoint encasing them in a 6' Enclosure with explosives is obviously unsafe. Also, most of the debris is not generated at this level. Lastly, hopefully we don't need to go into the physics of putting a big giant sail on a barge and trying to tug it on a breezy bay. The barrier will wind up in the water and create a potential maritime hazard.

G-52 3. Please make the following changes: Fires from the electric match placed in the Fireworks Fuse shall ~~be wrapped around nails that are installed on the racks~~ be secured in such a way to prevent wires from being pulled out and falling into the water. Wires are secured in a number of ways and not just tied to nails.

G-53 9. This section should be struck entirely or reworked. First of all, small shows are being discriminated against by this punitive rule. While you have allowed the Big Bay Boom to discharge 5,342 pounds of Fireworks, you are only requiring them to provide 20 man days for clean-up. The San Diego Symphony, conversely, fires 72% less Fireworks and produces much less debris but you are asking them to pay for 100 Man Days, or 80% more cost in bay clean up. This is arbitrary and unfair. Similar comparisons can be made to all other displays. Lastly, this will be delegated by contract to the Sponsor and so this wording should be incorporated. The Symphony will buy 100 man days by contract, not the Fireworks Vendor.

G-54 <u>Section 10: Reporting.</u> Again an arbitrary number has been chosen that does not coincide with other agencies. This should be a minimum of 10 days. Also this section provides the same punitive problem as section 9, asking for man power based on the numbers of barges and not the numbers of fireworks. You are asking the San Diego Symphony to provide 80% more man power for the privilege of firing 72% less fireworks. Also, by contract, this will not fall to the Fireworks Organizer but to the Sponsor and should be worded as such.

G-55 Section 11: Change the word *Fireworks Operator* to *Sponsor.* Sponsors handle security, crowd control, etc. Fireworks Companies do not.

G-56 (h) Event Transportation and Parking Management Plans. Change *Fireworks Organizer* to *Sponsor*. Fireworks Companies do not undertake parking management, etc. That falls to sponsors.

G-57 Section_.8 (c) Cost Recovery. What is the fee?

Response to Comment G-1

This comment is an introductory statement that thanks the District for the opportunity to review and comment on the Draft EIR and indicates that Fireworks America is providing comments on the Draft EIR and the proposed ordinance. The comment concludes by providing a contact name and information.

The District appreciates Fireworks America's interest in the proposed project. This comment does not raise any issues needing a response pursuant to CEQA.

Response to Comment G-2

This comment provides an excerpt from Draft EIR Section ES.2.3, page ES-3, footnote 1 and requests clarification on the Project Objectives with reference to exclusion of consumer fireworks.

The intent of the proposed project is to govern professional grade fireworks display events, rather than consumer fireworks sold to the public for general recreational use. Section 8.02(b)(11) of the District Code prohibits the discharge of fireworks by any person within a District park. This comment does not raise any environmental issues requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required.

Response to Comment G-3

The comment provides an excerpt from Draft EIR Section ES.2.3, page ES-3, footnote 1 and states that flash powder is not used in fused set pieces.

The referenced footnote of the Draft EIR identifies the U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives general definition of a traditional fireworks display event (U.S. ATF 2016). The District understands that there might be some variation in the types of fireworks display used in the United States. This comment does not raise any environmental issues requiring a response pursuant to CEQA. No changes to the Final EIR are required.

Response to Comment G-4

The comment provides an excerpt from Draft EIR Section ES-1 and states that only Chula Vista, National City, and Chula Vista are listed. The comment also asks if this precludes other singular commercial events or if they are grandfathered in under the proposed ordinance.

The proposed project includes four proposed new fireworks display events in Chula Vista and National City, two of which would occur on the Fourth of July. The intent of the proposed project is to govern fireworks display events within the District's jurisdiction, including the existing events identified in Tables 2-1 and 2-2 of the Draft EIR. This comment does not raise an issue regarding the adequacy of the EIR and no response is required pursuant to CEQA. Therefore, no changes to the Final EIR are required.

To clarify, the proposed ordinance would govern existing and proposed new fireworks displays within San Diego Bay and Imperial Beach Oceanfront that require a discretionary action by the District or that are operated by the Districts tenants (see Draft EIR Section ES2.4 and the proposed ordinance). The proposed ordinance identifies locations where events can occur, subject to a permit, areas subject to District approval and not identified cannot be used for fireworks displays (see Section X.07(a) of the proposed ordinance. To the extent the comment's reference to being

"grandfathered in" under the proposed ordinance means not subject to the provisions of the proposed ordinance, there are no fireworks display events within the District's jurisdiction that are exempt from the provisions of the proposed ordinance.

Response to Comment G-5

The commenter states that "mine fireworks" are too quiet to be considered in the same class as "salute fireworks."

The descriptions of both the Quiet Fireworks Alternative and No Salute Fireworks Alternative have been updated to clarify that salutes are the only the type of fireworks that are always specifically designed to be loud. The references to mines and rockets have been removed because these types of fireworks are not always especially loud. All fireworks permitted under the Quiet Fireworks Alternative would still be subject to the noise limit provided in the Draft EIR.

Response to Comment G-6

The comment requests clarification on whether noise measurements considered the lift or the break of the firework, and whether the measurement location was appropriate considering whether the lift or the break was measured.

The noise limit refers to the break noise; the Final EIR has been updated to clarify this. The purpose of having a fixed-distance measurement point is to provide a standard specification for fireworks' noise levels that can provide a consistent limit for all fireworks regardless of actual launch location. Because the distance to a spectator area will vary from one launch location to the next, the use of a spectator area for noise assessment would provide inconsistent results between launch locations. Therefore, no change has been made to the Final EIR in response to this comment.

Response to Comment G-7

This comment asks for a rewording of the mitigation measure MM-AQ-2(d) 1. to require replacement of perchlorate with other oxidizers as they become commercially available, rather than requiring the permit applicant to establish that such alternative fireworks are not available. The comment does not address the adequacy of the EIR. Therefore, no changes to the Final EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment G-8

The comment is requesting that the phrase "non-required" be added before the word "labels" in MM-BIO-1 (d)2.A (Section X.07 – Permits – Conditions of Approval) because state and federal required labels cannot be removed prior to discharge. The comment does not address the adequacy of the EIR. The District agrees with the commenter and, in response to this comment, the District has made the following revision to the mitigation measure MM-BIO-1:

"2. Packaging.
   A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels (<u>excluding labels mandated by State or Federal laws</u>) from all fireworks to be used in the event."

and the proposed ordinance §7 (d):

2. Packaging.

   A. Prior to commencement of a Fireworks Display Event, the Fireworks Operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all Fireworks to be used in the event.

Response to Comment G-9

The comment requests that MM-BIO-1 (f)2 be modified to removed references to the 6-foot fire retardant debris barrier, and suggests that such a barrier would pose a risk. The comment further requests studies showing that a 6-foot barrier is effective in containing debris, and requests consideration of barriers of different heights. Please see response to comment J-9 below.

Response to Comment G-10

The comment states that the number of persons required for post-event cleanup (per MM-BIO-1 (f)9) does not take into account the size of the display and other conditions, and that the fireworks company should determine the number of persons required for cleanup at its discretion. The comment requests that the number of persons required to participate in clean-up of fireworks trash and debris should be at the discretion of the fireworks company. The clean-up of fireworks trash and debris required by MM-BIO-1 is required to mitigate the potential significant environmental impacts of the proposed new fireworks display events. Leaving the number of persons required to participate to the discretion of the fireworks company could be considered an improper deferral of mitigation under CEQA. The District has implemented this requirement on prior fireworks events and maintains this number is prudent for larger shows. In light of the importance of this mitigation measure, no change will be made in the Final EIR. Please see also response to comment G-30.

Response to Comment G-11

The comment states that the duration of 5 business days stated in MM-BIO-1 (f)10 is not adequate for reporting, and that state law allows 10 days for reporting. This comment does not address the adequacy of the EIR. In response to this comment the District has revised the requirement in the proposed ordinance §7(f) 10. to match State law and require reporting and weighing in 10 days, as follows:

"10. Within ~~five~~ten (~~5~~10) business days after a Fireworks Display Event, the Fireworks Organizer shall provide the Executive Director with the photographs and written evidence of the weight of the Fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. …"

And revisions to MM-BIO-1 in the Final EIR, as follows:

"10. Within ~~five~~ten (~~5~~10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the weight of the fireworks trash and debris collected is less than fifty percent (50 percent) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other

launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront."

Response to Comment G-12

This comment asks that consideration be given to the required collection of trash and debris weighing 50 percent of fireworks show weight be reconsidered because the fireworks components that turn to smoke can be up to 95 percent of the initial weight. The District has not received or been able to obtain any information supporting the identified level of combustible material within a firework. The analysis in the EIR presents a worst-case scenario as it assumes a greater amount of debris could enter the water. In the event less than 50 percent becomes debris, the associated clean up requirements result in additional trash collected from the Bay rectifying or compensating for any potential impact from debris within the Bay whether from the fireworks themselves or incidentally from operations or spectators of the events. In the absence of evidence showing that a smaller percentage of the weight of fireworks ends up as debris that falls to the surrounding land or waters, the requested change in the Final EIR is not warranted.

Response to Comment G-13

The comment states that the parties responsible for implementation of MM-BIO-2 are unclear.

Although the introductory paragraph of MM-BIO-2 indicates that both the fireworks organizer and the fireworks operator are responsible for its implementation, MM-BIO-2 requires compliance with certain provisions of the proposed ordinance that specifically identify which party is responsible for implementation. Therefore, no changes to the Final EIR are required.

Response to Comment G-14

The comment restates concerns about Section X.07 – Permits – Conditions of Approval (see comment G-8) as included in MM-WQ-1 related to removal of state and federal required labels. Please see response to comment G-8.

Response to Comment G-15

The comment restates concerns about Section X.07 – Permits – Conditions of Approval (see comment G-9) as included in MM-WQ-1 related to a 6-foot debris barrier. Please see response to comments G-9 and J-9.

Response to Comment G-16

The comment restates concerns about Section X.07 – Permits – Conditions of Approval as included in MM-WQ-1 that 5 business days is an insufficient time for reporting (see comment G-11), and about the collection of fireworks trash and debris equaling less than 50 percent of the net weight of fireworks launched (see comment G-12). Please see responses to comments G-11 and G-12.

Response to Comment G-17

The comment restates concerns about Section X.07 – Permits – Conditions of Approval as included in MM-WQ-1 requiring a cleanup crew of five persons (see comment G-10). Please see response to comment G-10.

Response to Comment G-18

The comment is requesting clarification related to responsibility for trash receptacles and collection as stated under MM-WQ-2 and Section X.07(f)(11) of the proposed ordinance. These provisions incorrectly state that the "Fireworks Operator" is responsible for increasing the number of trash receptacles at major viewing areas prior to a fireworks display event. The Final EIR and the proposed ordinance has been revised to state that the "Fireworks Organizer" is the party responsible for implementing this measure. This clarifying language is included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment G-19

The comment states that the cumulative analysis under Impact-C-WQ-1 does not acknowledge the biodegradable nature of fireworks debris. This comment asks that consideration be given to the biodegradable nature of fireworks materials under cumulative impacts. The District has not received or been able to obtain any information establishing the specific amount of biodegradable material in fireworks debris. Because a larger amount of biodegradable material in fireworks debris would reduce the potential adverse impact of fireworks debris on the environment, no change in the Final EIR is required.

Response to Comment G-20

The comment states that responsibility for implementation of MM-TRA-1 should be on the project sponsor. This comment does provide any explanation or justification for placing the responsibility for implementing MM-TRA-1 on the fireworks sponsor rather than on the fireworks organizer. Therefore, no changes to the Final EIR are required. For clarification, as identified in MM-TRA-2, implementation of this mitigation measure is the responsibility of the fireworks organizer not the sponsor. The sponsor may ultimately provide the funding used to pay for the event transportation and parking management plan, but it is the responsibility of the organizer to prepare and implement the plan.

Response to Comment G-21

The comment is requesting clarification of sponsorship agreements, signatories, and requirements as discussed in Section 3.1. A Sponsorship Agreement is an agreement by which the District agrees to provide funding or other support for an event.

Response to Comment G-22

The comment is requesting removal of cesium, lithium, and phosphorous from Table 3-3, as they are not used in commercial fireworks. The commenter further states that zinc and antimony are rarely used and are being replaced in commercial fireworks.

The list of fireworks chemical constituents summarized in the Draft EIR and Water Quality Technical report were obtained directly from the RWQCB's General Permit, Fact Sheet Table 1 (Page F-9). No changes to the Final EIR are required in response to this comment.

Response to Comment G-23

The comment objects to the term "chemical residue" as used in Section 3.3.3, subheading *Aerial Fireworks/Shells*.

The term "chemical residue" was taken directly from the RWQCB's General Permit Fact Sheet (Page F-7), which states, "Most of the incendiary elements and shell casings burn up in the atmosphere; however, portions of the casings and some internal structural components and chemical residue fall back to the ground or receiving water bodies…" No changes to the Final EIR are required in response to this comment.

Response to Comment G-24

The comment states that private shows for Loews Coronado also occur along the Coronado Bayfront, and that it is incorrect for the Draft EIR to state that the Fireworks Show Over Glorietta Bay is the only fireworks display event that currently occurs there.

In order to determine the baseline conditions at the time the NOP was issued for public review, the District reached out to regulatory agencies and all tenants and obtained all permits from the member cities and the RWQCB for firework display events that occurred within 2015. Based on this outreach, no shows were identified to occur at Loews Coronado in 2015. Therefore, fireworks display events at Loews Coronado are not included in the Draft EIR or the proposed ordinance as an existing show that requires a discretionary action or is anticipated to require a discretionary action by the District. However, as identified in Table 5-2 of the Draft EIR, Loews Coronado had one barge-based fireworks display event that occurred in 2014 and has been included in the cumulative analysis (Draft EIR, Chapter 5, *Cumulative Impacts*).

Response to Comment G-25

The comment suggests that the Khaparde study referenced on page 4.2-22 should be discounted, as the fireworks made in India are not governed by the same regulations and requirements as those made in the U.S.

The Khaparde study was only referenced to assist in estimating the way combusted particulate matter disperses in the atmosphere since dispersion of particulate matter is dependent on the size and weight of the particles created after burning of the fireworks. The Khaparde study was not used to estimate the total amount of emissions (e.g., pounds per day of PM10) or to determine what chemicals make up the fireworks themselves, but instead was used to estimate the size of the particles following the burning of the fireworks. Moreover, there are no requirements that fireworks used in these events be made in the United States. Therefore, because the Khaparde study was not used to determine what chemicals make up the fireworks, no changes are necessary to the analysis in the Draft EIR.

Response to Comment G-26

The comment states that the material deliveries described on pages 4.2-23 and 4.4-17 are incorrect, and that an assumption of a 16-foot parcel van from either Lakeside or Alpine should have been used.

This assumption was made because it was unknown at the time of analysis where fireworks materials would come from. It is reasonable to assume that materials come from China, and it is reasonable to assume that those fireworks would pass through the Port of Los Angeles and/or Long Beach. While this assumption may be conservative in light of the fact that fireworks may instead be delivered from Lakeside or Alpine, emissions from material deliveries are small (approximately one pound of PM10 on peak Fourth of July event day) and air quality impacts would remain unchanged if the assumption was changed. Therefore, no changes are necessary to the analysis in the Draft EIR.

Response to Comment G-27

The comment states that the visitor traffic analysis on page 4.2-24 should not apply to fireworks display events other than the Big Bay Boom or San Diego Pops concerts because of the lack of similar advertising.

The analysis of visitor traffic is qualitative and does not quantitatively attribute emissions to both advertised and non-advertised events, Instead, the analysis discusses both the limitations of numerically attributing vehicle traffic to events (as shown in Section 4.2.4.1 of the Draft EIR) and the fact that it is unlikely events contribute emissions that would contribute substantially to an existing or projected air quality standard (as discussed in Section 4.2, *Air Quality and Health Risk*, under Threshold 2 of the Draft EIR). The analysis of visitor traffic has no bearing on air quality or greenhouse gas impacts or analysis thereof. No changes are necessary to the analysis in the Draft EIR.

Response to Comment G-28

The comment states that the health risk assessment on pages 4.2-24 and 4.2-25 does not consider the changes in chemical compounds following ignition, and that raw chemicals are not being discharged into waterways or the atmosphere.

The health risk assessment is based on emission factors that were based on literature review. For example, modeling to determine the concentration of copper at downwind receptors was based on the emission factors presented in the Croteau et al. (2010) study, which estimated emission factors through air sampling in an airtight room after combustion. The analysis is not based on raw materials but instead on the estimated amount of metals and other compounds that are generated after the fireworks are combusted (or ignited). No changes are necessary to the analysis in the Draft EIR.

Response to Comment G-29

Related to Impact-BIO-2, the comment states that private shows should be exempt from most mitigation measures, except for post-show cleanup, because they do not generate foot traffic or public trash and are so small that they make little or no impact. The comment does not provide any evidence in support of these assertions. Impact BIO-2 relates to the proposed new fireworks display events at the Chula Vista and National City Bayfronts. The proposed new events are public, not

private, events and are of sufficient size to warrant the approach utilized in the Draft EIR. No changes in the Final EIR are required or warranted.

Response to Comment G-30

The comment states that requiring five persons per barge for clean-up, regardless of the size of the display, is punitive and not well thought out. This comment asserts that the requirement for five clean-up crew members per barge is too broad as it doesn't recognize the difference in possible events sizes, between Big Bay Boom for example and a Summer Pops show(s).

The requirement for the fireworks organizer to provide five persons per barge for post-display clean-up efforts does take into account the size of the show. The Big Bay Boom is the only fireworks display event that uses more than one barge; all other existing and proposed fireworks displays use one barge (or none). Therefore, except for the Big Bay Boom, the fireworks organizer for all other fireworks display events will be required to provide only five persons for the post-event clean-up effort.

Response to Comment G-31

The comment restates concerns about Section X.07 – Permits – Conditions of Approval as included in MM-BIO-1 about 5 business days being inadequate for reporting (see comment G-11). Please see response to comment G-11. Revisions to MM-BIO-1 have been made to revise 5 to 10 days as requested by the comment. This clarifying language is included in Chapter 3, *Errata and Revisions*, of the Final EIR.

Response to Comment G-32

The comment states that private events should be exempt from MM-BIO-2 because members of the general public are not invited and the events have no impact. The commenter further states that requiring implementation of MM-BIO-2 would harm San Diego's convention and tourist business.

This comment does not provide any evidence in support of its assertions and does not raise any environmental issues or address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project. Please see response to comment G-29.

Response to Comment G-33

Regarding the discussion on page 4.3-47 of debris entering the water, the commenter requests that the biodegradable nature of fireworks debris should be accounted for. Please see responses to comments G-12 and G-19 above.

Response to Comment G-34

The comment states that the conclusion on page 4.3-49 that the proposed ordinance would have no substantial adverse effect on existing fireworks displays is incorrect, and that mitigation compliance would cost tens of thousands of dollars for non-profit organizations like the San Diego Pops.

This comment does not provide any evidence in support of its assertions and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR

are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment G-35

The comment states that the Draft EIR's assertion that "The proposed ordinance does not propose any change in the number or nature of the existing fireworks display events" is incorrect, as the Draft EIR uses numbers from 2015 that were exceeded in 2016. The commenter further states that a higher volume of small private fireworks display events should be allowed. Finally, the commenter states that the proposed ordinance does not allow for new barge shows in the future, which would generate sales tax revenue and have a small footprint.

The list of existing fireworks display events includes those events that occurred in or before 2015 because CEQA normally requires an EIR to establish the environmental setting based on conditions that exist at the time the NOP is published. This comment does not raise any environmental issues or address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment G-36

The comment states that some of the substances discussed in Section 4.5.2.1 of the Draft EIR were once used but are now banned from use, and suggests that modern fireworks manufacturing companies be consulted to determine the chemicals currently in use.

The list of fireworks chemical constituents summarized in the Draft EIR and Water Quality Technical report and were obtained directly from the RWQCB's General Permit, Fact Sheet Table 1 (Page F-9). Therefore, in order to provide an analysis consistent with the General Permit, no revisions to the Final EIR were made in response to this comment.

Response to Comment G-37

The comment notes that wires can be secured in a number of ways and suggests that language in MM-WQ-1 (f)3 be modified to allow different methods to do so, as follows: "Wires from the electric match placed in the fireworks fuse shall be ~~wrapped around nails that are installed on the racks~~ secured in such a way to prevent wires from being pulled out and falling into the water."

This comment does not address the adequacy of the EIR. In response to this comment the District has revised the requirement in the proposed ordinance §7(f) 3. as follows:

3. Wires from the electric match placed in the fireworks fuse shall be secured ~~wrapped around nails that are installed on the racks~~ to avoid strain (such as wrapped around nails that are on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event."

In addition, MM-WQ-1 has been revised as follows:

"(f) 3. Wires from the electric match placed in the fireworks fuse shall be secured ~~wrapped around nails that are installed on the racks~~ to avoid strain (such as wrapped around nails that are on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event."

Response to Comment G-38

The comment restates concerns about Section X.07 – Permits – Conditions of Approval, as included in MM-BIO-1, requiring a cleanup crew of five persons (see comments G-10, G-17, and G-30). The commenter further clarifies that cleanup crew size should be based on show size rather than barge size. Please see response to comments G-10 and G-30.

Response to Comment G-39

The comment restates concerns about Section X.07 – Permits – Conditions of Approval, as included in MM-BIO-1, about 5 business days being inadequate for reporting (see comments G-11, G-16, and G-31). Please see response to comment G-11. Revisions to MM-BIO-1 have been made to revise five (5) to ten (10) days as requested by the comment.

Response to Comment G-40

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.03, Definitions. The commenter requests clarification on the roles and responsibilities of Fireworks Operators, Fireworks Organizers, and Sponsors, but does not identify any specific provision of the proposed ordinance that requires clarification. Accordingly, no further response is possible or warranted.

Response to Comment G-41

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.03, Definitions. The commenter states that "Alternative Fireworks" as defined do not exist and requests that the section be struck from the proposed ordinance. Please see response to comment G-7. The provisions in the proposed ordinance are intended to ensure the use of the least environmentally impactful type of fireworks available now and in the future.

Response to Comment G-42

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.05, Permits – Application. The commenter requests that the requirement that the application for a permit be filed 60 days prior to the event should be changed to 10 days, in accordance with fire department requirements and state law. The commenter further suggests that permits be issued annual permits rather than permits for individual events to ensure that insurance and other standard requirements can be met prior to issuance of an annual permit.

This comment does not raise any environmental issues or address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment G-43

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (a), Location of Fireworks Display Events. The commenter suggests that provisions should be made for other events that launch fireworks from barges at locations other than those discussed in the proposed ordinance.

This comment does not raise any environmental issues or address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment G-44

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (a)2B. The commenter states that 23 shows per year on or adjacent to the U.S.S. Midway Museum is insufficient and requests expansion to 80 events per year to avoid affecting revenue, because these shows have little or no impact on the port tenants or residents.

This comment does not raise any environmental issues or address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment G-45

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (a)2C. The commenter suggests expanding the number of allowed shows per year for the San Diego Symphony Summer Pops concerts to a minimum of 50 to accommodate the Pops' new permanent venue.

This comment does not raise any environmental issues or address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment G-46

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (d)1, Chemical Composition. The commenter states that fireworks described in this section are not currently commercially available, and requests that either the section be struck or be modified to allow that such fireworks would be used once they are commercially available. Please see response to comment G-7.

Response to Comment G-47

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (d)2, Packaging. The commenter

requests the addition of the phrase "non-required" to specify that only those labels not required by federal or state law shall be removed (see also comments G-8 and G-14).

Please see response to comment G-8. Revisions to MM-BIO-1 have been made to exclude labels mandated by State and Federal laws.

Response to Comment G-48

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (e)3, Security. The commenter requests modification of the text as follows:

> Security. For advertised or non-private Fireworks Display Events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one half mile of unprotected (i.e., unfenced) federally or state-listed nesting colonies or habitat areas, the ~~Fireworks Organizer~~ Sponsor shall provide a minimum of two professional security guards to direct persons away from and to discourage trespass into sensitive nesting areas or habitat during such displays.

The requested changes do not relate to an environmental issue or to the adequacy or completeness of the EIR. In addition, the District does not believe that the requested changes are warranted or necessary. Nonetheless, the comment will be included in the material provided to the Board of Port Commissioners for their consideration of whether or not to adopt the proposed ordinance. No further response is required.

Response to Comment G-49

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (e)4, Signage. The commenter requests modification of the text as follows:

> Signage. For advertised or non-private Fireworks Display Events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one half-mile of nesting colonies or habitat areas for federally or state-listed species, the ~~Fireworks Organizer~~ Sponsor, in cooperation with the District, shall post temporary signage along primary access points to sensitive nesting colonies and habitat areas to identify safe viewing locations, to educate visitors on locations of sensitive wildlife habitats, to prevent viewers from trespassing into sensitive areas and to encourage appropriate viewing behavior.

The requested changes do not relate to an environmental issue or to the adequacy or completeness of the EIR. In addition, the District does not believe that the requested changes are warranted or necessary. Nonetheless, the comment will be included in the material provided to the Board of Port Commissioners for their consideration of whether or not to adopt the proposed ordinance. No further response is required.

Response to Comment G-50

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (e)5, Education. The commenter requests modification of the text as follows:

Education. Beginning not less than seven (7) days before advertised or non-private Fireworks Display Events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) located within one-half mile of federally or state-listed nesting colonies or habitat areas, the ~~Fireworks Organizer~~ Sponsor shall implement a public education program using social media, press releases, and information posted at parks, boat launch facilities, marinas, yacht clubs and other viewing locations, to educate potential viewers regarding appropriate viewing and boat docking areas, to discourage trespass into sensitive wildlife habitat, and to reminds viewers of appropriate viewing behavior in and near sensitive nesting colonies and habitat areas (e.g., appropriate disposal of trash, prevention of illegal fireworks, and safe boating procedures).

The requested changes do not relate to an environmental issue, adequacy, or completeness of the EIR. In addition, the District does not believe that the requested changes are warranted or necessary. Nonetheless, the comment will be included in the material provided to the Board of Port Commissioners for their consideration of whether or not to adopt the proposed ordinance. No further response is required.

Response to Comment G-51

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f)2. The comment restates concerns regarding a 6-foot debris barrier (see comments G-9 and G-15). The commenter further clarifies that such a barrier could potentially create a maritime hazard. Please see response to comment J-9.

Response to Comment G-52

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f)3. The commenter restates concerns with specifying that wires be secured with a nail (see comment G-37) and suggests the following modification to the text: "Wires from the electric match placed in the fireworks fuse shall be ~~wrapped around nails that are installed on the racks~~ secured in such a way to prevent wires from being pulled out and falling into the water." Please see response to comment G-37. Revisions to MM-WQ-1 and the proposed ordinance have been included to address this comment.

Response to Comment G-53

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f)9. The commenter restates concerns about Section X.07 – Permits – Conditions of Approval as included in MM-BIO-1 requiring a cleanup crew of five persons (see comments G-10, G-17, G-30, and G-38). The commenter further clarifies that the size of cleanup crew will be delegated by contract to the Sponsor. Please see response to comments G-10 and G-30.

Response to Comment G-54

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f)10. The comment restates concerns about Section X.07 – Permits – Conditions of Approval, as included in MM-BIO-1, about 5 business days being inadequate for reporting (see comments G-11, G-16, G-31, and G-39). The

comment further states that manpower requirements should not be based on the number of barges, but rather the number of fireworks used. The comment further states that the Sponsor, and not the Fireworks Organizer, will be responsible for compliance with this condition by contract. Please see response to comment G-11. Revisions to MM-BIO-1 have been revised to 5 to 10 days as requested by the comment. In addition, please see response to comment G-30 regarding the number of clean-up crew members.

In addition, this comment suggests that the responsibility for implementing this condition of the proposed ordinance be delegated to the sponsor rather than the organizer. This comment does not address the adequacy of the EIR and no response is required. Nonetheless, the District takes this opportunity to clarify that the "fireworks organizer" is identified as responsible for ensuring security. Please see Section X.03 of the proposed ordinance for definitions of the terms *Fireworks Operator*, *Fireworks Organizer*, and *Sponsor*.

Response to Comment G-55

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f)(11). The comment requests changing "Fireworks Operator" to "Sponsor," as fireworks companies do not handle tasks such as security and crowd control.

Please see response to comment G-18, which acknowledges that this provision of the proposed ordinance will be corrected to substitute the term "Fireworks Organizer" for the term "Fireworks Operator."

Response to Comment G-56

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (g), Event Transportation and Parking Management Plan. The commenter requests changing "Fireworks Organizer" to "Sponsor" and states that fireworks companies do not undertake parking management.

Please see response to comment G-20. The requested changes do not relate to an environmental issue or to the adequacy or completeness of the EIR. In addition, the District does not believe that the requested changes are warranted or necessary. Nonetheless, the comment will be included in the material provided to the Board of Port Commissioners for their consideration of whether or not to adopt the proposed ordinance. No further response is required.

Response to Comment G-57

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.08, General Provisions, subsection (c), Cost Recovery, and asks what the fee will be. The District has not yet determined the amount of the fee. In the event the proposed ordinance is adopted by the Board of Port Commissioners, the District will establish the amount of any fees that are required pursuant to the Article 2, Cost Recovery, of the District Code.

4.4.8 Comment Letter H: H.P. Purdon

May 1, 2017

San Diego Unified Port District
Wileen Manaois
Real Estate Development Department
3165 Pacific Highway
San Diego, CA 92101-1128

RE: DRAFT EIR FOR SAN DIEGO BAY FIREWORKS DISPLAY EVENTS

Dear Mr. Manaois:

This letter is to communicate the concerns we have regarding the Ordinance and Draft EIR as it pertains to the operation of the Port of San Diego Big Bay Boom July 4th Fireworks Show. The Big Bay Boom provides over $500,000 of TOT funds to our community, has an attendance of over 500,000 and creates over $10.6 million of economic impact for our region. It is continually ranked in the top 5 July 4th fireworks shows in the nation.

H-1 With that backdrop let me as the" Fireworks Organizer" (executive producer) of the event the concerns I have for the proposed Ordinance and subsequent EIR. I will not be addressing the many concerns the "Fireworks Operators" (Pyro Spectaculars & Pacific Tugboat Service) may have with the ordinance or EIR. They are the appropriate entities to address the actual fireworks displays and Best Management Practices for on the water operations of the event. My job is to provide for the various permitting, environmental responses, fund raising, sponsor contracts and fulfillment and budgeting issue to make the event successful.

Section__ .05 – PERMITS – APPLICATION

H-2 (a) The timing of the proposed date of 60 days in advance of July 4th is impossible to meet. The date for file the permit request would be May 4, 2017, for the July 4, 2017, show. I assume this will be waived for 2017.

H-3 (c) Our NPDES permit with the Water Boards (RWQCB) is done 9 months in advance of the next fireworks show along with the Best Management Practices agreement.

Section__ .07 – PERMITS – CONDTIONS OF APPROVAL

H-4 (f) Best Management Practices
NOTE: We have provided and paid for many years of water monitoring with each year's results being "no damage has been done to the water body" from our fireworks operations. This is an important result and should be noted.

H-5 7. The sweeps of the immediate area around the barges for the Big Bay Boom are conducted by 8 of the approximately 16 patrol barges. Two volunteer patrol boats per barge will conduct the sweep around the location of the barge after it has left the area. Pool skimmers are used to do this exercise.

H-6 8. Returning to the detonation zones and quays, piers and docks adjacent to the fireworks detonation zone to remove fireworks trash and debris has been done in the past only to find after two tide changes very little if any fireworks debris was found. This is an expensive use of time and people with very little resulting debris found.

H-7 9. The morning after the event we have been conducting another sweep of the shoreline. We have used crews of at least 20 people for the 4 barge event. The debris collected has been weighed and photographed. Frankly, this is a very expensive use of time and people as there will have been two tide changes and little if any debris has been found in the past.

H-8 (h) Regarding the Event Transportation and Parking Management Plan (ETPMP), please find on the Big Bay Boom website (www.bigbayboom.com) an extensive outline on how the public can access the event with full transportation and parking options. This should suffice as the annual plan for the Port to review.

H-9 The general sense of the Draft EIR and Ordinance for San Diego Bay fireworks seems to put a lot of unnecessary burden on the Fireworks Operator and the Fireworks Operator. These burdens' will amount to increased costs and time to manage the event. This will undoubtedly require increased sponsor fees for all sponsors including the title sponsor, the Port of San Diego.

Best regards,

H.P. Purdon

H. P. "Sandy" Purdon
Executive Producer, Port of San Diego Big Bay Boom July 4th Fireworks Show

Response to Comment H-1

This comment is an introductory statement and briefly describes the Big Bay Boom event and states concerns with the proposed ordinance and Draft EIR.

The District has reviewed the letter regarding the proposed ordinance and the Draft EIR as it pertains to the operation of the Port of San Diego Big Bay Boom Fourth of July Fireworks Show. This comment does not raise any environmental issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. The specific comments provided later in the comment letter are listed separately along with the District's individual responses below. No changes to the EIR are required.

Response to Comment H-2

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.05, Permits – Application, subsection (a). The comment states that it is not possible to submit the permit application 60 days in advance of the July 4, 2017, show. The comment assumes that this requirement would be waived for 2017.

This comment does not raise any environmental issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the EIR are required. The District considers 60 days prudent to allow the District to review and process the application and is consistent with park permit requirements. In the event the proposed ordinance is adopted by the Board of Port Commissioners and becomes effective before the Fourth of July show for this year (2017), the District will determine what provisions of the proposed ordinance are possible to be implemented in light of the time constraints identified in the comment.

Response to Comment H-3

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.05, Permits – Application, subsection (c). The comment states that his National Pollutant Discharge Elimination System permit is done 9 months in advance of the next fireworks show along with the Best Management Practices agreement.

As required by this condition of the proposed ordinance, the National Pollutant Discharge Elimination System and the Best Management Practices agreement shall be submitted to the District along with the application. This comment does not raise any environmental issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required.

Response to Comment H-4

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f). The comment notes that it has performed many years of water monitoring that have shown no damage done to the water body as a result of fireworks operations.

As identified in the Water Quality Technical Report (Appendix G) and Section 4.6, *Hydrology and Water Quality*, of the Draft EIR, the District has considered the water monitoring results conducted for the Big Bay Boom fireworks display event. This comment does not raise any environmental

issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the EIR are required

Response to Comment H-5

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f)7. The comment states that sweeps of the immediate area around the barges for the Big Bay Boom are conducted by eight patrol barges, and that two volunteer patrol boats per barge conduct the sweeps using pool skimmers.

The comment describes aspects of the clean-up program for the immediate area around the barges for the Big Bay Boom Fireworks Display Event. This comment does not raise any environmental issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required.

Response to Comment H-6

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f)8. The comment states that returning to detonation zones and quays, piers, and docks adjacent to the fireworks detonation zones has recovered very little if any fireworks debris in the past. The comment states that this is an expensive use of time with little result.

The District has reviewed the information from the Big Bay Boom Fireworks Display Event regarding the clean-up efforts that currently take place in the detonation zone and quays, piers and docks adjacent to the fireworks detonation zone. Notwithstanding the comment's concern that this clean-up activity does not recover a substantial amount of fireworks trash or debris, this activity is an important part of the comprehensive clean-up program required by the District in the Best Management Practices for fireworks display events. This comment does not raise any environmental issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment H-7

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (f)9. The comment states that they have conducted sweeps of the shoreline the morning after the event and recovered very little debris in the past. The comment also states that this is an expensive use of time with little result.

The District has reviewed the information from the Big Bay Boom Event regarding the cleanup of the shoreline the morning after the event. Notwithstanding the comment's concern that this clean-up activity does not recover a substantial amount of fireworks trash or debris, this activity is an important part of the comprehensive clean-up program required by the District in the Best Management Practices for fireworks display events. This comment does not raise any environmental issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

Response to Comment H-8

This comment refers to the text of the proposed ordinance as presented in Appendix D of the Draft EIR, Section X.07, Permits – Conditions of Approval, subsection (h). The comment requests that the District review the Big Bay Boom parking and transportation information available on its website at www.bigbayboom.com and suggests that this existing information should suffice as an Event Transportation and Parking Management Plan.

The District has reviewed the information regarding the Big Bay Boom Event Transportation and Parking Management Plan for informational purposes, but does not consider the information to be a substitute for the Event Transportation and Parking Management Plan required by the proposed ordinance. This comment does not raise any environmental issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the EIR are required.

Response to Comment H-9

The commenter states that the proposed ordinance and Draft EIR places an unnecessary burden upon the Fireworks Operator and Fireworks Organizer and states that implementation of the proposed ordinance would amount to increased costs and time to manage the event, resulting in increased sponsor fees for all sponsors, including the Port of San Diego.

This comment does not raise any environmental issues and does not address the adequacy of the EIR requiring a response pursuant to CEQA. Therefore, no changes to the EIR are required. However, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

4.4.9 Comment Letter I: Pacific Tugboat Service

Pacific Tugboat Service P.O. Box 12787, San Diego, CA 92112-3788
San Diego (619) 533-7932 1444 Cesar E. Chavez Pkwy. San Diego, Ca 92113
Long Beach (562) 590-8188 1512 West Pier C Street, Long Beach, CA 90813

May 1, 2017

San Diego Unified Port District
Wileen Manaois
Real Estate Development Department
3165 Pacific Highway
San Diego, CA 92101-1128

RE: DRAFT EIR FOR SAN DIEGO BAY FIREWORKS DISPLAY EVENTS

Dear Mr. Manaois:

I-1 This letter is to communicate the concerns we have regarding the proposed Ordinance and Draft EIR as it pertains to the operation of the Port of San Diego Big Bay Boom July 4th Fireworks Show. Historically, we have been subcontracted to provide barge services for launching the fireworks at various venues in and around San Diego and Los Angeles Counties.

I-2 Although most of the language in the proposed Ordinance and draft EIR does not or should not apply to us (as a sub-contractor), the six-foot perimeter fence we see as problematic for the following reasons:

1. Safety

- An all-around perimeter fence that is six feet off the deck of our barge would hinder if not prevent easy emergency egress from the barge in case of fire, injury or any number of unforeseen circumstances.
- It may also hinder if not prevent first responders from gaining access to the barge.
- A six-foot-high fence would block the vision of the tug captain on the busiest vessel traffic night of the year.

2. Costs Logistics

- The fence will take time to install and uninstall for each event, which will take place pier-side and cannot be done while other work is going on.
- Storage space for fence materials between events is non-existent and would have to be acquired
- Cost to build the structure for each event is grossly out of budget and will add significant cost to each event.
- Additional lookouts would be required for properly managing and maneuvering the barge.

I-3 May we suggest, as a solution to these problem areas, either a lower barrier fence of say three feet or a "curtain" that can easily be raised and lowered as needed to contain debris (although this would likely increase the costs slightly).

Regards,

Skip Lakti

Risk Management
(619) 533-7932
skip@pacifictugboats.com

Response to Comment I-1

The commenter states that it has concerns to communicate and that it has historically been subcontracted to provide barge services for various fireworks display events in San Diego and Los Angeles counties.

The District appreciates Pacific Tugboats interest in the proposed project. This is an introductory comment that does not raise any environmental issues requiring a response pursuant to CEQA. The specific comments that follow this introduction are listed separately along with the District's individual responses.

Response to Comment I-2

The commenter expresses concerns about the 6-foot perimeter fence, stating that an all-around perimeter fence that is 6 feet off the deck of its barge would hinder emergency access in case of fire or other emergency, and may hinder first responders from gaining access to the barge. The comment further states that the fence would block the vision of the tug captain during the busiest traffic vessel night of the year.

The comment also expresses concern relating to the cost of the fence, stating that installation and teardown of the fence will take time and could not be performed during other work, and that the cost to build the structure would add significant cost. The comment further states that storage space for fence materials do not currently exist and would have to be acquired. The comment also states that additional lookouts would be required for managing and maneuvering the barge. Please see response to comment J-9 below.

Response to Comment I-3

The commenter suggests lowering the height of the fence to 3 feet or replacing it with a curtain that could be raised or lowered to contain debris.

The requirement for a 6-foot-tall fireworks debris barrier is intended to prevent fireworks trash and debris from falling into the Bay and thereby to reduce potential adverse environmental impacts associated with trash and debris in the Bay. While a 3-foot barrier would be better than no barrier at all, the proposed height of the fireworks debris barrier is intended to contain the greatest amount of trash and debris possible. Although no changes to the EIR or the proposed ordinance will be made, this comment will be included in the materials presented to the Board of Port Commissioners for consideration in the decision whether or not to approve the proposed project.

4.4.10 Comment Letter J: Pyro Spectaculars, Inc.

PYRO SPECTACULARS by Souza

May 2, 2017

Ms. Wileen Manaois
Principal, Development Services
Real Estate Development Department
San Diego Unified Port District
3165 Pacific Highway
San Diego, CA 92101-1128

Via: Email only to: wmanaois@portofsandiego.org

RE: San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project UPD #EIR-2015-115; SCH #2015081013

Dear Ms. Manaois:

J-1

Pyro Spectaculars, Inc., ("Pyro") submits the following comments to the Draft EIR and the Proposed Fireworks Display Ordinance included as an Exhibit to the Draft EIR in the above referenced Project.

As a brief introduction, Pyro has been performing displays in the San Diego area for decades, and we are familiar with the sites and circumstances of most of the displays in the region over the past decades. We currently perform the Big Bay Boom display.[1] We actively participate in governmental activities related to fireworks and fireworks safety around California, in other states, and at national and international levels. We hold regular seminars and workshops on fireworks operations and safety for licensed operators, helpers, and fire authorities alike and have been instrumental in the development of multiple such training programs in California and the United States. We participate in several fireworks codes and standards groups including the National Fire Protection Association Technical Committee on Pyrotechnics; California State Fire Marshal's Fireworks and Special Effects Advisory Committees; and the American Pyrotechnics Association's Board of Directors as well as its Executive, Display, Proximate Pyrotechnics, Transportation, and Code Committees.

We respect the interests of the Port in regulating special events that involve public fireworks displays and understand the pressures that can be placed on any government agency by citizens and extreme activist groups and lawyers. Still, we must not lose sight of certain fundamental responsibilities each of us bears and the rights we enjoy. Among the responsibilities is to ensure the health, safety, and welfare of persons, property, and the environment; to not discriminate among persons on other than rational grounds;

[1] Pyro is not the company that set off all the fireworks at once.

PyroSpectaculars.com

PYRO SPECTACULARS, INC.
P.O. Box 2329 • Rialto, CA 92377 • Phone: (909) 355-8120 or (888) 477-PYRO • Fax: (909) 355-9813

J-1 cont. and to not excessively, unnecessarily, or unfairly infringe upon their rights. Which brings us to our general comments of the Draft EIR and Ordinance.

General Comments

J-2 The Proposed Fireworks Display Ordinance is overly broad. The fireworks subject matter is neither within the Port's jurisdiction nor advisable for it to regulate in light of its lack of familiarity with fireworks law, regulation, standards, and operations. Fire authorities regulate fireworks in the cities within the Port District, the cities within the Port District regulate special events in their jurisdiction, and the Regional Water Quality Control Board regulates the Clean Water Act. See e.g., EIR Section 4.5.4.3.

J-3 This Proposed Ordinance attempts to supersede and conflicts with the jurisdiction of those fire authorities, cities, and the Water Board. The Proposed ordinance is overreaching in these respects. By way of example, the Ordinance requires that the Water Board General Permit be obtained before the Port grants a permit. The water board permit requires certain best management practices, but the Ordinance goes on to require a substantially duplicate set of practices, and adding some requirements that create unsafe conditions. The Ordinance requires that a municipal fire authority "supervise" the display and determine things like "safe cool down periods."[2] This duplication is unnecessary, and the additions are poorly advised. A simple requirement that the hosts of public events comply with existing law is the wisest approach since the cities, the Water Board, and the fire authorities already have regulations and processes in place. If the cities wish to delegate special event permitting to the Port, that would be their decision. Delegating fireworks and Clean Water Act permitting is not the same, because the Port does not have jurisdiction under state law to make laws regulating fireworks and the Water Board has jurisdiction over discharges to the waters of the Bay. Only cities, counties, and special districts that provide fire-related services may permit and thereby regulate fireworks operations under the California Fireworks Law.

J-4 The Proposed Ordinance sets up yet another layer of regulation that duplicates and confuses long-existing patterns of regulation and permitting. Recent examples of the confusion among cities in the Port is that the Coronado Fire Marshal recently refused to consider an application for a fireworks display permit for unclear reasons, but mentioned the activity by the Port related to fireworks displays.

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[2] NFPA 1123-14, Section 9.5.2 provides that personnel shall not enter the for a period of time the operator deems necessary for safety.

J-5 Another example of confusion is closer to the Port home. Recently, Pyro contracted with a customer that proposed a private fireworks display in the waters adjacent to Manchester Grand Hyatt. Port officials told Pyro a special events permit was required from the Port. The application for such permit is handled by the Real Estate Department, requires sixty days advance filing, and by the terms of the application may only be made by a tenant of the Port or a person authorized by the tenant to have all decision making authority for the tenant. The display was to take place sooner than sixty days as most private displays are scheduled and contracted less than sixty days in the future. Pyro filed an application with the Port, although the application Pyro was given was clearly intended for construction projects. The maps of the Port jurisdiction were consulted, and the display barge location itself was outside the mapped Jurisdiction of the Port although the people viewing the display, private guests of the hotel, were within Port leased land. There were no public advertising, no bleachers or other provisions for the public, no parking was planned or needed for the public. After several days, Pyro was informed that the display, being in the water, was not in the Port's jurisdiction. The Port told Pyro it would have to apply for a City of San Diego fireworks permit and obtain a California Coastal Development Permit or waiver/exclusion from the Coastal Commission.

As a result of the delays by the Port, Pyro was unable to meet the deadlines of the customer who made alternative plans. There is no need for the Proposed Ordinance and the permitting scheme it proposes. There is already a permitting process. If the Port demands a special event permit in addition or alternative to the permits currently available, the fireworks permits for the display should still be obtained from the responsible fire authority only. If the display is in the water, the Water Board already requires a permit and has a set of Best Management Practices in place for discharges from the fireworks. The Port only needs to require that those permits be obtained and consider the Coastal Development requirements in order to issue the special events permit. Small private events, like at the Manchester Grand Hyatt, that are not advertised to the public and for which no public accommodations are necessary, should not even require a special events permit from the Port. The EIR clearly establishes that there are no significant impacts from such small displays.

J-6 Although the Draft EIR language seems addressed to "Fireworks Display <u>Events,</u>" the Proposed Ordinance is entitled "Fireworks <u>Display</u> Ordinance." There is a substantial difference between regulating the special <u>event</u> that includes a fireworks display and regulating the <u>display</u> itself. The Port may be qualified to regulate special events in its jurisdiction, notwithstanding the jurisdiction of Port cities to regulate special events. It is

J-6 cont. not qualified or empowered to enforce or vary the laws, regulations, codes, and standards governing the operation of fireworks displays.

In California, the State Fire Marshal is the agency authorized to develop and enforce the State Fireworks Law, Health and Safety Code, Sections 12500-12759. Cities, counties, and Special Districts that provide fire protection, prevention, or suppression services may adopt an ordinance or regulation to prohibit or regulate the sale, use, or discharge of fireworks within that special district as provided in Health and Safety Code Section 12541.1(a). The Port District is not so authorized because it does not provide fire-related services.

J-7 The State Fire Marshal has developed a comprehensive set of regulations pertaining to fireworks and fireworks displays set out in Title 19, California Code of Regulations, Chapter 6. These regulations have been in place for many years. There is no provision for a Special Port District that does not provide fire related services to adopt such an ordinance as is proposed in the draft EIR. Even if there were such authority, regulation of fireworks operations is best left to those who are qualified to do so. Clearly, that is the rationale for limiting the entities that can regulate fireworks. These state fireworks regulations have been developed with years of experience and the cooperation and input of many experts in the field from both the industry and enforcement sides. It is wrong and contrary to California state law for the Port to try to assume jurisdiction over fireworks displays.

J-8 Pyro has been training fire authorities in the safe permitting and inspection of fireworks displays for decades. We know that among the possible enforcement authorities, fire authorities, with the proper training and experience, are in the best position to understand safe pyrotechnic practices. Several of the provisions in the ordinance demonstrate our concerns with regulation of fireworks practices by non-subject-matter experts:

J-9

1) __.07,(f) - Best Management Practices. Placing a fence of any height around the discharge area on land, let alone on a barge, creates several risks to the fireworks operator, crew, emergency responders, and the vessel itself. The fence inhibits the crew from seeing the fireworks equipment in case of an emergency. The fence creates barriers to crew being able to escape from the barge in case of emergency. The fence inhibits emergency response personnel and equipment from accessing and boarding the vessel. The fence may cause burning objects to be bounced back onto the vessel, into the discharge area, into the crew possibly causing premature ignition of the

J-9 cont

fireworks and possible injury to the crew. If a fence were damaged, it could fall onto the fireworks equipment and impair other fireworks from being launched properly. NFPA 1123-14, Section 6.3.2.1 provides that for fireworks displays fired from floating platforms (barges), "A minimum of two separate egress paths shall be provided at all times." 6.3.2.3 provides, "Egress paths shall be clear and free of impediments." The very idea that a fence should be put around the fireworks discharge area on a barge demonstrates either a lack of understanding of even basic fireworks safety or a fundamental disregard for the safety of the personnel on the barge and those who may have to access the barge in an emergency. While allowing the fire marshal to prohibit such a fence would appeal to non-experts, it is the fireworks operator in charge of the display who is responsible for crew safety under state law and regulation. As the fireworks licensee, Pyro would not permit its operators to place barriers around the discharge site, and that refusal would violate this ordinance such that Pyro and the Operator would be liable. By trying to shift responsibility for safety to the fire marshal, the Port is attempting to make the fire marshal responsible and liable for the safety of the crew on a matter that is clearly contrary to existing fireworks codes and standards.

J-10

2) __.07,(f) - Best Management Practices. Requiring a wire to be wrapped around a nail seems like a simple enough requirement, but not all fireworks equipment has extra nails sticking out; most doesn't. In fact, protruding nails would be a great safety hazard on several levels, especially in the dark when the ordinance requires the crew to strike the display. The Port is not qualified to regulate fireworks, and has no legal basis for regulating the operation of the display. Even if such regulation by the Port were appropriate, it is far better to set a standard of performance that allows flexibility in the means of achieving the standard. Requiring that wires be secured is far superior to dictating how they must be secured, allowing for development of superior, safer methods.

J-11

3) __.07,(f) - Best Management Practices. __.07,(d),2,A. Requiring packaging, wrapping and labels to be removed and disposed of prior to commencement of the display again shows a lack of understanding of the fireworks law and good practices. In the event that some or all of the fireworks are not fired for some reason, the packaging and wrapping will be required to repack and identify the shells. Fireworks must be labeled under both state and federal law.

J-12

4) Requiring boxes to be approved by California Department of Transportation creates an impossible requirement. US DOT regulates the boxes in which fireworks are transported. The state does not approve fireworks boxes.

J-13

5) Requiring 50% of the weight (NEW?) of the fireworks to be picked up after the display, in the dark, from the water in the Bay or the Pacific Ocean is unreasonable and not supported by any substantial evidence in the draft EIR. Much of the materials that is related to the shells is burned or disintegrates in the performance of the devices. It is unreasonable to expect anyone to recover that much especially in tidal zones. It is also unreasonable to expect non-residents of the Port, or anyone for that matter, who may sponsor displays in the Port to attend the annual clean-up.

J-14

6) __.07,(d),2,B. This section prohibits fireworks that have a plastic casing or are made up of more than 5% by mass of non-biodegradable inner components. What if the device is not shot into the air but remains on the ground? Why would that need to be made of biodegradable material? How is anyone to know what is inside an aerial shell or other device? Neither the display operator, the host, or the enforcing authority can make that determination without destroying the shell. Such information is not available from manufacturers or distributors of fireworks. Scientists, consultants, who know little to nothing about fireworks have fixated on absolute numerical specification without considering the practical and operational implications of their machinations.

J-15

7) Throughout the ordinance, in designating the weights of the fireworks that can be used, the ordinance fails to state for the correct standard for fireworks weight. The mass of fireworks is correctly designated in Pounds Net Explosive Weight, or lbs. NEW. If this term is not used, then the full weight of the devices out of the packaging is implied. For example, under the Ordinance, section __.07(c)1,A, Big Bay Boom is limited to "a cumulative 5,342 pounds of fireworks." Because the weight is not designated as NEW, the Ordinance would require approximately a 50% reduction of fireworks in the display. I doubt that this was the intention, but it is the result when regulators who know little about fireworks and explosives try to write laws that regulate fireworks.

J-16

8) Section __.07,(d),1,A. The Big Bay Boom Event fireworks can "contain no more than 0.32% copper (Cu) per pound of explosive material." Of course, "percent per pound" is a very unusual measurement. It is not clear how that might be applied here. We understand percentages, and we understand mass per pound, but percent per pound is vague at best. Perhaps the intention is to say that the net explosive material in all shells combined shall be no more

J-16 cont

that .32% copper. That seems to be what the alternative standard in the section is trying to say, no more than 17 lbs. of total copper emissions in the display. But then, we must wonder whether that weight (17 lbs.) was calculated using NEW (net explosive weight) or something else. It appears they were on the right track: 5342 lbs. NEW of fireworks x 0.0032 [.32%] = 17.09 lbs. So, these consultants understood the difference between the weight of the shell and the weight of its composition, and they still failed to set out the correct weight measure, NEW, throughout the Ordinance.

J-17

9) Clearly, the EIR relies heavily on the "study" written by Croteau, et al, in 2010, for its emission factors of various chemicals, particularly copper. See EIR, Section 4.2, page 4.2-22 *Fireworks Emission Sources and Source Strength Calculation, Direct Sources.* Croteau, an industrial hygienist, was studying emissions from small consumer fireworks used on stage in a uniquely bizarre clown show[3]. We should be clear on this point. The fireworks that were studied by Croteau are not like the fireworks used in public displays including displays in San Diego Bay. Quoting from the draft EIR, "The aerial shells from the largest existing fireworks display event, Big Bay Boom, are most similar in characteristics to the Roman Candle "B" projectile as measured following combustion testing performed in a burn room for this scientific journal article." EIR, Section 4.2, page 4.2-22 *Fireworks Emission Sources and Source Strength Calculation, Direct Sources.* While it is always tempting to defer to scientific expertise and not read closely their reasoning, this single statement read by anyone with any knowledge of professional fireworks casts doubt on the quality of the Draft EIR as a whole and on the wisdom of relying on this massive 600 page[4] report to regulate fireworks. We grant that understanding the differences between consumer and professional fireworks generally and between Roman candle projectiles and aerial shells specifically, may not be common knowledge. But, basing a fireworks law on a study that does not recognize those difference is not reasonable.

a) The projectile from the consumer Roman candle is a solid pellet of pyrotechnic composition about ½" or less in diameter. A professional

[3] Cirque de Flambé is a group that performs live at ground level before a live audience with small fireworks in their hands and attached to props. There is nothing about this group that is like Big Bay Boom or any other fireworks display in the Bay. Here are examples of their performance – Part 1. Part 2. In Part 2, at about 00:35, notice the sparks falling right in front of the camera in the audience.

[4] The supporting material is an additional 900 pages long.

J-17 cont aerial shell ranges from 2" to 10" in diameter. Even if projectile and shell were the same dimensions, they are not the same chemical makeup.

J-18 b) The difficulty for the drafters of the EIR is that without the fireworks in the study and the fireworks in the displays being comparable (they are not comparable), there is no basis for the regulation of copper to which the Port seems to be especially sensitive.

J-19 c) A projectile from any particular consumer Roman candle is not at all like any kind of aerial shell in any relevant characteristic. They could both be spheroidal, and they may both have some type of pyrotechnic composition, but the similarities fall off sharply there.

J-20 d) The other difficulty in mandating the percentage of a particular chemical like copper in the display is that it is not currently practicable to determine the percentages of each chemical in the thousands of varieties of shells available from a hundreds of foreign and domestic manufacturers in various countries. Manufacturers are loath to release precise formulations, making it almost impossible for the licensee, the operator, or the enforcers to determine what combination of fireworks would comply with this unusual standard.

J-21 e) In addition to Croteau, the Draft EIR cites other studies conducted in China and Europe as the basis for its model and results. But the details of the fireworks used in those studies are not revealed. In the United States, the U.S. Department of Transportation ("USDOT") restricts the chemicals that can be used in fireworks for transportation safety reasons. Consumer fireworks are further restricted by the U.S. Consumer Product Safety Commission ("CPSC"). There is no discussion in the Draft EIR of how regulation of fireworks formulations varies in these countries from the U.S. formulation restrictions or what adjustments should be made to account for these differences.

J-22 10) Requiring that some type of environmentally friendly fireworks by used when those fireworks are clearly not yet practical or proven to be safe is putting the horse before the cart. It should not be required that we constantly prove a negative to get a fireworks permit. After more than a year of investigation and 600 pages of report, it should be easy to determine that such fireworks are only minimally available and only at many times the cost of conventional fireworks. The EIR does not establish that such fireworks would significantly change the environmental impact of the displays. The General Permit from the water board already has a more reasonable version of this requirement.

J-23 11) __.07, (f), 11 - Perhaps inadvertently, the Ordinance requires the Fireworks Operator to provide double the number of trash receptacles. We think this is likely intended for the Fireworks Organizer.

Fireworks Display Locations and Quantities

J-24 We refer to the Proposed Ordinance, Sections __.07,(a) et seq. One of the most troubling aspects of the proposed ordinance is that it limits the locations where displays can take place and quantities without any substantial justification for that narrow restriction in the EIR. There does not appear to be any reason why the findings of the EIR, if correct, would not apply with like force to other displays that might be held in the Port jurisdiction at other times and places. There does not appear to be any reason to draw an arbitrary line around certain areas in the Bay that can have fireworks when the findings of the EIR are not location specific and would seem to apply throughout the Bay, perhaps beyond. There is no substantiation for limiting particular displays to particular quantities, and there is no provision for other displays not mentioned in the Ordinance or what quantities are appropriate for those displays.

J-25 The EIR purports to scope particular recurring displays as well as particular hoped-for displays that may occur in the future as the Project. The Ordinance is not so limited in its effect. The Ordinance permits specific events with specific quantities of fireworks, at specific locations, and in limiting events to those locations, quantities, and times the Ordinance has effectively banned future displays at other locations, even locations that have historically been used for displays. One example is the Manchester Grand Hyatt where convention guests have frequently contracted for fireworks displays. The Manchester Grand Hyatt currently has two convention groups that intend to have fireworks display at the hotel, and the Ordinance as drafted would not allow those shows to take place. One of the groups is the American Pyrotechnic Association that is coming to the Port of San Diego largely because of the wonderful venue right at the hotel for fireworks displays. The Ordinance, however, permits displays at the venue just north in the bay, the Midway. What reason is there to prefer one location to the exclusion of the other or to exclude any other display that is not located within or proximate to an environmentally sensitive area.

J-26 There is no map or chart attached to either the EIR or the Ordinance to assist in locating the precise jurisdiction of the Port compared to locations where barge based fireworks are launched, and no discussion of the effect of a barge being outside the Port's jurisdiction when the related event is in Port jurisdiction. It should be easy for the Port

J-26 cont to designate eel grass areas where barge control should be implemented. (see Ordinance, section __.07,(g).

Distinction between Independence Day and Other Events

J-27 It is not clear to Pyro what possible health, safety, welfare, or environmental consideration exists for distinguishing between events that celebrate patriotism around the Independence Day holiday and events occurring the rest of the year. We applaud the celebration of Independence Day, but we also applaud other free expression. We reject the suppression or restriction of other displays based on the time of year[5] or the expression of content other than patriotic content in those displays.

J-28 We ask, why is it acceptable to have a display somewhere in Imperial Beach on July 4 that has 456 lbs. (NEW?) of fireworks but U.S.S. Midway is limited to 235 lbs. on other than July 4? Why can a display on July 4 be 20 minutes long while a display on July 5 ten minutes long? Additionally, what reason is there to limit Independence Day displays to July 4? For example, this year July 4 is on Tuesday. People have to work on Wednesday. It is common for sponsors to have displays on Saturday or Sunday in such years to attract the most attendees, allow the most people to enjoy the display, bring customers to their businesses, book hotel rooms, and thereby have more volunteers available to work late or to work the next day, as with next day debris patrols required by the Water Board's General Permit, and redundantly by the Proposed Ordinance. There is no substantial evidence in the Draft EIR to support this discrimination and suppression of expression based on content or under the guise of environmental protection.

Protection of Species and Habitat - Section __.07,(e), et seq, and __.03 Definitions

J-29 Pyro respects the effort being made to protect sensitive species and habitat. Pyro supports regulations that reasonably and lawfully give effect to those purposes. However, the Proposed Ordinance has blurred the distinction between an event and a display by defining a Fireworks Display Event too broadly in some respects and too

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J-27 cont. [5] Pyro recognizes that there is an interest in protecting avian species during their breeding periods. However, the draft EIR does not demonstrate that there would be a significant impact on birds from fireworks displays. Management of the public in sensitive areas would seem to be an ongoing requirement not limited to fireworks events and the burden of managing access to those areas should not be dumped on fireworks organizers. Perhaps there are environmental groups that could spend some of the resources protecting such areas.

J-29 cont narrowly in others. This makes the ordinance confusing and subject to a variety of interpretations and misinterpretations.

J-30 The plain meaning of the words in the Proposed Ordinance should be clear. A fireworks *display* involves the handling, possession, loading, staging, launching, and sometimes storage of fireworks.[6] The fireworks *event* takes place where the audience and participants are located, park, and travel. This would be either the private or public group viewing the display.

The definition of fireworks display event further confuses the meaning of *event* by declaring that any group exceeding twenty-five is the equivalent of viewing by the public. This makes no sense when it is applied to certain locations, like the Midway and hotels that have a large private group of viewers, but have none of the issues related to public parking, trash, encroachment on habitat, and similar public interests. Similarly, while the Midway and hotels are open to the public, the fireworks are not advertised to the public and the event itself is not open to the public. The concerns with public traffic in sensitive areas is just not present in such cases.

J-31 We appreciate what appears to be a great effort on the part of Port personnel to address concerns raised by the environmental activist. But neither the activist nor the Port have lived in the existing regulatory, permitting, and enforcement world of fireworks the way we have. It is disappointing that the EIR team did not include fireworks professionals on a deep basis. The reason for that is not clear, unless we consider that those who make threats of lawsuits try to control the process as well as the result.

The novelty of the approach to fireworks taken in this project, and particularly in the draft ordinance, is difficult to fully express. Throughout this state and the other states of this nation fireworks displays have been taking place in all kinds of locations for decades. Few have had any significant environmental effects. Those that have are covered by existing law and regulation. CEQA and the Coastal Development acts were made with projects in mind more impactful and significant than a few minute fireworks display. Most of those projects or developments last 24/7/365 for an indefinite time into the future. They warrant a close look. A display lasts about 20 minutes. That 20-minute

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J-30 cont [6] Displays do not routinely include the "detonating of fireworks." Detonations in the fireworks vernacular mean malfunctions where the device "detonates" without rising into the air from its launching position. Fireworks are launched or ignited, not detonated, during the course of a display.

J-31 cont. display would need to last 26,280 times longer to reach a single year of impact. We are all too quick to look at results from an EIR or an imagined impact without considering the infinitesimal action of a such a short display compared to protracted activities in our society. We are too quick to regulate or respond to complaints without recognizing that the fireworks displays are a form of expression that shouldn't be put aside by allowing some types of content, audience, location, weight, or length and banning or limiting others.

J-32 We request that the District Board seriously consider what it is doing to the existing regulatory scheme, the effects that this ordinance would have on all concerned including its own tenants and cities, and take great care to not encroach upon the regulatory authorities and jurisdiction that have been carefully in place for a very long time. No hypercritical interpretation of laws that were never intended to reach these types of events should be permitted to cause such a distortion of the existing regulatory schemes as this project would.

Respectfully submitted,
Pyro Spectaculars, Inc.

By: Laurie Collins on behalf of
Gary Brown, General Counsel
Licensed Pyrotechnic Operator

Response to Comment J-1

The District appreciates Pyro Spectaculars interest in the proposed project. This comment does not raise any environmental issues requiring a response pursuant to CEQA. The specific comments raised in the pages that follow this introduction are listed separately along with the District's individual responses.

Response to Comment J-2

This comment states the author's opinion that the proposed ordinance is overly broad and fireworks are not a subject within the District's regulatory jurisdiction. Because the comment makes only a general assertion and does not identify any specific aspect of the proposed ordinance that is overly broad, no further response to this portion of the comment is possible or necessary. The District has jurisdiction over land use and other activities that occur within the land and water areas conveyed to it pursuant to the San Diego Unified Port District Act, California Harbors & Navigation Code, Appendix 1. As discussed below in response to comment J-7, the District also has jurisdiction to adopt the proposed ordinance pursuant to California Health & Safety Code section 12541.1.

Response to Comment J-3

This comment repeats the author's opinion that the District does not have jurisdiction to regulate fireworks and asserts the proposed ordinance attempts to supersede and conflicts with the jurisdiction of other fire authorities, cities and the RWQCB. Please see responses to comments J-2 and J-7 regarding the District's jurisdiction to adopt the proposed ordinance. The proposed ordinance does not supersede or conflict with the regulations of other regulatory agencies. Instead, the proposed ordinance expressly defers to other regulatory agencies where appropriate, such as the provisions of the ordinance that address compliance with the RWQCB general permit, compliance with other required permits, compliance with applicable federal, state and municipal laws and regulations (Draft EIR, Appendix D, Proposed Fireworks Display Ordinance, Section X.07(i), (j), (k)) and preemption by applicable federal and state laws (Draft EIR, Appendix D, Section X.08(a)).

The comment further states the author's opinion regarding the wisdom of provisions of the proposed ordinance that the author believes duplicate other laws or permits and recommends the District simply require the hosts of public events to comply with existing law. This comment raises a policy issue, not an environmental concern or a question regarding the adequacy or completeness of the Draft EIR. Accordingly, the comment will be available for consideration by the Board of Port Commissioners when it makes its decision whether or not to adopt the proposed ordinance and no further response is required.

Response to Comment J-4

This comment repeats the author's opinion that the proposed ordinance contains provisions that duplicate other regulations. Please see response to comment J-3 above.

Response to Comment J-5

This comments describes an "example of confusion" concerning applicable regulations involving an application for a special events permit for a private fireworks display in the waters adjacent to the Manchester Grand Hyatt. The comment also repeats the author's opinion that the District should

leave the regulation of fireworks to other regulatory agencies and states small private fireworks display events should not be required to obtain even a special events permit. This comment raises a policy issue, not an environmental concern or a question regarding the adequacy or completeness of the Draft EIR. Accordingly, the comment will be available for consideration by the Board of Port Commissioners when it makes its decision whether or not to adopt the proposed ordinance and no further response is required. Please also see response to comment J-3 above.

Response to Comment J-6

This comment refers to language in the Draft EIR that refers to "Fireworks Display Events" and the proposed ordinance that is titled "Fireworks Display Ordinance" and states the District may be qualified to regulate special events, but is not qualified or empowered to regulate fireworks displays. Please see responses to comments J-3 and J-7. This comment raises a policy issue, not an environmental concern or a question regarding the adequacy or completeness of the Draft EIR. Accordingly, the comment will be available for consideration by the Board of Port Commissioners when it makes its decision whether or not to adopt the proposed ordinance and no further response is required.

Response to Comment J-7

This comment states the author's opinion that the District is not authorized to adopt a fireworks ordinance or regulation because it does not provide fire-related services as required by California Health and Safety Code section 12541.1(a). The comment is incorrect. Health and Safety Code section 12541.1(a) provides as follows: "A special district which provides fire protection, prevention, or suppression services may adopt an ordinance or regulation to prohibit or regulate the sale, use, or discharge of fireworks within that special district." The District is authorized by section 12541.1(a) to adopt the proposed ordinance because it is a special district that provides fire protection, prevention and suppression services within its jurisdiction through HPD. As discussed in the Draft EIR, HPD provides marine firefighting services in and around San Diego Bay. HPD has 130 sworn officers who are cross-trained as both land and marine firefighters and police officers. HPD patrol boats respond to fire emergencies on San Diego Bay and are equipped with fire-suppression equipment capable of handling both small and large vessel fires (Draft EIR, Section 4.9.2.1, pp. 4.9-2–4.9-3). Because the comment raises a legal issue, not an environmental issue relating to the Draft EIR, no further response is required.

Response to Comment J-8

This comment states that the commenter has been training fire authorities in safe permitting and inspection of fireworks for decades and serves as a general introduction to the specific comments that follow as comments J-9 through J-23. Please see responses to comments J-9 through J-23 below.

Response to Comment J-9

This comment states that the commenter objects to the Best Management Practice required by Section X.07(f)(2) of the proposed ordinance, which requires each fireworks barge to be equipped with a fire-resistant debris barrier around the perimeter of the fireworks launch area to contain debris, and that such a barrier would present a safety hazard to the fireworks operator, crew, emergency responders and the barge itself and conflicts with applicable regulations. Section X.07(f)(2) of the proposed ordinance included this requirement as part of the "Best Management

Practices" to be implemented for all display events in order to contain fireworks debris on the barge and to prevent the debris from falling into surrounding waters and adversely affecting environmental resources. The proposed ordinance acknowledges the concern expressed in this comment by providing that the debris barrier must be implemented "unless prohibited by the municipal fire marshal with jurisdiction over the Fireworks Display Event." Because the number and type of fireworks and their launching equipment, as well as the size and layout of the barge, may vary from event to event, the proposed ordinance is a reasonable accommodation of the need to provide a safe working environment on the barge and the need to reduce potential significant adverse environmental impacts by ensuring that as much fireworks debris as possible is contained on the barge and does not fall into surrounding waters.

Response to Comment J-10

This comment objects to the Best Management Practice required by Section X.07(f)(3) of the proposed ordinance, which requires that wires from the electric match in the fireworks fuse be wrapped around nails installed on the racks to prevent wires from being pulled out and falling into the surrounding waters. Please see response to comment G-52 above.

Response to Comment J-11

This comment objects to the Best Management Practice required by Section X.07(f)(2) of the proposed ordinance, which requires all fireworks packaging material and debris to be properly disposed of in trash receptacles, because the packaging and wrapping may be required to repack fireworks that are not used in the display. Section X.07(f)(2) is intended to prevent fireworks packaging and debris from falling into the surrounding waters. It does not prohibit or interfere with a fireworks operator's ability to retain packaging that may be needed to repack fireworks not used in a display and to deposit such packaging in a receptacle for later reuse as needed.

This comment also states that fireworks must be labeled under both federal and state law. The proposed ordinance will be revised to clarify that it does not require the removal of labels required by law, which is consistent with the provision of the proposed ordinance that specifically requires compliance with all applicable federal and state laws and regulations (Draft EIR, Appendix D, Section X.07(k)).

Response to Comment J-12

This comment objects to the Best Management Practice required by Section X.07(f)(2) of the proposed ordinance, which requires fireworks to be brought to the barge and loaded in their California Department of Transportation-approved shipping cartons, on the ground that the federal Department of Transportation regulates fireworks shipping cartons, not the California Department of Transportation. The first sentence of Section X.07(f)(2) of the proposed ordinance will be revised as recommended to refer to "U.S. Department of Transportation-approved shipping cartons."

Response to Comment J-13

This comment objects to the Best Management Practices required by Section X.07(f)(7) – (10) of the proposed ordinance, which require the fireworks organizer to recover fireworks debris and other trash from the Bay in the amount of 50 percent of the net weight of the fireworks used in the event, on the ground that the amount required to be recovered is not supported by substantial evidence.

The amount of fireworks debris that the proposed ordinance requires the fireworks organizer to recover is based on an article titled *Fireworks and their Hazards* prepared by Thomas J. Poulton, M.D. and Kenneth L. Kosanke, Ph.D. dated June 1995.

This comment also states the author's opinion that it is unreasonable to require the recovery of that much trash because much of the material related to fireworks shells is burned or disintegrated in the display and non-residents of the District who sponsor fireworks display events should not be required to attend the District's annual clean-up. The District has been unable to identify any report, study, or other document that has determined what portion of fireworks shells is burned or disintegrated in a fireworks display and what portion is not destroyed and instead may fall to the surrounding land or waters. Unless facts, data or other evidence become available that would warrant a change in the amount of fireworks debris that must be recovered under the proposed ordinance, no change in the proposed ordinance is warranted.

The proposed ordinance does not require "non-residents" of the District or fireworks "sponsors" to participate in clean-up events. Section X.07(f)(7) – (10) of the proposed ordinance require the applicant for a fireworks display event permit to engage in a comprehensive series of actions intended to recover fireworks debris and other trash from the Bay in an amount of 50 percent of the weight of the fireworks used in the event. In the event the permit applicant's direct efforts to recover fireworks debris and trash immediately after an event and recover less than 50 percent of the weight of fireworks used, Section X.07(f)(10) requires the permit applicant to provide a crew to participate in the District's next scheduled annual "Operation Clean-up" to recover trash and debris from the Bay and the Imperial Beach oceanfront. Nothing in the proposed ordinance requires the participation of "non-residents" or "sponsors" of fireworks display events.

Response to Comment J-14

This comment objects to the Best Management Practice required by Section X.07(d)(2)(b) of the proposed ordinance, which prohibits fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than 5 percent of the mass of the shell or device, on the grounds that such information is not available from manufacturers or distributors of fireworks and the characteristics identified in this section of the proposed ordinance cannot be identified without destroying the shell. This requirement of the proposed ordinance is intended to protect water quality of the waters surrounding the fireworks launch area by prohibiting the use of fireworks that contain the specified non-biodegradable materials. Similar to CEQA's requirements that mitigation measures must be feasible, the District's intention in the proposed ordinance is to require Best Management Practices and other conditions that are feasible. The District is willing to consider modification of any provision of the proposed ordinance for which there is substantial evidence in the record that establishes it is infeasible. However, under CEQA, a lawyer's assertions or arguments alone do not constitute substantial evidence (see *Pala Band of Mission Indians v. County of San Diego* (1998) 68 Cal.App.4th 556, 578-580).

Response to Comment J-15

This comment states that the proposed ordinance fails to state the correct standard for fireworks weight. The proposed ordinance will be corrected to refer to the weight of fireworks that may be used in a fireworks display event as "net explosive weight" or "NEW."

Response to Comment J-16

This comment states that the requirement in Section .7(d)(1)(A) of the proposed ordinance that fireworks "contain no more than 0.32% copper (Cu) per pound of explosive material" is vague and that it is unclear if the calculations are based on net explosive weight. See response to comment J-15 that explains that the proposed ordinance will be corrected to refer to the weight of fireworks that may be used in a fireworks display event as "net explosive weight" or "NEW." Also, the "per pound" language that the commenter finds vague was included to make clear the intent of the proposed ordinance, which is to limit copper emissions to 17 pounds per Big Bay Boom event. Lastly, as the comment correctly states, the intent of the language is to ensure that copper emissions from the Big Bay Boom event is limited to 0.32 percent of net explosive weight, or 17 pounds (e.g., 0.32 percent of 5,342 pounds net explosive weight is 17 pounds).

Response to Comment J-17

This comment states that the Draft EIR relies heavily on a study by Croteau, et al. in 2010 for its emission factors of various chemicals, including copper, but that the fireworks studied by Croteau are not like the fireworks used in public fireworks displays like those that will be subject to the proposed ordinance, which casts doubt on the quality of the Draft EIR as a whole and the wisdom of relying on the Draft EIR to regulate fireworks. The analysis presented in the Draft EIR is based on the best available science known and available at the time of analysis. The author is not aware of any studies that present emission factors for fireworks used in public fireworks displays. Studies to determine the air quality effects of public fireworks events in the United States are hard if not impossible to find, so we used the best available information, which was the peer-reviewed journal article the commenter mentions. Thus, because the air quality effects presented in the Draft EIR and the proposed ordinance's reliance on these conclusions are based on the best available science known and available at the time of analysis, and because no other source for emission factors is known, no changes to the assumptions, emission factors, or conclusions thereof are required.

Response to Comment J-18

This comment states that there is no basis for the regulation of copper in the proposed ordinance because the fireworks in the Croteau study and the fireworks in the proposed fireworks displays are not comparable. Similar to comment J-17, the best available science from various sources, from not only the Croteau study the commenter cites, but also various other journal articles, online presentations, and the U.S. Department of Transportation table fireworks chemicals all mention the prominence of copper and copper compounds as a fireworks colorant or color agent. Copper is listed as an air toxic by California Air Resources Board and Office of Environmental Health Hazard Assessment and is known to acutely impact human respiratory systems, resulting in upper respiratory tract irritation and nausea. Knowing that copper is prevalent in fireworks and that copper is a known pollutant of concern, it would be both unwise and a violation of CEQA to dismiss copper emissions. While the commenter states that the fireworks used in the Croteau study are not comparable to public display fireworks, information concerning the copper content (as a percentage) of net explosive weight in public display fireworks is unknown, and information from the Croteau study is the best available and only information available.

Response to Comment J-19

This comment states that a projectile from any particular consumer Roman candle is not at all like any kind of aerial shell in any relevant characteristic. See responses to comments J-17 and J-18. The Croteau study is the best available science at the time of analysis. This comment only provides a criticism of the analysis but does not provide substantive evidence to dispute the assumptions and conclusions in the Draft EIR. The comment states that the fireworks used in the public fireworks displays are different than the fireworks assumed in the Croteau study, but offers no evidence to support this claim. No changes were made to the Draft EIR in response to this comment.

Response to Comment J-20

This comment states that an additional difficulty in mandating the percentage of a particular chemical like copper in a fireworks display event is that fireworks manufacturers are loathe to release precise formulations, making it impossible to determine what combination of fireworks would comply with this standard. It is understood that fireworks manufacturers tend to shy away from disclosing all ingredients in their fireworks. However, the U.S. Department of Transportation has a list of approved and prohibited chemicals that manufactures must comply with, so it is assumed that at some level the operator could obtain a list of chemicals or get assurance from the manufacturer. Regardless, the commenter raises an issue regarding the economic or technical infeasibility of the copper reduction portion of the proposed ordinance. Accordingly, this comment will be included in the materials presented to the Board of Port Commissioners for their consideration when they make their decision whether or not to adopt the proposed ordinance.

Response to Comment J-21

This comment states that the Draft EIR cites other studies conducted in China and Europe as the basis for models and results, but the details of the fireworks used in those studies are not revealed. This is a general comment that has no bearing on the analysis. The summaries of the studies conducted in China and Europe are provided for context only and do not affect the analysis in the Draft EIR. This comment also says there is no discussion in the Draft EIR of how regulation of fireworks formulations varies in these countries from the formulations restricted by the U.S. Department of Transportation and the U.S. Consumer Product Safety Commission, or what adjustments should be made to account for these differences. The analysis in the Draft EIR does not estimate effects and health risk from any formulations that are currently restricted in the U.S. The main pollutants of concern in the study—copper, as a component of overall particulate matter, and total particulate matter—are not affected by these restrictions, so no adjustments are necessary.

Response to Comment J-22

This comment states that requiring the use of some type of environmentally friendly fireworks, when those fireworks are not yet practical or proven to be safe, is putting the horse before the cart and such fireworks are only minimally available and cost many times more than conventional fireworks. CEQA does not require the District to adopt mitigation measures for the proposed new fireworks display events or conditions of approval in the proposed ordinance that are economically or technically infeasible. However, a claim that a requirement of the proposed ordinance is infeasible must be supported by substantial evidence. The Board of Port Commissioners will consider evidence of infeasibility prior to making its decision whether or not to certify the EIR and to adopt the proposed ordinance. However, under CEQA, a lawyer's assertions or arguments alone

do not constitute substantial evidence (see *Pala Band of Mission Indians v. County of San Diego* (1998) 68 Cal.App.4th 556, 578-580).

Response to Comment J-23

This comment states that Section X.07(f)(11) of the proposed ordinance may have inadvertently designated the Fireworks Operator as the party responsible for providing trash receptacles. This comment is correct and the proposed ordinance will be corrected to substitute the term "Fireworks Organizer" in place of the term "Fireworks Operator" in Section X.07(f)(11) of the proposed ordinance.

Response to Comment J-24

This comment states that the provisions of the proposed ordinance limit the locations where fireworks display events can take place. The Draft EIR was prepared in compliance with CEQA, which requires an EIR to include a description of the proposed project that provides the "precise location and boundaries of the proposed project" (see State CEQA Guidelines § 15124(a)). This requirement limits the scope of the Draft EIR to existing and proposed fireworks display events that take place, or are proposed to take place, at specific locations. Unknown future fireworks displays could not be included in the Draft EIR because their location, as well as their number, size, duration and frequency, among other things, are presently unknown and any attempt to assess their environmental impacts would be speculative. The scope of the proposed ordinance is similarly limited to existing and proposed fireworks display events whose locations and other material characteristics are known at this time.

The comment further correctly observes that there is no provision in the proposed ordinance for other fireworks display events that are not mentioned in the proposed ordinance. This comment raises a policy issue regarding the scope of the proposed ordinance, not an environmental issue or concern regarding the adequacy of completeness of the Draft EIR. Accordingly, this comment will be included in the materials presented to the Board of Port Commissioners for their consideration when they make their decision whether or not to adopt the proposed ordinance.

Response to Comment J-25

This comment repeats the author's concern that the proposed ordinance limits the fireworks display events that may occur in the future. Please see response to comment J-24 above. The comment also states that the proposed ordinance effectively bans fireworks display events at locations that historically have been used for such displays, such as the Manchester Grand Hyatt.

As indicated in response to comment J-24 above, District staff and consultants made extensive inquiries with the District tenants and regulatory and permitting agencies involved with fireworks display events in and around San Diego Bay and the Imperial Beach oceanfront to identify all fireworks display events that occurred on a regular basis in that area prior to commencement of preparation of the Draft EIR. Although convention guests at the Manchester Grand Hyatt may have periodically contracted for fireworks displays as stated in the comment, this location was not identified by the regulatory and permitting agencies as a site where existing fireworks display events occurred on a regular basis. This comment raises a policy issue regarding the locations at which fireworks display events will be allowed, not an environmental issue or concern regarding the adequacy of completeness of the Draft EIR. Accordingly, this comment will be included in the

materials presented to the Board of Port Commissioners for their consideration when they make their decision whether or not to adopt the proposed ordinance.

Response to Comment J-26

This comment states there is no map or chart in the Draft EIR or the proposed ordinance that shows the jurisdiction of the District compared to locations where barge-based fireworks are launched Figure 2-1 of the EIR depicts the location of the existing and proposed fireworks launch sites with the District jurisdiction overlaid on the figure.

The comment also states that there is no discussion of the effect of a barge being outside the District's jurisdiction when the related event is in District jurisdiction. A lead agency's obligation to comply with CEQA is not limited only to environmental effects that occur within the lead agency's jurisdiction. The Draft EIR complies with CEQA by analyzing the potential environmental impacts of fireworks display events that occur in and around San Diego Bay and the Imperial Beach oceanfront, involve barges loaded within the District's jurisdiction, require a discretionary decision by the District, or are conducted by District tenants.

The comment also states that it should be easy for the District to designate eelgrass areas where barge control should be implemented.

Section X.07(g) of the proposed ordinance requires "To the extent practicable, barges shall be located in unvegetated deep water channels outside of eelgrass beds." Additionally, Section X.07(g) further states that "...tug boat operators shall be made aware of shallow eelgrass and instructed not to use high trust in the vicinity of eelgrass beds. Figure 4.3-1 includes the Bay's eelgrass habitat to assist with identifying sensitive habitat areas in the Bay.

Response to Comment J-27

This comment says it is not clear why the District distinguishes between fireworks display events that occur on the Fourth of July and events that occur at other times throughout the year. This distinction is made throughout the Draft EIR and in the proposed ordinance because fireworks display events that occur on the Fourth of July are generally much larger and impactful, both in terms of number of pounds of fireworks used, duration of the event and number of spectators, than events that occur at other times during the year (Draft EIR, Chapter 2, *Environmental Setting*, Tables 2-1 and 2-2). The distinction between these two general types of events served as an effective way to organize the analysis of environmental impacts in the Draft EIR and the conditions of approval in the proposed ordinance. The comment's assertion that the use of this distinction constitutes discrimination and suppression of expression has no merit and does not raise an environmental issue or relate to the adequacy or completeness of the Draft EIR. Accordingly, no further response is warranted.

In a footnote, the comment also states the Draft EIR does not demonstrate that there would be a significant impact on birds from fireworks displays and the burden of managing access to sensitive areas should not be dumped on fireworks organizers. The direct and indirect significant impacts of the proposed new fireworks display events and the proposed ordinance on avian species are discussed in detail in Section 4.3, *Biological Resources*, of the Draft EIR at pages 4.3-27 through 4.3-34. The requirement to mitigate these significant effects is not "dumped on fireworks organizers" by the District, but is imposed pursuant to CEQA on the party (i.e., fireworks organizer) who proposes an event that may have an adverse impact on the environment. The comment's suggestion that

environmental groups could spend some of their resources protecting such areas raises a policy issue, not an environmental issue or concern regarding the adequacy of completeness of the Draft EIR. Accordingly, this comment will be included in the materials presented to the Board of Port Commissioners for their consideration when they make their decision whether or not to adopt the proposed ordinance.

Response to Comment J-28

This comment asks why it is acceptable to allow fireworks display events at certain locations of certain sizes and durations on the Fourth of July, but not at other locations. The locations, sizes, duration and frequency of allowed for existing fireworks display events is based solely on their past occurrence. CEQA requires an EIR to identify the physical conditions in the vicinity of a proposed project at the time of commencement of environmental review. These existing conditions are referred to as the "environmental setting" and normally constitute the baseline physical conditions by which a lead agency determines whether an environmental impact is significant (State CEQA Guidelines § 15125(a)). The characteristics of existing fireworks display events, whether on the Fourth of July or other days throughout the year, are part of the environmental setting for purposes of the Draft EIR and were carried forward into the proposed ordinance.

The comment also states that there is no reason to limit Independence Day displays to July 4 because it is "common" for sponsors to have displays on Saturdays or Sundays if July 4 falls on a weekday. The proposed ordinance defines "Fourth of July Fireworks Display Event" as a fireworks display event that occurs annually on the Fourth of July (Draft EIR, Appendix D, p. 2) because in the District's experience the existing Fourth of July fireworks display events have occurred on July 4, regardless of what day of the week July 4 occurs. The comment's claim that this provision constitutes discrimination and suppression of expression does not raise an environmental issue or other concern regarding the adequacy or completeness of the Draft EIR. Accordingly, no further response is required.

Response to Comment J-29

This comment states that the author's general opinion that the proposed ordinance defines a fireworks display event too broadly in some respects and too narrowly in other respects, which the author believes makes the proposed ordinance confusing and subject to misinterpretation. This comment is a general statement of opinion that does not refer to any specific section of the proposed ordinance and appears to be an introduction to other comments that follow. Therefore, no further response is possible or required.

Response to Comment J-30

This comment concerns the proposed ordinance's definition of the meaning of "Fireworks Display Event" and its reference to any group of people exceeding 25 in number. The reference in the definition to any group exceeding 25 in number is intended to make the proposed ordinance consistent with Section 8.26 of the District Code, which makes it unlawful for any company, organization or group of persons, exceeding 25 in number, to conduct or participate in any celebration, exercise or demonstration on District property without a permit from the District. The comment's objection to this provision raises a policy issue, not an environmental issue or concern regarding the adequacy of completeness of the Draft EIR. Accordingly, this comment will be included

in the materials presented to the Board of Port Commissioners for their consideration when they make their decision whether or not to adopt the proposed ordinance.

In a footnote, the comment states displays do not routinely include the "detonating of fireworks" and that the term detonation refers to a malfunction that results in the device not rising into the air from its launching position. The comment recommends use of the terms "launched" or "ignited" rather than "detonated." Except where indicated otherwise, the District intends that words used in the proposed ordinance be given their plain meaning. The dictionary defines the word "detonate" to mean to explode with sudden violence or to cause to explode. The comment, including its recommendation to substitute the word "ignite" for the word "detonate" in the proposed ordinance, will be included in the materials presented to the Board of Port Commissioners for their consideration when they make their decision whether or not to adopt the proposed ordinance.

Response to Comment J-31

This comment states the author's general opinions regarding the regulation of fireworks display event, which involve policy issues and considerations, not an environmental issue or concern regarding the adequacy of completeness of the Draft EIR. Accordingly, this comment will be included in the materials presented to the Board of Port Commissioners for their consideration when they make their decision whether or not to adopt the proposed ordinance.

Response to Comment J-32

This comment asks the Board of Port Commissioners to seriously consider the effect of the proposed ordinance on the existing regulatory scheme and the effects the proposed ordinance could have on its own tenants and cities, and to take great care not to encroach on the regulatory authorities and jurisdiction that have been in place for a very long time. This comment raises policy issues and considerations, not an environmental issue or concern regarding the adequacy of completeness of the Draft EIR. Accordingly, this comment will be included in the materials presented to the Board of Port Commissioners for their consideration when they make their decision whether or not to adopt the proposed ordinance.

Chapter MMRP
Mitigation Monitoring and Reporting Program

MMRP.1 Purpose

The purpose of this Mitigation Monitoring and Reporting Program (MMRP) is to ensure that the San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events project implements mitigation measures for significant environmental effects, as required by the Final Environmental Impact Report (EIR) for the proposed project. Those mitigation measures have been integrated into this MMRP. The MMRP provides a mechanism for monitoring the mitigation measures in compliance with the EIR, and general guidelines for the use and implementation of the monitoring program are described below.

This MMRP is written in accordance with California Public Resources Code 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. California Public Resources Code Section 21081.6 requires the Lead Agency, for each project that is subject to CEQA, to adopt a reporting or monitoring program for changes made to the project, or conditions of approval, adopted in order to mitigate or avoid significant effects on the environment and to monitor performance of the mitigation measures included in any environmental document to ensure that implementation takes place. The San Diego Unified Port District (District) is the designated Lead Agency for the MMRP. The Lead Agency is responsible for review of all monitoring reports, enforcement actions, and document disposition. The Lead Agency will rely on information provided by a monitor as accurate and up to date and will field check mitigation measure status as required.

The District may modify how it will implement a mitigation measure, as long as the alternative means of implementing the mitigation still achieve the same or greater impact reduction. Copies of the measures shall be distributed to the participants of the monitoring effort to ensure that all parties involved have a clear understanding of the adopted mitigation measures and monitoring requirements.

MMRP.2 Format

Mitigation measures applicable to the proposed project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, and/or requiring supplemental structural controls. Within this document, approval mitigation measures are organized and referenced by subject category. Each of the mitigation measures has a numerical reference. The following items are identified for each mitigation measure.

- Mitigation Language and Numbering
- Mitigation Timing
- Methods for Monitoring and Reporting
- Responsible Parties

MMRP.2.1 Mitigation Language and Numbering

Provides the language of the mitigation measure in its entirety along with a corresponding number for identification.

MMRP.2.2 Mitigation Timing

The mitigation measures required for the project will be implemented at various times, including prior to the issuance of a fireworks permit, prior to each fireworks display event, during each fireworks display event, or following each fireworks display event.

MMRP.2.3 Methods for Monitoring and Reporting

The MMRP includes the procedures for documenting and reporting mitigation implementation efforts. The party responsible for implementing each of the mitigation measures varies. The District is responsible for all mitigation monitoring and reporting.

MMRP.2.4 Responsible Parties

For each mitigation measure, the party responsible for implementation, monitoring and reporting, and verifying successful completion of the mitigation measure is identified.

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measures	Timing and Methods	Responsible Parties
Air Quality and Health Risk		
MM-AQ-1: Limit the Size of Overlapping New Fireworks Display Events in Compliance with the Conditions of the Proposed Ordinance. The fireworks organizer and operator are required to comply with the following air quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (c) Size of Fireworks Display Events. D. National City Fourth of July, not to exceed 400 pounds of fireworks E. Chula Vista Fourth of July, not to exceed 400 pounds of fireworks	**Timing:** Prior to issuance of a fireworks permit **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** Fireworks Organizer and Fireworks Operator **Monitoring and Reporting:** Fireworks Organizer, Fireworks Operator **Verification:** District
MM-AQ-2: Implementation of Air Quality-Related Conditions of the Proposed Ordinance. The fireworks organizer and operator are required to comply with the following air quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use. (d) Fireworks Chemical Composition and Packaging. 1. Chemical Composition. B. All fireworks display events shall use alternative fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants	**Timing:** Prior to and during each fireworks display event **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** Fireworks Organizer and Fireworks Operator **Monitoring and Reporting:** Fireworks Organizer, Fireworks Operator **Verification:** District

Mitigation Measures	Timing and Methods	Responsible Parties
that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such alternative fireworks are not commercially available.		
Biological Resources		
MM-BIO-1: Implementation of Biological Resources–Related Conditions of the Proposed Ordinance for Direct Impacts. The fireworks organizer and operator are required to comply with the following biological resources-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (d) Fireworks Chemical Composition and Packaging. 2. Packaging. A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all fireworks to be used in the event. B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited. (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use. 2. Fireworks shall be brought to the barge and loaded in their California Department of Transportation (DOT)-approved	**Timing:** Prior to issuance of a fireworks permit, prior to, during, and following each fireworks display event **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** Fireworks Organizer and Fireworks Operator **Monitoring and Reporting:** Fireworks Organizer, Fireworks Operator **Verification:** District

Mitigation Measures	Timing and Methods	Responsible Parties
shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other wrapping, shall be properly disposed of in trash receptacles as the fireworks display event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the fireworks display event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the fireworks launch area to contain debris.		
3. Wires from the electric match placed in the Fireworks fuse shall be secured to avoid strain (such as wrapped around nails that are on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event.		
4. Once the fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position. No loose material shall be allowed on the barges during the fireworks display event.		
5. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the fireworks display event, the fireworks operator shall pick up all loose material on the barge, including all trash and debris resulting from the discharge of the fireworks, to prevent it from being discharged into the water while the barge is underway.		
6. Upon return to the loading facility, the fireworks operator shall clean the barge of all fireworks related material and shall photograph and properly dispose of all fireworks trash and debris. Unexploded fireworks and related components shall be collected and disposed of by the fireworks operator in accordance with all applicable regulations. Fireworks operators shall photograph the barge prior to and after cleaning.		

Mitigation Measures	Timing and Methods	Responsible Parties
7. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the fireworks organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent fireworks using hand held fishnets, pool skimmers, or other similar equipment.		
8. The morning after the fireworks display event, the fireworks organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the fireworks detonation zone to remove fireworks trash and debris. The fireworks organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal.		
9. The morning after the fireworks display event, the fireworks organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with trash bags and a trash grabber. The fireworks organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal.		
10. Within ten (10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the weight of the fireworks trash and debris collected is less than fifty percent (50 percent) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront.		
(i) Compliance with San Diego Water Board General Permit.		
1. Prior to the Executive Director's issuance of a permit		

Mitigation Measures	Timing and Methods	Responsible Parties
pursuant to this article, the Applicant shall demonstrate that it has applied for coverage and has been enrolled under the San Diego Water Board General Permit. 2. The Applicant shall comply with all applicable terms, conditions and Best Management Practices required by the San Diego Water Board General Permit, which shall be incorporated into and considered in the terms, conditions and Best Management Practices of any permit issued by the Executive Director pursuant to this article. 3. The Applicant shall submit to the District copies of all applications, plans, reports and other documentation required by the San Diego Water Board General Permit, including without limitation the Notice of Intent, Fireworks Best Management Practices Plan, Public Fireworks Display Log and the Public Display of Fireworks Post Event Report, within the time required for the submission of such reports to the San Diego Water Board. (j) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater Management and Discharge Control), and the fire marshal of any city which has jurisdiction over all or any part of the activity allowed under said Permit. (k) Compliance with Laws: The Applicant shall comply with any and all applicable rules and regulations promulgated by the District, including without limitation the District Code, the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan, and with the laws, rules and regulations of the United States of America and the State of California, and of any department or agency thereof, and with the applicable ordinances, rules and regulations of any city which has jurisdiction over all or any part of the activity allowed under said Permit. The Applicant's failure to comply with any applicable law,		

Mitigation Measures	Timing and Methods	Responsible Parties
ordinance, rule or regulation shall be cause for immediate revocation of said permit and for the denial of applications for future Permits.		
MM-BIO-2: Implementation of Biological Resources–Related Conditions of the Proposed Ordinance for Indirect Impacts. The fireworks organizer and operator are required to comply with the following biological resources–related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (e) Protection of Species and Habitat. The following conditions shall apply to fireworks display events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies: 3. Security. For fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one-half mile of unprotected (i.e., unfenced) federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall provide a minimum of two professional security guards to direct persons away from and to discourage trespass into sensitive nesting areas or habitat during such displays. In addition, the fireworks organizer shall provide security patrols of the water area to enforce the existing restrictions on access to unauthorized areas during such fireworks display events in the South Bay. 4. Signage. For fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) that occur within one half-mile of nesting colonies or habitat areas for federally or state-listed species, the fireworks organizer, in cooperation with the District, shall post temporary signage along primary access points to sensitive nesting colonies and habitat areas to identify safe viewing locations, to educate visitors on locations of sensitive wildlife habitats, to prevent viewers from trespassing into sensitive areas and to encourage appropriate viewing behavior.	**Timing:** Prior to, during, and following each fireworks display event **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** District, Fireworks Organizer, Fireworks Operator **Monitoring and Reporting:** Fireworks Organizer, Fireworks Operator **Verification:** District

Mitigation Measures	Timing and Methods	Responsible Parties
5. Education. Beginning not less than seven (7) days before fireworks display events with public viewing areas (i.e., parks, promenades, publicly accessible piers, and other similar facilities) located within one-half mile of federally or state-listed nesting colonies or habitat areas, the fireworks organizer shall implement a public education program using daily announcements on social media, press releases, and information posted at parks, boat launch facilities, marinas, yacht clubs and other viewing locations, to educate potential viewers regarding appropriate viewing and boat docking areas, to discourage trespass into sensitive wildlife habitat, and to remind viewers of appropriate viewing behavior in and near sensitive nesting colonies and habitat areas (e.g., appropriate disposal of trash, prevention of illegal fireworks, and safe boating procedures). (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 11. For all Fourth of July fireworks display events and for Non-Fourth of July fireworks display events which are advertised to the public, the fireworks organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event.		
MM-BIO-3: Implementation of the Biological Resources-Related Conditions of the Proposed Ordinance for Direct Eelgrass Impacts. The fireworks organizer and operator are required to comply with the following biological resources-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (g) Eelgrass Avoidance and Mitigation. For fireworks display events with launching sites located in shallow water with the potential for eelgrass to occur, fireworks barges shall be held in place by tugboats and shall not require temporary moorings. To the extent practicable, barges shall be located in unvegetated deep water channels outside of eelgrass beds. Pre-event and post-event eelgrass surveys shall be completed to identify the distribution of	**Timing:** Prior to, during, and following each fireworks display event **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** Fireworks Organizer, Fireworks Operator **Monitoring and Reporting:** Qualified agent, approved by the District, Fireworks Organizer, Fireworks Operator **Verification:** District

Mitigation Measures	Timing and Methods	Responsible Parties
eelgrass to assist tug operators and to assess any impacts to eelgrass that may occur. Through a pre-event training, tug operators shall be made aware of shallow eelgrass and instructed not to use high thrust in the vicinity of eelgrass beds. If an unanticipated impact to eelgrass occurs, this impact shall be mitigated by replacing the eelgrass at a ratio determined by the California Eelgrass Mitigation Policy.		
MM-BIO-4: Fireworks Biological Monitoring Plan. Not less than 30 days before any fireworks display event in the South Bay that would occur within 1 mile of sensitive avian nesting colonies, the fireworks organizer shall submit to the District an Avian Species Nesting Colony Monitoring Plan (Monitoring Plan). The Monitoring Plan shall be prepared by a qualified biologist and approved by the District in coordination with USFWS and CDFW. A qualified biologist is a person who, by reason of his or her knowledge of the natural sciences and the principles of wildlife biology, acquired by education and experience. The Monitoring Plan shall identify the monitoring protocol that will be used to assess the effectiveness of mitigation measures **MM-BIO-1** and **MM-BIO-2** and shall, at a minimum, include the following: 1. A literature review which refines the proposed methodology. 2. A list of target species identified for each individual event based on the season of the event, proximity of the event to nesting colonies, sensitivity of species, and capacity for the fireworks display event to cause species disturbance/effects. 3. Species behavior and noise data shall be collected at least 1 hour prior to, during, and 1 hour after the fireworks display event. 4. Documentation of the following data: a. Site location, name of monitor, date and time of observations b. Number of adults, nests, and chicks observed within one-half mile of spectator viewing areas c. Sources of stressors (e.g., light, noise, trespass, debris) d. Unauthorized access within nesting colonies e. Counts of illegal pyrotechnics Within 30 days following the completion of the fireworks display event, the qualified biologist shall prepare a Monitoring Report for submittal to the District that details the findings of the monitoring	**Timing:** A minimum of 30 days prior to, during, and within 30 days following each fireworks display event **Method:** Prepare a Monitoring Plan for fireworks display events in the South Bay that would occur within 1 mile of sensitive nesting colonies, conduct biological monitoring, and prepare a Monitoring Report documenting the results of the biological monitoring.	**Implementation:** Fireworks Organizer **Monitoring and Reporting:** Qualified agent, approved by the District, Fireworks Organizer **Verification:** District

Mitigation Measures	Timing and Methods	Responsible Parties
results. This report shall include background/introduction, methods, results, discussion, and recommendations sections. The District shall provide a copy of the report to the USFWS and CDFW and shall coordinate with these agencies regarding the results and recommendations of the report. Based on the review of the reports for two consecutive years of monitoring, the District, in coordination with these agencies, shall determine whether continued monitoring is required.		
Hydrology and Water Quality		
MM-WQ-1: Implementation of Water Quality–Related Conditions of the Proposed Ordinance for Fireworks Debris. The fireworks organizer and operator are required to comply with the following water quality-related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (d) Fireworks Chemical Composition and Packaging. 1. Chemical Composition. B. All fireworks display events shall use alternative fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant waste loading to surface waters, unless the Applicant establishes in writing and to the satisfaction of the Executive Director that such alternative fireworks are not commercially available. 2. Packaging. A. Prior to commencement of a fireworks display event, the fireworks operator shall remove and properly dispose of all packaging, wrapping and labels (excluding labels mandated by State or Federal laws) from all fireworks to be used in the event. B. Fireworks that include a plastic outer casing or non-biodegradable inner components that make up more than five (5) percent of the mass of the shell or device are prohibited. (f) Best Management Practices (BMPs). Fireworks display events shall implement the following BMPs for fireworks display event	**Timing:** Prior to issuance of a fireworks permit, prior to, during, and following each fireworks display event **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** Fireworks Organizer and Fireworks Operator **Monitoring and Reporting:** Fireworks Organizer, Fireworks Operator **Verification:** District

Mitigation Measures	Timing and Methods	Responsible Parties
preparation, discharge and clean-up: 1. Fireworks display events on barges shall be set up at a loading facility in accordance with the requirements and under the supervision of the municipal fire department with jurisdiction over the event. Barges shall be inspected for leaks and other potential safety issues. Idling time for delivery trucks and loading equipment shall not exceed three (3) minutes and all such trucks and equipment shall be shut down when not in use. 2. Fireworks shall be brought to the barge and loaded in their California Department of Transportation (DOT)-approved shipping cartons. Fireworks shall be encased in paper to prevent spillage of loose compounds. All packaging material and debris, including fuses, wires, shipping cartons and other wrapping, shall be properly disposed of in trash receptacles as the fireworks display event is set up. Unless prohibited by the municipal fire marshal with jurisdiction over the fireworks display event, barges shall be equipped with a fire-retardant debris barrier that extends six feet (6') in height, with openings no larger than ¼ inch, around the perimeter of the Fireworks launch area to contain debris. 3. Wires from the electric match placed in the fireworks fuse shall be secured to avoid strain (such as wrapped around nails that are on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event. 4. Once the fireworks are prepared for launch, all trash and debris shall be removed from the barge while it is at the loading facility and prior to the barge being moved into position. No loose material shall be allowed on the barges during the fireworks display event. 5. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the fireworks display event, the fireworks operator shall pick up all loose material on the barge,		

Mitigation Measures	Timing and Methods	Responsible Parties
including all trash and debris resulting from the discharge of the fireworks, to prevent it from being discharged into the water while the barge is underway. 6. Upon return to the loading facility, the fireworks operator shall clean the barge of all fireworks related material and shall photograph and properly dispose of all fireworks trash and debris. Unexploded fireworks and related components shall be collected and disposed of by the fireworks operator in accordance with all applicable regulations. Fireworks operators shall photograph the barge prior to and after cleaning. 7. Following the fireworks display event and upon expiration of any safety period required by the municipal fire marshal with jurisdiction over the event, the fireworks organizer shall provide cleanup crews and boats to conduct sweeps of the fireworks detonation zone to gather any floating debris from spent fireworks using hand held fishnets, pool skimmers, or other similar equipment. 8. The morning after the fireworks display event, the fireworks organizer shall conduct another sweep of the fireworks detonation zone and quays, piers and docks adjacent to the fireworks detonation zone to remove fireworks trash and debris. The fireworks organizer shall collect, bag, weigh and photograph all trash and debris collected prior to its disposal. 9. The morning after the fireworks display event, the fireworks organizer shall perform a cleanup of the shoreline using crews of not fewer than five persons per barge on the shoreline adjacent to each barge location. Each crew member shall be equipped with trash bags and a trash grabber. The fireworks organizer shall collect, bag, weigh, and photograph all trash and debris collected prior to its disposal. 10. Within ten (10) business days after a fireworks display event, the fireworks organizer shall provide the Executive Director with the photographs and written evidence of the weight of the Fireworks trash and debris collected pursuant to subdivisions (5) through (9) above. If the dry weight of the fireworks trash and debris collected is less than fifty percent		

Mitigation Measures	Timing and Methods	Responsible Parties
(50 percent) of the net weight of fireworks launched during the fireworks display event, the fireworks organizer shall offset the remaining amount by providing a crew of not fewer than two (2) persons for each barge or other launch site used in the fireworks display event to participate in the next scheduled "Operation Clean Sweep" or other District-sponsored clean-up event prior to the end of the calendar year to recover trash and debris from San Diego Bay and/or the Imperial Beach Oceanfront.		
(i) Compliance with San Diego Water Board General Permit. 1. Prior to the Executive Director's issuance of a permit pursuant to this article, the Applicant shall demonstrate that it has applied for coverage and has been enrolled under the San Diego Water Board General Permit. 2. The Applicant shall comply with all applicable terms, conditions and Best Management Practices required by the San Diego Water Board General Permit, which shall be incorporated into and considered in the terms, conditions and Best Management Practices of any permit issued by the Executive Director pursuant to this article. 3. The Applicant shall submit to the District copies of all applications, plans, reports and other documentation required by the San Diego Water Board General Permit, including without limitation the Notice of Intent, Fireworks Best Management Practices Plan, Public Fireworks Display Log and the Public Display of Fireworks Post Event Report, within the time required for the submission of such reports to the San Diego Water Board.		
(i) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater Management and Discharge Control), and the fire marshal of any city which has jurisdiction over all or any part of		

Mitigation Measures	Timing and Methods	Responsible Parties
the activity allowed under said Permit. (j) Compliance with Laws: The Applicant shall comply with any and all applicable rules and regulations promulgated by the District, including without limitation the District Code, the Chula Vista Bayfront Master Plan Settlement Agreement and Natural Resources Management Plan, and with the laws, rules and regulations of the United States of America and the State of California, and of any department or agency thereof, and with the applicable ordinances, rules and regulations of any city which has jurisdiction over all or any part of the activity allowed under said Permit. The Applicant's failure to comply with any applicable law, ordinance, rule or regulation shall be cause for immediate revocation of said permit and for the denial of applications for future Permits.		
MM-WQ-2: Implementation of Water Quality–Related Conditions of the Proposed Ordinance for Human-Generated Trash and Litter. The fireworks organizer and operator are required to comply with the following water quality–related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (f) Best Management Practices. Fireworks display events shall implement the following BMPs for fireworks display event preparation, discharge and clean-up: 11. For all Fourth of July fireworks display events and for Non-Fourth of July fireworks display events which are advertised to the public, the fireworks organizer shall double the number of trash receptacles at major viewing areas prior to each fireworks display event; trashcans shall be emptied and parks and viewing areas shall be cleaned following the event.	**Timing:** Prior to and following each fireworks display event **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** Fireworks Organizer and Fireworks Operator **Monitoring and Reporting:** Fireworks Organizer, Fireworks Operator **Verification:** District
Noise and Vibration		
MM-NOI-1: Implementation of Noise-Related Conditions of the Proposed Ordinance. The fireworks organizer and operator are required to comply with the following noise related conditions of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (e) Protection of Sensitive Species and Habitat. The following	**Timing:** During each fireworks display event **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** Fireworks Organizer and Fireworks Operator **Monitoring and Reporting:** Fireworks Organizer, Fireworks

Mitigation Measures	Timing and Methods	Responsible Parties
conditions shall apply to Fireworks Display Events that occur between February 15 and September 15 (i.e., avian breeding season) and are located less than one (1) mile from any federally or state-listed avian species nesting colonies: 1. Location. Fireworks display events shall be located not less than one (1) mile from any federally or state-listed avian species nesting colony unless the maximum size of shells used in the event is limited to eight (8) inches. 2. Salutes. Fireworks display events shall not use concussion type, non-color shells such as "salutes" or "reports" during the initial twenty-five percent (25 percent) of the duration of any display (e.g., within the first 5 minutes of a 20-minute display).		Operator **Verification:** District
Transportation, Circulation, and Parking		
MM-TRA-1: Implementation of the Transportation-Related Conditions of the Proposed Ordinance. The fireworks organizer is required to comply with the following transportation-related condition of the proposed ordinance. Section X.07 – Permits – Conditions of Approval (h) Event Transportation and Parking Management Plans. For all Fourth of July fireworks display events and for non-Fourth of July fireworks display events that are advertised to the public, the fireworks organizer shall prepare and submit an event transportation and parking management plan to the Executive Director for approval as part of the Application, which shall be designed to ensure safe and convenient access to public viewing areas while limiting conflicts between transportation modes and reducing impacts on surrounding transportation facilities to the maximum extent feasible. The Event Transportation and Parking Management Plan shall take into account anticipated attendance, existing transportation and parking facilities, and other concurrent public events in the surrounding areas, and shall include but is not limited to the following: 1. Transportation management strategies, including but not limited to a public awareness program, traffic management and enforcement, incident management, and public transit and alternative modes of transportation management, which	**Timing:** Prior to, during, and following each fireworks display event **Method:** Implement conditions of approval per Fireworks Display Ordinance	**Implementation:** Fireworks Organizer **Monitoring and Reporting:** Fireworks Organizer **Verification:** District

Mitigation Measures	Timing and Methods	Responsible Parties
shall be implemented for the fireworks display event; and 2. Parking management strategies, including but not limited to a public awareness program, coordination with parking vendors, offsite parking arrangements, designated areas for taxi and rideshare pick-up/drop-off, promotional programs with rideshare vendors, joint event ticketing programs with public transit agencies, and expanded shuttle operations. (i) Compliance with Other Required Permits: Prior to the Executive Director's issuance of a Permit pursuant to this article, the Applicant shall demonstrate that it has obtained and shall comply with all other permits and approvals required by federal, state, and local laws and regulations including, without limitation, such permits and approvals as are required by the United States Coast Guard, California Coastal Act, the District Code, including Article 10 (Stormwater Management and Discharge Control), and the fire marshal of any city that has jurisdiction over all or any part of the activity allowed under said Permit.		