

**ENVIRONMENTAL CHECKLIST FORM  
CITY OF HUNTINGTON BEACH  
PLANNING DEPARTMENT  
ENVIRONMENTAL ASSESSMENT NO. 2008-010**

- 1. PROJECT TITLE:** Huntington Harbour Bulkhead Repair
- 2. LEAD AGENCY:** City of Huntington Beach  
2000 Main Street  
Huntington Beach, CA 92648
- Contact:** Jennifer Villasenor, Associate Planner  
**Phone:** (714) 374-1661  
**Email:** [jvillasenor@surfcity-hb.org](mailto:jvillasenor@surfcity-hb.org)
- 3. PROJECT LOCATION:** 30 Properties in Huntington Harbour, City of Huntington Beach (*Refer to Attachment No. 1*)
- 4. PROJECT PROPONENT:** Natalie Chan, Tetra Tech, Inc.  
401 E. Ocean Blvd., Suite 420  
Long Beach, CA 90814  
(562) 495-0495
- 5. GENERAL PLAN DESIGNATION:** RL-7 (Residential Low Density )
- 6. ZONING:** RL-CZ (Residential Low Density – Coastal Zone)
- 7. PROJECT DESCRIPTION:** Tetra Tech, Inc. is currently working with 30 homeowners in Huntington Harbour to repair bulkheads. The main purpose of the bulkhead repair project is to restore the foundation of the bulkhead and provide toe protection to inhibit any future scouring or erosion, which may jeopardize the bulkhead's structural integrity. The bulkheads in Huntington Harbour are made of reinforced cast-in-place concrete and untreated timber piles supporting the footings (refer to Attachment No. 4). Due to the time span of design and construction, there are slight differences in bulkhead design among the properties. Some sections of the bulkhead have a cutoff wall below the bulkhead and some do not have a cutoff wall.
- Over the years, erosion due to localized tidal currents, recreational boat use and periodic maintenance dredging activities in the area have undermined the bulkhead, damaged the support piles and threatened the overall structural integrity. Properties located on the main channel show the greatest erosion levels.

The repair project would consist of three phases: pile repair, placement of sheet piles and installation of slope protection, although not all phases would apply to all properties.

### ***Phase 1 – Pile Repair***

During the first phase, if a timber pile is found to be deteriorated, it would be exposed by removing the surrounding material by hand to allow a thorough inspection. A determination would then be made on how much of the pile, if any, would be removed. If the pile requires replacement, a steel jack would be installed and jacked to the original design load. Once the damaged piles have been repaired, PVC plumbing would be installed and extended to critical areas such as the deepest voids in the footing and around the support jack socket to ensure that concrete and pressure grout completely cover all voids that may promote corrosion or degradation. This work would be conducted underwater with one diver.

It is anticipated that eight of the 30 properties would require pile inspection. However, the actual number of properties requiring pile repair will likely be minimal, if any. Several bulkheads will need further inspection once sections of the cutoff wall are removed to facilitate access to piles. Duration of pile repair is expected to be approximately seven working days per property. This phase will require up to 56 working days.

### ***Phase 2 – Sheet Pile Placement***

The second phase of repair consists of placing a PVC sheet pile retaining wall in front of the undermined sections of the bulkhead. Sections of sheet pile will be placed by hand (by one or two divers) at a maximum distance of 1'-7" away from the wall and by driving the sheet piles to their final elevation using a pneumatic vibratory hammer. No turbidity would be generated during this installation. If a wale is required to support the sheet piles, a 1-inch hole would be drilled into the bulkhead with a pneumatic drill and a ¾-inch diameter threaded rod with expansion anchor installed to attach the wale reinforced sheet pile to the bulkhead. After the sheet piles are installed, concrete and high pressure grout would be pumped via PVC tubes to the top of footing in order to fill all voids.

Dive inspections of the bulkheads have been conducted at all of the subject properties and have revealed that a total of 11 of 30 properties would require the second phase of installing sheet pile. The installation of sheet pile is estimated to take an average of three days per property; a total of 33 working days will be required to complete this phase.

### ***Phase 3 – Installation of Slope Protection***

The third phase of the project would apply to all 30 properties. This final phase would consist of installing a slope protection blanket using a small barge-mounted crane (40' X 50'). The slope protection material would be staged on another barge (40' X 60') from where it would be picked up and placed at the toe of the seawall to the specified grades. The slope protection blanket would consist of coarse material (over geotextile filter fabric) and be placed seaward of the seawall to provide scouring protection. This coarse material would consist of a standard size distribution referred to as 8-inch minus or "quarry waste", typically used for this type of application. This material contains a broad range of stone sizes ranging from sand-like particles to a maximum diameter of eight inches to prevent migration or accretion to other areas. The horizontal extent of the coarse material blanket will vary depending on the existing mudline elevations; however, it would not be expected to exceed eleven feet and would average six feet. The coarse material would be placed by mechanical means (i.e., using the bucket of an excavator or using a small clamshell type bucket, depending on the source of the material).

The installation of slope protection will not impact eelgrass (*Zostera marina*) at any of the 30 properties. At sites where eelgrass occurs outside of the project footprint, barge anchor placement

would be implemented in such a way as to avoid the eelgrass. Navigational access would be maintained throughout the progress of work and turbidity would be monitored and mitigated by installing a sheet curtain if necessary. The installation of rock slope protection takes a single work crew one day per property. The third phase is expected to take 30 working days.

All three phases will be staggered and performed concurrently at certain stages to minimize total project duration. All work will be conducted Monday through Friday from 7:00 a.m. to 3:30 p.m. No work is proposed to be conducted on Saturdays, Sundays or federal holidays. The total duration of the project is estimated to take 120 working days.

- 8. SURROUNDING LAND USES AND SETTING:** Huntington Harbour is a man-made residential marina complex that was dredged out of mudflats and developed in the 1960s. The project involves the bulkhead repair of 30 single-family properties with channel frontage located within Huntington Harbour and its man-made islands. The proposed project area includes homes on Davenport Island, Trinidad Island, Gilbert Island, Humboldt Island, Edgewater Lane and Morning Star Drive. (refer to Attachment No. 1) Surrounding land uses are primarily single-family residences with docks and boat slips within the waterway.
  
- 9. OTHER PREVIOUS RELATED ENVIRONMENTAL DOCUMENTATION:** Humboldt Island and Trinidad Island Seawall (Bulkhead) Repairs, Environmental Assessment No. 00-05 (September, 2000; Addendum – September, 2001)
  
- 10. OTHER AGENCIES WHOSE APPROVAL IS REQUIRED (AND PERMITS NEEDED)** (i.e. permits, financing approval, or participating agreement):
  - ◆ California Coastal Commission
  - ◆ California Regional Water Quality Control Board
  - ◆ U.S. Army Corps of Engineers
  - ◆ California State Lands Commission

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or is “Potentially Significant Unless Mitigated,” as indicated by the checklist on the following pages.

- Land Use / Planning
- Transportation / Traffic
- Public Services
- Population / Housing
- Biological Resources
- Utilities / Service Systems
- Geology / Soils
- Mineral Resources
- Aesthetics
- Hydrology / Water Quality
- Hazards and Hazardous Materials
- Cultural Resources
- Air Quality
- Noise
- Recreation
- Agriculture Resources
- Mandatory Findings of Significance

**DETERMINATION**

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

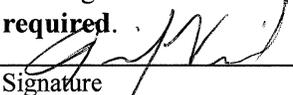
I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. **A MITIGATED NEGATIVE DECLARATION** will be prepared.

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

I find that the proposed project **MAY** have a “potentially significant impact” or a “potentially significant unless mitigated impact” on the environment, but at least one impact (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, **nothing further is required.**

  
\_\_\_\_\_  
Signature

Jennifer Villaseñor  
\_\_\_\_\_  
Printed Name

7-28-08  
\_\_\_\_\_  
Date

Associate Planner  
\_\_\_\_\_  
Title

**EVALUATION OF ENVIRONMENTAL IMPACTS:**

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project. A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards.
2. All answers must take account of the whole action involved. Answers should address off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. “Potentially Significant Impact” is appropriate, if an effect is significant or potentially significant, or if the lead agency lacks information to make a finding of insignificance. If there are one or more “Potentially Significant Impact” entries when the determination is made, preparation of an Environmental Impact Report is warranted.
4. “Potentially Significant Impact Unless Mitigated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVIII, “Earlier Analyses,” may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). Earlier analyses are discussed in Section XVIII at the end of the checklist.
6. References to information sources for potential impacts (e.g., general plans, zoning ordinances) have been incorporated into the checklist. A source list has been provided in Section XVIII. Other sources used or individuals contacted have been cited in the respective discussions.
7. The following checklist has been formatted after Appendix G of Chapter 3, Title 14, California Code of Regulations, but has been augmented to reflect the City of Huntington Beach’s requirements.

*SAMPLE QUESTION:*

<i>ISSUES (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<p><i>Would the proposal result in or expose people to potential impacts involving:</i></p> <p><i>Landslides? (Sources: 1, 6)</i></p> <p><i>Discussion: The attached source list explains that 1 is the Huntington Beach General Plan and 6 is a topographical map of the area which show that the area is located in a flat area. (Note: This response probably would not require further explanation).</i></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**I. LAND USE AND PLANNING. Would the project:**

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (Sources: #1, 2, & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

***Discussion:***

The proposed project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. The project will not result in new land uses or changes to existing land use and zoning designations. Therefore, the project will not conflict with any land use plan in the City of Huntington Beach, including the Municipal Code, the Zoning and Subdivision Ordinance and the General Plan, specifically, the Coastal Element Land Use Plan. The project site is located within the Coastal Zone and will be required to obtain a coastal development permit from the California Coastal Commission prior to any repair activities.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Conflict with any applicable habitat conservation plan or natural community conservation plan? (Sources: #1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

***Discussion:***

The project proposes to repair the structural integrity of the bulkhead at 30 single-family residential properties within Huntington Harbour that has been compromised due to erosion over time. The project site is located in Huntington Harbour, a man-made residential marina complex, and all improvements will occur entirely underwater. The project will not conflict with any habitat conservation plan or natural community conservation plan of the City of Huntington Beach, as there are no such plans adopted for the area. No impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Physically divide an established community? (Sources: # 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

***Discussion:***

The proposed project will not disrupt or physically divide an established community. The project involves bulkhead repair of 30 properties within Huntington Harbour and does not consist of the construction of any roads, road widening, rail lines, bridges or other features that would physically divide a community. No impacts would occur.

**II. POPULATION AND HOUSING. Would the project:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extensions of roads or other infrastructure)? (Sources: #1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Discussion:**

See discussion under item c.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (Sources: #1, 3, 4, & 5) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item c.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (Sources: #1, 3, 4, & 5) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion a – c:**

The project will not be growth inducing through construction or extension of roads or other infrastructure. The project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour and will not result in any new uses that would induce substantial growth in the area. The project will not displace any people or existing housing and will not necessitate the construction of replacement housing elsewhere. No impacts would occur.

**III. GEOLOGY AND SOILS.** Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Sources: #1 & 6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

See discussion under item e.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| ii) Strong seismic ground shaking? (Sources: #1 & 6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

See discussion under item e.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| iii) Seismic-related ground failure, including liquefaction? (Sources: #1, 6, & 13) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Discussion:**

See discussion under item e.

- |                               |                          |                          |                          |                                     |
|-------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| iv) Landslides? (Sources: #1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|-------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b) Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill? (Sources: #1 & 6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

See discussion under item e.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (Sources: #1 & 6) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

See discussion under item e.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Sources: #1 & 6) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater (Sources: #4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion a – e:**

Southern California is a seismically active region and a portion of the Newport-Inglewood fault traverses through Huntington Harbour. Based upon the City’s General Plan and Geotechnical Inputs Study, the project site is not located within an area of expansive soil. The General Plan Environmental Hazards Element shows that Huntington Harbour is an area with low to no potential for unstable slope areas, but is an area with very high potential for liquefaction.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant	Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

The project proposes to repair the structural integrity of the bulkhead at 30 single-family residential properties within Huntington Harbour that has been compromised due to erosion over time. No new structures or uses are proposed and all improvements will be entirely underwater. The project does not involve development that would necessitate the construction of alternative waste water disposal systems. The proposed project does not propose changes in topography and will not require any excavation work. The project will result in minimal fill during slope protection activities, which will improve stability of the bulkhead and actually reduce potential for future erosion. In addition, potential impacts from a seismic event are greater without implementation of the proposed project. Based on a review of the original design criteria, engineering analyses, structural calculations, field observations and regional seismic studies, the bulkhead will likely fail in the event of seismic activity if it is not repaired. The proposed project will decrease potential impacts to the bulkhead at existing properties associated with seismic events and geologic conditions as a result of seismic activity. Less than significant impacts would occur.

**IV. HYDROLOGY AND WATER QUALITY.** Would the project:

- a) Violate any water quality standards or waste discharge requirements? (Sources: #1 & 4)

***Discussion:***

The project will not produce any waste discharge that would violate water quality standards as no new structures or uses are proposed. During construction, a general degradation of water quality will occur when bottom sediments are disturbed and fine particulates are suspended into the water column. The particulates could cause a short-term turbidity plume that would dissipate and clear with tidal activity. Turbidity creates a murky condition in the water caused by the suspended particulates that absorb heat from the sunlight creating warmer waters. The suspended particulates also scatter the sunlight decreasing the photosynthetic activity of plants and algae. Impacts from turbidity can lead to a reduction in the concentration of oxygen in the water, which could inhibit growth of submerged aquatic plants and, in turn, affect the survival of other species dependent on those plants. The placement of filter fabric over the sediment before slope protection work occurs will greatly reduce the likelihood of significant turbidity. Even though, based on the scope of work and observation of similar projects, a less than significant increase in turbidity is anticipated, turbidity will be visually monitored during project implementation and a silt curtain will be installed to contain the suspended sediments if necessary. Use of a silt curtain will remain in place until the sediments settle and turbidity returns to normal. In cases where turbidity does not occur outside of the immediate work area and a silt curtain is not used, any localized turbidity will likely dissipate within one hour due to tidal flow. The following mitigation measures are proposed to prevent and control turbidity:

**HYDRO-1:** During all phases of the project, Best Management Practices (BMPs) will be implemented to prevent and control turbidity. BMPs may include the installation of a silt curtain.

**HYDRO-2:** If turbidity is observed at a distance of 100 feet or greater from the actual work site, either the work will be stopped until the water returns to normal or, if deemed necessary, a silt curtain will be installed until turbidity returns to normal.

Furthermore, the project will be required to obtain a 401 Water Quality Certification from the Santa Ana Regional Water Quality Control Board.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted? (Sources: #1 & 4 )

**Discussion:**

The proposed project does not involve development of new structures or uses that would create additional water demand such that it would substantially deplete groundwater supplies. No impacts would occur.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site? (Sources: #1, 4 & 16)

**Discussion:**

See discussion under item e.

- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site? (Sources: #1, 4 & 16)

**Discussion:**

See discussion under item e.

- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Sources: #4, 16 & 17)

**Discussion c – e:**

The project proposes to repair the structural integrity of the bulkhead at 30 single-family residential properties within Huntington Harbour that has been compromised due to erosion over time. The project will not alter the existing drainage pattern of the channel. The project would alter flow of water due to displacement from the slope protection work; this effect would be minimal and the slope protection will be placed in such a way that the flow of water will not be redirected or impeded. Weep holes in the bulkhead allow for flow of water between the landward and seaward sides of the bulkhead. The weep holes are located above the height of the

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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proposed slope protection and/or sheet pile and will not be affected by the project. All improvements will occur entirely underwater in the channel. Since the work will be conducted underwater, the project will not result in erosion or flooding due to surface runoff nor will it create additional sources of polluted runoff. No impacts would occur.

- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| f) Otherwise substantially degrade water quality?<br>(Sources: #4, 16 &17) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|

**Discussion:**  
See discussion under item a.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Sources: #4, 16 &17) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**  
See discussion under item i.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? (Sources: #4, 16 &17) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**  
See discussion under item i.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? (Sources: #4, 7 & 16) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion g – i:**  
The subject properties are located within Flood Insurance Rate Map (FIRM) Zone X, which is not subject to Federal Flood Development requirements and is outside the 100-year flood hazard area. The project does not propose development of new housing or uses that would expose people and structures to the risks of flooding. In addition, flood risks as a result of failure of a levee or dam are less than the risks associated with the existing deteriorating bulkhead. If the repair project is not completed, based on a review of the original design criteria, engineering analyses, structural calculations, field observations and regional seismic studies, the bulkhead will likely fail under seismic conditions. Even without a seismic event, under existing conditions, the seawall will eventually fail as piles deteriorate. This potential catastrophic failure could result in loss of property and/or life. The proposed project will decrease the potential for flooding on the 30 subject homes in Huntington Harbour.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow? (Sources: #1, 4 & 16)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Discussion:</b> According to the General Plan Environmental Hazards Element, the project site is not subject to inundation by seiche, tsunami or mudflow and therefore no adverse impacts would occur.				
k) Potentially impact stormwater runoff from construction activities? (Sources: #4, 16 &17)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Discussion:</b> See discussion under item o.				
l) Potentially impact stormwater runoff from post-construction activities? (Sources: #4, 16 &17)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Discussion:</b> See discussion under item o.				
m) Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas? (Sources: #4, 16 & 17)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Discussion:</b> See discussion under item o.				
n) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters? (Sources: #4, 16 &17)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Discussion:</b> See discussion under item o.				
o) Create or contribute significant increases in the flow velocity or volume of stormwater runoff to cause environmental harm? (Sources: #4, 16 &17)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Discussion k – o:**

The project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. In addition, all improvements will occur underwater. The project will not involve vehicle washing, outdoor work areas, waste handling or hazardous materials storage or handling that could lead to the discharge of stormwater pollutants. The project does not propose new structures or uses that would create increases in stormwater discharge or runoff. No impacts would occur.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| p) Create or contribute significant increases in erosion of the project site or surrounding areas? (Sources: #4, 16 &17) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

The project does not involve excavation or grading and includes minimal fill activities for the purpose of erosion control and slope protection, which will span approximately 1,933 linear feet. The fill material is a type of quarry waste made up of coarse rock ranging in stone sizes from sand-like particles to a maximum diameter of eight inches. The volume of fill material will vary depending on the extent of erosion at each property.

Implementation of the proposed project would decrease the potential for erosion at the 30 properties in Huntington Harbour. Although the project would alter flow of water due to displacement from the slope protection work, this effect would be minimal and the slope protection will be placed in such a way that the flow of water will not be redirected or impeded. In addition, installation of slope protection will inhibit future scouring and erosion. Less than significant impacts are expected.

V. **AIR QUALITY.** The city has identified the significance criteria established by the applicable air quality management district as appropriate to make the following determinations. Would the project:

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Sources: #1, 4, 8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

See discussion under item e.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b) Expose sensitive receptors to substantial pollutant concentrations? (Sources: #1, 4, 8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

See discussion under item e.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| c) Create objectionable odors affecting a substantial number of people? (Sources: #1, 4, 8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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***Discussion:***

See discussion under item e.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| d) Conflict with or obstruct implementation of the applicable air quality plan? (Sources: #1, 4, 8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

***Discussion:***

See discussion under item e.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| e) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (Sources: #1, 4, 8) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
		Potentially Significant		

**Discussion a – e:**

The project proposes to repair the bulkhead at 30 existing single-family residential properties in Huntington Harbour. Long-term air quality impacts, which typically refer to stationary and mobile operational emission sources, would not be a result of the proposed project.

Short-term impacts are expected to occur from the temporary emission of equipment exhaust during the construction period. No new emission sources would be created and no construction equipment related emissions will be generated for work done during Phase One and Two as these phases are completed entirely underwater by divers. Minimal emissions are expected to be generated during Phase Three work from the use of two barges. The placement of slope protection will require use of a 40' X 50' crane barge and a 40' X 60' rock barge. The crane barge is typically equipped with two four-cylinder diesel engines. One engine is for transporting the crane barge to the work site and, once the barge is in place, it will be turned off. The second engine is for operating the crane during slope protection work. In addition, a small skip loader or "Bobcat" with a three- or four-cylinder diesel engine will be on the rock barge and operated as needed to manage the material and load the crane bucket. The rock barge itself has no engine and will be moored to the crane barge. Hours of operation of these engines will be between the hours of 7:00 a.m. and 3:30 p.m. for up to 30 working days. The amount of emissions would vary depending upon the activities conducted on a daily basis and the prevailing weather conditions. However, based on the scope and duration of the project, no air quality standard is anticipated to be exceeded.

The City of Huntington Beach is in a non-attainment area for Ozone, PM<sub>2.5</sub> and PM<sub>10</sub> pollutants. The project would contribute these pollutants to the area temporarily during project construction. However, since minimal emissions are anticipated such that no air quality standard is expected to be exceeded, the project would not result in a cumulatively considerable net increase of any non-attainment criteria pollutant. Furthermore, upon completion, the project will not generate measurable long-term air quality impacts and would return to pre-project conditions.

The construction area is adjacent to residential homes throughout most of the project area's length in the channel. However, emissions related to the barges are expected to be minor and residents will not be exposed to substantial pollutant concentrations. Since project activities will take place close to homes, there may be some gasoline, diesel or other similar odors detected by residents in association with the crane and/or other mechanical equipment during implementation of Phase Three. This phase is estimated to take one working day per property for each of the 30 properties. The exposure of any one resident to these odors would be short-term and would cease once construction activities have moved past their homes. Less than significant impacts would occur.

**VI. TRANSPORTATION/TRAFFIC.** Would the project:

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (e.g., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? (Sources: #1, 3, 4 & 10)
 

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Less Than Significant Impact	No Impact
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**Discussion:**

The project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. The project does not propose new structures or uses that would increase traffic on existing roadways. In addition, the project would be conducted by divers using water vehicles. Any increase in vehicle trips traveling to and from the project site by workers would be minimal and temporary for the duration of the construction. The longest phases of the project (Phase One and Two) would be conducted by no more than two divers. The barge crew utilized during Phase Three is typically made up of six crew members. At any given time, there will be six to 18 people on site (including dive crew, concrete crew and barge crew) during Phase Three, which would be completed within 30 working days.

The project staging area is located in an open area adjacent to the channel along Countess Drive (refer to Attachment No. 12). The proposed staging area was previously utilized as a staging area for a similar bulkhead repair project in Huntington Harbour in 2001/2002 and is subject to approval by the Department of Public Works. Workers will also use this area for construction parking. However, most of the on-site work is conducted using one pick-up truck that will be parked on the street in front of the individual properties. During concrete pouring activities, a concrete truck would be placed on the street in front of the individual properties and picked up by 3:30 p.m. each day. Accordingly, less than significant traffic impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? (Sources: #1, 3, 4 & 10) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. The project does not propose new structures or uses that would exceed level of service standards for roads and highways. The project will not increase recreational boat usage in the channel. No impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Source: #11) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. Although the City is located within the Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos, the project involves improvements under the water's surface and will not result in the development of new structures or buildings that would interfere with existing airspace or flight patterns. No impacts would occur.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses? (Source: #4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Discussion:**

The proposed project does not involve the development of new structures or uses and does not include reconfiguration of existing sites such that an increase in design hazards would result. All permanent changes will occur underwater and will not change the existing configuration of the channel. No impacts would occur.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| e) Result in inadequate emergency access? (Sources: #1, 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

The proposed project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour and will not result in any changes to existing land uses. No new structures or associated site improvements are proposed which would result in inadequate emergency access for police and fire. The Third Phase of the project requires utilization of two barges, however, navigational access would be maintained in the channel and would not disrupt access for the City's Marine Safety Division watercraft. Less than significant impacts would occur.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| f) Result in inadequate parking capacity? (Sources: #2, 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

The project does not propose new structures or uses that would require additional parking demand in Huntington Harbour resulting in inadequate parking capacity. During project construction, workers will park either at the staging area (refer to Attachment No. 12) or on the street in front of the individual property where the work is being conducted. No public parking lots or required coastal access parking will be utilized for the project. Most of the on-site work will be conducted using one pick-up truck that will be parked on the street in front of the individual properties. During concrete pouring activities, a concrete truck would be placed on the street in front of the individual properties and picked up by 3:30 p.m. each day. The proposed project will not impact on-street parking in the residential neighborhoods except in front of the property where the work is being done. Less than significant impacts would occur.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? (Sources: 1, 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The project does not propose development of new structures or uses that would bring additional residents/visitors to the project area. As such, the project will not conflict with policies supporting alternative transportation and no additional means of transportation to the project area would be required. No impacts would occur.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**VII. BIOLOGICAL RESOURCES.** Would the project:

- |   |                          |                                     |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Sources: #1, 18, 19, 20 & 21) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|

***Discussion:***

See discussion under item b.

- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? (Sources: #1, 18, 19, 20 & 21) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|

***Discussion a & b:***

Existing habitats in the project area include: unvegetated soft bottom sediments; sediments vegetated with Eelgrass (*Zostera marina*); the hardscape of the existing seawalls, pilings and docks; and the water column. The hard surface of the current bulkhead supports algae and invertebrates such as barnacles, limpets and bay mussels (*Mytilus edulis*). The water column contains plankton (phytoplankton and zooplankton) and fish species such as midshipman (*Porichthys* spp.) Unlike rocky shores, mudflats are far less observable without disturbing the habitat. However, recent underwater studies of the area resulted in identifying clam beds, approximately 15 feet from the existing bulkheads, in addition to wavy chione, California chione and common littlenecks, which most likely dominate the mudflats. No sensitive animal or plant species are likely to inhabit the project area.

Eelgrass habitat has been identified as a sensitive marine resource by the California Department of Fish and Game, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service. Eelgrass beds serve as refuges, foraging areas and nursery habitats for various coastal and bay invertebrates and fish species. Eelgrass grows from the low tide level to a maximum depth of approximately 20 feet.

Placement of the slope protection material will extend to a maximum of eleven feet and average six feet from the existing bulkhead. An eelgrass survey was conducted to determine the impact the proposed project would have on eelgrass habitat (refer to Attachment No. 10). The survey was conducted and prepared in compliance with the Southern California Eelgrass Mitigation Policy (Revision 11). The results of the survey indicate that no eelgrass was found within six feet of the bulkhead at any of the 30 subject properties. In addition, no eelgrass was found in the area adjacent to (within 12 meters) 29 of the 30 subject properties. An 11 square foot patch of eelgrass was found eight to eight and a half feet from the bulkhead at one property (3432 Venture Drive). To avoid impacting this patch of eelgrass, avoidance measures for barge anchor placement and other such design/construction methods in accordance with the Southern California Eelgrass Mitigation Policy (Revision 11) should be employed. The following mitigation measures for impacts to eelgrass shall be implemented:

**BIO-1:** An anchor management plan shall be prepared and implemented to avoid damage to eelgrass.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**BIO-2:** A pre-construction eelgrass survey shall be conducted to confirm that no impacts to eelgrass will occur within the area of construction as a result of the project.

**BIO-3:** Any reduction in acreage of eelgrass habitat shall be mitigated according to State and Federal environmental policies, which include the in-kind replacement of habitat.

The installation of the sheet pile during Phase Two will unavoidably impact 401.5 square feet of soft bottom habitat at 11 properties. Efforts to concurrently remove overspilled concrete up to three feet away from the footing along the bulkhead will reduce impacted soft bottom habitat area compared to the total sheet pile footprint area. Properties requiring sheet pile installation will be required to participate in the Soft Bottom Mitigation Plan (Plan) that was prepared and implemented for the Humboldt Island and Trinidad Island Bulkhead Repair Project in 2001 (refer to Attachment No. 8). The mitigation area consisted of 5,358 square feet of improvements to the Bolsa Chica Ecological Reserve. Although improvements were completed in 2002, 2,539 square feet of mitigation remain in a “mitigation bank” for future projects such as the proposed project (refer to Attachment No. 9). The Plan requires impacted area of soft bottom habitat to be mitigated at a 2:1 ratio. Therefore, 803 square feet must be mitigated for the proposed project. The following mitigation measure for impacts to soft bottom habitat shall be implemented:

**BIO-4:** The 11 properties requiring sheet pile installation, and impacting 401.5 square feet of soft bottom habitat, shall participate in the Soft Bottom Mitigation Plan, as approved by the California Coastal Commission under Coastal Development Permit 5-01-020. Confirmation from the California Department of Fish and Game (CDFG) shall be provided to ensure the availability of credits in the “mitigation bank” for the required square footage to be mitigated for the project. In the event that sufficient credit is unavailable, the applicant must mitigate the impacted area of soft bottom habitat at a 2:1 ratio. Any new mitigation plan shall be approved by the CDFG and the California Coastal Commission.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Sources: #1, 4 & 16) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The project does not contain any wetlands; therefore, no impacts would occur.

- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| d) Interfere substantially with the movement of any 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? (Sources: #1 & 21) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|

**Discussion:**

Eelgrass is a nursery site for fish species. See discussion under item b.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Sources: #1, 2, & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

There are no local policies applicable to the proposed project. However, the project will adhere to all regional, state and federal policies for impacts to biological resources as discussed under item b. Less than significant impacts would occur.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan for the area; therefore, no impacts are anticipated.

**VIII. MINERAL RESOURCES.** Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (Sources: #1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item b.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? (Sources: #1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion a & b:**

Although Huntington Beach has been the site of oil and gas extraction since the 1920s, oil production has decreased over the years, and today, oil producing wells are scattered throughout the City. The proposed project involves 30 existing single-family residential properties located in Huntington Harbour, a man-made residential marina complex constructed in the 1960s. The project site is not designated as a known or important mineral resource recovery site in the General Plan or any other land use plan. Therefore, the proposed project will not result in the loss of a known mineral resource. No impacts would occur.

**IX. HAZARDS AND HAZARDOUS MATERIALS.**

Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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disposal of hazardous materials? (Sources: #1 & 4)

**Discussion:**

See discussion under item c.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Sources #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item c.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school? (Sources: #1, 3, & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion a – c:**

The nearest school is approximately 0.3 miles from the project site. In addition, the project does not propose new structures or uses that will involve the transport, use or disposal of hazardous materials nor will the project result in hazardous impacts. The project does not provide on-site fuel dispensing, underground or outdoor storage of hazardous materials. No impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Sources: #1, 4, & 12) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

Huntington Harbour is not listed on the State’s Hazardous Waste and Substance Site List. No impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? (Sources: #11) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item f.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? (Sources: #11) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Discussion e & f:**

Huntington Harbour is not within the vicinity of a private airstrip. Although the City of Huntington Beach is included in the Orange County Airport Environs Land Use Plan due to the Los Alamitos Armed Forces Reserve Center, the project does not propose new structures or uses that would expose people to safety hazards. The project involves repair of the bulkhead at 30 existing single-family properties in Huntington Harbour; implementation of the proposed project will not change existing conditions as they pertain to safety hazards from flight activity. No impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Sources: #1, 3, & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

Although the proposed project will occur in the Huntington Harbour channel, the channel will be kept clear for emergency access watercraft/vehicles at all times. The proposed project will not impede access to the surrounding area nor will it impair implementation of or physically interfere with any adopted emergency response plan or evacuation plan. No impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (Sources: #1, 3, & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The project is located in Huntington Harbour, a man-made residential marina complex constructed in the 1960s and is not near any wild lands. No impacts would occur.

**X. NOISE.** Would the project result in:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Sources: #1, 3, 4, & 14) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

During construction of the proposed project, a temporary increase in ambient noise levels within the project area will occur due to construction equipment, specifically during Phase Three when use of the barges and a crane is required for the slope protection work. However, this phase would not exceed 30 working days and the overall project construction would not exceed 120 working days, which is approximately four months. In addition, the construction is proposed to occur during the daytime hours of 7:00 a.m. to 3:30 p.m. and will be subject to the regulations of the City's Noise Ordinance (Chapter 8.40 of the Huntington Beach Municipal Code) to further reduce potential noise impacts associated with the project.

The project, once it is complete, will not result in increased noise levels since no new structures or uses are proposed. All noise associated with implementation of the project would be unchanged from noise associated

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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with current conditions. Less than significant impacts would occur.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? (Sources: # 1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

Some vibration may be experienced during construction due to use of equipment and tools necessary to complete the work. However, all improvements will be conducted by divers underwater, which would minimize any vibration, if any, experienced by adjacent property owners. After the project is completed, existing conditions will return to pre-project conditions. Less than significant impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (Sources: 1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The proposed project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. The project, once it is complete, will not result in increased noise levels since no new structures or uses are proposed. All noise associated with implementation of the project would be unchanged from noise associated with current conditions. No impacts would occur.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

The project is anticipated to generate short-term noise impacts during construction. Based on the proposed construction schedule and applicable City codes, less than significant impacts are anticipated. No other noise impacts are expected after construction due to the nature of the project.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (Sources: #11) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item f.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? (Sources: #11) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Discussion e & f:**

Huntington Harbour is not within the vicinity of a private airstrip and the project does not propose new structures or uses that would expose people residing in Huntington Harbour to excessive noise levels. The project involves repair of the bulkhead at 30 existing single-family properties in Huntington Harbour; implementation of the proposed project will not change existing conditions as they pertain to noise impacts from flight activity. No impacts would occur.

**XI. PUBLIC SERVICES.** Would the project 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 any of the public services:

- |                                       |                          |                          |                          |                                     |
|---------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Fire protection? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Police Protection? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |                               |                          |                          |                          |                                     |
|-------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Schools? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|-------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |                             |                          |                          |                          |                                     |
|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Parks? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) Other public facilities or governmental services? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion a – e:**

The proposed project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. The project does not propose new structures or uses that would increase the demand for public services. No impacts would occur.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XII. UTILITIES AND SERVICE SYSTEMS.** Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (Sources: #1, 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Sources: #1, 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Sources: #1, 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (Sources: #1, 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (Sources: #1, 3 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion a – e:**

The proposed project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. No new uses or structures are proposed that would generate additional wastewater beyond the current conditions necessitating expansion or construction of new wastewater treatment facilities.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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In addition, the project will not result in the creation of new storm water drainage facilities nor will it create a demand for water usage beyond that which currently exists for the project area. No impacts would occur.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (Sources: #1, 3, 4 & 9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

See discussion under item g.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| g) Comply with federal, state, and local statutes and regulations related to solid waste? (Sources: #1, 3, 4 & 9) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion f & g:**

The project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour and does not propose new structures or uses that would generate additional solid waste. Minimal amounts of solid waste may be generated from project construction during Phase One in the event that deteriorated timber piles need to be cut and replaced with steel jacks. The number of timber piles to be cut and replaced is unknown until further inspection can be done. However, at most, eight properties will require this work. The removed timber piles are untreated and are not hazardous. They will be placed in a bin and disposed of off-site. The nearest landfill is the Frank R. Bowerman Landfill located in the City of Irvine. The landfill has a remaining capacity in excess of 30 years based on the present solid waste generation rates. The project will not noticeably impact the capacity of the existing landfill. Less than significant impacts are anticipated.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| h) Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands?) (Sources: #1, 3, 4 & 9) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item e.

**XIII. AESTHETICS.** Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista? (Sources: #1, 3, 4 & 16) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item c.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Sources: #1, 3, 4 & 16) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Discussion:**

See discussion under item c.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? (Sources: #1, 3, 4 & 16) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion a – c:**

The proposed project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour, a man-made residential marina complex constructed in the 1960s. All improvements, as proposed, will occur underwater and will not result in any permanent visible changes to the existing visual character of the site or its surroundings. The proposed project will not damage existing scenic resources, including trees, rock outcroppings or historic buildings. The final phase of work will require the placement of two barges in the waterway. This work is proposed to be completed within 30 working days and may temporarily impact the visual character of the waterway for those residences within the vicinity of the project site having frontage on the channel. Less than significant impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Sources: #3, 4 & 16) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The proposed project involves repair of the bulkhead at 30 properties in Huntington Harbour, a man-made residential marina complex. All proposed work will be conducted underwater and will not create a new source of substantial light or glare. No impacts would occur.

**XIV. CULTURAL RESOURCES.** Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item d.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

See discussion under item d.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Directly or indirectly destroy a unique paleontological resource or site unique geologic feature? (Sources: #1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**Discussion:**

See discussion under item d.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Disturb any human remains, including those interred outside of formal cemeteries? (Sources: # 1 & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion a – d:**

Huntington Harbour is a man-made residential marina complex that was developed out of mudflats in the 1960s. This area has been subject to modifications, disturbance and erosion over the years. Intact cultural, paleontological, archeological or historic resources are unlikely to exist in the project area. However, standard language would be included in the construction plan in the unlikely event that any cultural or historical resources are recovered. This language would require all work to stop until a qualified archeologist, paleontologist or County coroner is notified and an evaluation of the resource is conducted. No impacts would occur.

**XV. RECREATION.** Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood, community and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Sources: #3, 4 & 16) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The proposed project does not involve the creation of new homes or businesses that would increase the use of existing parks and recreational facilities. No impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (Sources: #1, 3, & 4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. The repair project does not include expansion of recreational opportunities within the waterway. No impacts would occur.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| c) Affect existing recreational opportunities? (Sources: # 3, 4 & 16) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

The project involves repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour. The final phase of the project involves the use of two barges to complete necessary slope protection

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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work. Although the work will take place in the channel, a significant recreational boating area, the barges will be placed adjacent to the work site in such a way so as not to impede recreational boat traffic. In addition, this phase will be completed within 30 working days to further minimize impacts to recreational boating opportunities in the channel. Less than significant impacts are anticipated.

**XVI. AGRICULTURE RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (Sources: #9) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

Repair of the bulkhead at 30 existing single-family residential properties in Huntington Harbour will not result in the conversion of any farmland. No impacts would occur.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? (Sources: #1 & 9) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The subject site is presently zoned RL-CZ (Residential Low Density – Coastal Zone) and is located in Huntington Harbour, a man-made residential marina complex developed in the 1960s. The project involves repair of the bulkhead that has eroded over time at 30 single-family residential properties. No impacts would occur.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? (Sources: #9) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

**Discussion:**

The project does not propose any changes in the environment beyond the proposed project area. Additionally, the project does not propose any changes to existing land uses and would not result in conversion of or impacts to farmland/agricultural uses as there are none within the vicinity of the project site. No impacts would occur.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XVII. MANDATORY FINDINGS OF SIGNIFICANCE.**

- |   |                          |                                     |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Sources: #1-22) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|

**Discussion:**

As discussed in Section VII, the project would result in potential impacts to 11 square feet of eelgrass habitat and unavoidable impacts to 401.5 square feet of soft bottom habitat. Although the impacts will not result in a substantial reduction in the habitat of fish, or threaten to eliminate a plant or animal community, mitigation for the potential loss of eelgrass and unavoidable loss of soft bottom habitat will be implemented so that impacts are reduced to less than significant levels. No impacts to cultural resources are anticipated.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) (Sources: #1-22) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

As discussed above in Sections I to XVI, the project is not anticipated to have any cumulatively considerable impacts due to the small scale of the project and implementation of proposed mitigation measures and standard project design/construction methods. Less than significant impacts are anticipated.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Sources: #1-22) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

**Discussion:**

As discussed above in Sections I to XVI, the project as proposed will have less than significant impacts on human beings, either directly or indirectly.

## **XVIII. EARLIER ANALYSIS.**

Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D).

Earlier Documents Prepared and Utilized in this Analysis:

<b><u>Reference #</u></b>	<b><u>Document Title</u></b>	<b><u>Available for Review at:</u></b>
1	City of Huntington Beach General Plan	City of Huntington Beach Planning Dept., Planning/Zoning Information Counter, 3rd Floor 2000 Main St. Huntington Beach
2	City of Huntington Beach Zoning and Subdivision Ordinance	“
3	Project Vicinity Map & Individual Property Locations	See Attachment #1
4	Huntington Beach Environmental Assessment Form & Project Description, received June 3, 2008	See Attachment #2
5	Summary of Status and Proposed Work	See Attachment #3
6	City of Huntington Beach Geotechnical Inputs Report	City of Huntington Beach Planning Dept., Planning/Zoning Information Counter, 3 <sup>rd</sup> Floor 2000 Main St. Huntington Beach
7	FEMA Flood Insurance Rate Map (October 21, 2004 & April 13, 2005)	“
8	CEQA Air Quality Handbook South Coast Air Quality Management District (1993)	“
9	City of Huntington Beach CEQA Procedure Handbook	“
10	Trip Generation Handbook, 7 <sup>th</sup> Edition, Institute of Traffic Engineers	“
11	Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos (Oct. 17, 2002)	“
12	Hazardous Waste and Substances Sites List	“
13	State Seismic Hazard Zones Map	“
14	City of Huntington Beach Municipal Code	“

15	Original Bulkhead Design (1999)	See Attachment #4
16	Bulkhead Repair Sections and Details Plans (April, 2008)	See Attachment #5
17	Bulkhead Repair Individual Property Plans (various inspection and plan dates, 2004 – 2008)	See Attachment #6
18	Area of Impact to Soft Bottom Habitat and Proposed Mitigation Area (2008)	See Attachment #7
19	Soft Bottom Mitigation Plan, Humboldt Island and Trinidad Island Bulkhead Repair Project (2000)	See Attachment #8
20	Summary of Soft Bottom Habitat Impacts and Mitigation Status (March 2008)	See Attachment #9
21	Davenport Bulkhead Repair Group Eelgrass Survey (May, 2008)	See Attachment #10
22	Humboldt Island and Trinidad Island Seawall (Bulkhead) Repairs, Environmental Assessment No. 00-05 (September, 2000; Addendum – September, 2001)	City of Huntington Beach Planning Dept., Planning/Zoning Information Counter, 3 <sup>rd</sup> Floor 2000 Main St. Huntington Beach
23	Summary of Mitigation Measures	See Attachment #11
24	Project Staging Area Map	See Attachment #12