4.3.7 Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>☐</td>
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</tbody>
</table>

Discussion

A global climate change evaluation was prepared for the project by SRA in order to identify the greenhouse gas (GHG) impacts that have the potential to result from construction or operation of the proposed project (SRA 2011b). The report is included as Appendix C. The analysis and conclusions of this report provide the basis for the following responses.

a) Would the project generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment?

**Less Than Significant Impact.** Based on CARB’s analysis that statewide 2020 business-as-usual GHG emissions would be 596 million metric tons of carbon dioxide equivalent (MMTCO₂e) and that 1990 emissions were 427 MMTCO₂e, local lead agencies have estimated that a reduction of 28.3% below business as usual is required to achieve the Assembly Bill (AB) 32 (California Global Warming Solutions Act) reduction mandate. According to CARB, CARB staff estimated 2020 business-as-usual GHG emissions, which represent the emissions that would be expected to occur in the absence of any GHG reduction actions. CARB staff estimates the statewide 2020 business-as-usual GHG emissions will be 596 MMTCO₂E. Emission reductions from the recommended measures in the AB 32 Scoping Plan total 169 MMTCO₂E, allowing California to attain the 2020 emissions limit of 427 MMTCO₂E. A reduction from business as usual of 28.3% is therefore used in this analysis to evaluate significance of global climate change impacts.

Emissions of GHGs were quantified for both construction and operation of the 9th and Palm project. Operational emissions were calculated assuming a business-as-usual operational scenario as well as an operational scenario with GHG reduction measures employed.

**Construction Impacts**

Construction GHG emissions associated with the proposed project would be generated from heavy construction equipment, truck traffic, and worker trips. Emissions were calculated using
the CalEEMod model for completed and proposed construction. As shown in Table 5 of the global climate change evaluation, the construction phase of the proposed project would generate 1,141 metric tons of carbon dioxide equivalent (MTCO₂E) emissions per year.

**Operational Impacts**

According to the global climate change evaluation, the proposed project would generate GHG emissions associated with buildings (natural gas, purchased electricity), water consumption (energy embodied in potable water), and vehicle emissions. As shown in Table 6 of the global climate change evaluation, the calculated GHG emissions generated by the proposed project under business-as-usual operations would be 6,110 MTCO₂E, representing a net increase of 1,941 MTCO₂E compared to emissions from the former Miracle Hills Shopping Center development on the project site.

Incorporation of the GHG reduction measures identified in the global climate change evaluation report would reduce GHG emissions from the project by 4,232 metric tons per year (approximately 31%). As shown in Table 7 of the report, emission reductions that would be implemented by the proposed project through state and local requirements demonstrate that emissions will be reduced by 30.74% below business-as-usual levels. The project would therefore be consistent with the goals of AB 32, and would not result in a significant global climate change impact. Furthermore, due to the proximity of the proposed commercial development to residential housing, the proposed project would improve the city’s jobs/housing ratio, which would likely decrease vehicle miles traveled and aid in reducing GHG emissions.

**Mitigation Measure(s)**

No mitigation measures are required.

**b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?**

*Less Than Significant Impact.* The City of Imperial Beach has not adopted specific GHG standards or reduction requirements to date; however, as implementing regulations for AB 32 are developed, sources within the city would be required to comply with these regulations.

Some lead agencies and organizations within the state have proposed and adopted specific guidance on GHG significance thresholds. The Bay Area Air Quality Management District, for example, has adopted a significance threshold based on a 2020 service population metric of 6.6 MT CO₂e per service population per year (SRA 2011). This threshold is based on a “gap-based approach”, which identifies the additional amount of emission reductions needed statewide from land use-driven emissions to meet the GHG reduction goals (SRA 2011). Although this threshold
may be appropriate for general and area plans, it is not necessarily appropriate for individual projects; therefore, it was not utilized as a significance threshold for the Breakwater project.

The City of Imperial Beach also has not adopted quantitative thresholds for the evaluation of GHG impacts. As stated in the global climate change evaluation, a significance threshold of 28.3% below business-as-usual levels is considered to demonstrate that a project would be consistent with the goals of AB 32. As discussed in response 4.3.7(a) above, incorporation of the GHG reduction measures outlined in the global climate change evaluation would reduce emissions of GHGs by 30.74% below business-as-usual levels. Therefore, the proposed project would be consistent with the goals of AB 32, and would result in a less than significant impact to global climate change.

As described in the Global Climate Change Evaluation prepared for the project, sea levels rose approximately 7 inches during the last century and the State of California predicts an additional rise of 10 to 17 inches by 2050 and a rise of 31–69 inches by 2100, depending on the future levels of GHG emissions (SRA 2011). Sea level rise adaptation strategies include those that involve construction of hard structures as barriers, such as seawalls and levees; soft structure strategies such as wetland enhancement, detention basins, and other natural strategies; accommodation strategies that include grade elevations, elevated structures, and other building design options; and withdrawal strategies that limit development to areas unaffected by sea level rise (SRA 2011).

Compliance with Imperial Beach Municipal Code Section 15.50.160 (Flood Hazard Reduction Standards) requires development within coastal high hazard areas to be elevated above the base flood level and adequately anchored to resist flotation, collapse, and lateral movement. The Breakwater project is not within the coastal high hazard area; therefore, it is not subject to these standards. Likewise, it is not anticipated that the levels of sea level rise predicted for the area would affect the project; therefore, impacts are considered to be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**Sources**

### 4.3.8 Hazards and Hazardous Materials

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
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</tr>
<tr>
<td>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
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</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
</tr>
<tr>
<td>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 environment?</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
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<td>✗</td>
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</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
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</tr>
<tr>
<td>g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
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</table>

### Discussion

**a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

*Less Than Significant Impact.* Relatively small amounts of hazardous substances, such as gasoline, diesel fuel, lubricants, grease, and solvents, would be used on site for construction and maintenance. These materials would be transported and handled in accordance with all federal,
state, and local laws regulating the management and use of hazardous materials. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment. All activities involving toxic, flammable, or explosive materials (including refueling construction vehicles and equipment) would be conducted with adequate safety and fire suppression devices readily accessible on the project site, as specified by the city’s fire department and per the Uniform Building Code.

Once construction is complete, the transport, use, or disposal of hazardous materials would be limited to common hazardous materials. Although limited quantities of these hazardous materials (e.g. cleaning agents, paints and thinners, fuels, insecticides, herbicides, etc.) are expected to be used during both construction and operation of the proposed project, uses generally do not entail the use of such substances in quantities that would present a significant hazard to the environment or the public at large. Additionally, fuels and other petroleum products specific to construction of the proposed project would no longer remain on site once construction is complete. Impacts would be considered less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?**

**Less Than Significant Impact with Mitigation Incorporated.**

**Construction Impacts**

Construction activities on the project site would involve the use and storage of commonly used hazardous materials such as gasoline, diesel fuel, lubricating oil, grease, solvents, and other vehicle and equipment maintenance fluids. These materials would be used and stored in designated construction staging areas within the footprint of the project site. As described in response 4.3.8(a) above, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Consequently, the materials alone, and use of these materials for their intended purpose, would not pose a significant risk to the public or environment. However, accidental spills or unauthorized releases of hazardous materials during construction could potentially result in soil contamination, which would be a significant impact. Potential impacts from the use of hazardous materials are generally associated with spills or other unauthorized releases during ground clearing and access road construction, foundation excavation, and construction. Other potential impacts involving the use of hazardous materials during construction are associated with
temporary storage sites, transportation of materials to the project site, and refueling and servicing of equipment/vehicles.

To minimize/eliminate fuel spillage, construction vehicles would be adequately maintained and equipped. Equipment maintenance work, including refueling, would occur off site or within the designated construction staging area as described in Section 3.4 of this IS/MND. Potentially hazardous construction waste, including trash, litter, garbage, and other solid wastes, as well as petroleum products and other potentially hazardous materials, would be removed to a hazardous waste facility that is permitted to treat, store, or dispose of such materials. The project would develop and implement a hazardous materials management plan (per Mitigation Measure HAZ-1) to address storage, use, transport, and disposal of each hazardous material anticipated for use on the project site. The plan would identify where hazardous materials and waste would be stored on site, how spill prevention measures would be implemented, where spill kits would be located, the appropriate spill response action for each material or waste, and procedures for notifying the appropriate authorities. Impacts would be less than significant with mitigation incorporated.

Prior to rough grading and construction of the Breakwater project, the City of Imperial Beach would demolish the former buildings on the project site, leaving a completely vacant and fully remediated site free of any lead-based paint, asbestos, or other hazardous materials that may expose the public or workers to potential health hazards. The project does not involve the demolition of existing structures on site; therefore, hazardous substances, such as lead-based paint or asbestos that may expose construction workers and the public to potential health hazards, are not anticipated.

Operational Impacts

During operations and maintenance of the project, hazardous materials (as defined under federal and state environmental laws) would be used and stored. During the operational phase of the project, hazardous materials used on site would be limited to cleaning products, landscaping chemicals and fertilizers, and other substances associated with the maintenance of ornamental landscaped areas. The materials would be transported, handled, and contained in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Most of the chemicals and hazardous materials used for operations and maintenance activities are similar to those used in construction activities; however, the use and quantities of these materials for operations and maintenance would be considerably less than those used during construction activities. Furthermore, most of the hazardous chemicals used for operations and maintenance would be brought to and removed from the site by maintenance personnel rather than stored on site. Impacts are considered to be less than significant.
By incorporating the project design features described above, developing a hazardous materials management plan as provided for in Mitigation Measure HAZ-1, and implementing BMPs to address accidental spillage of hazardous materials as provided for in Mitigation Measure HYD-1, potential hazards to the public or the environment resulting from foreseeable upset or accidental conditions related to hazardous materials would be substantially minimized or eliminated. Impacts would therefore be less than significant with mitigation incorporated.

Mitigation Measure(s)

HAZ-1 Prior to approval of final construction plans, the project applicant or its contractors shall prepare a hazardous materials management plan for the construction phase of the project, which shall be reviewed and approved by the City of Imperial Beach, and shall include the following components:

- The plan shall identify all hazardous materials that would be present on any portion of the construction site, including, but not limited to, fuels, solvents, and petroleum products. The plan shall address storage, use, transport, and disposal of each hazardous material anticipated to be used at the site. The plan shall establish inspection procedures, storage requirements, storage quantity limits, inventory control, non-hazardous product substitutes, and disposition of excess materials.

- The plan shall identify secondary containment and spill prevention countermeasures, as well as a contingency plan to identify potential spill hazards, how to prevent their occurrence, and responses for different quantities of spills that may occur. Secondary containment and countermeasures shall be in place throughout construction so that if any leaks or spills occur, responses would be made immediately.

- The plan shall identify materials (and their locations) that would be on site and readily accessible to clean up small spills (i.e., spill kit, absorbent pads, and shovels). Such emergency spill supplies and equipment shall be clearly marked and located adjacent to all areas of work and in construction staging areas. The plan shall identify the spill-response materials that must be maintained in vehicles and substation sites during construction and procedures for notification to the appropriate authorities.

- The plan shall identify adequate safety and fire suppression devices for construction-related activities involving toxic, flammable, or explosive materials (including refueling construction vehicles and equipment). Such devices shall be readily accessible on the project site, as specified by the City of Imperial Beach Fire Marshal and per the Uniform Building Code and Uniform Fire Code. The plan shall be included as part of all contractor specifications and final construction
plans to the satisfaction of the appropriate agency. The plan shall also identify requirements for notices to federal and local emergency response authorities, and shall include emergency response plans.

- Prior to construction, all contractor and subcontractor personnel shall receive training regarding the components of the hazardous materials management plan, as well as applicable environmental laws and regulations related to hazardous materials handling, storage, and spill prevention and response measures. The plan shall be submitted to the City of Imperial Beach at least 30 days prior to construction.

Implement Mitigation Measure HYD-1.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**Less Than Significant Impact.** The proposed project site is located within 0.20 mile of Imperial Beach Preschool, which is located northeast of the project site on the opposite side of SR-75. As noted in response 4.3.8(a) above, limited amounts of some hazardous materials may be used for development of the site, including the use of standard construction materials (e.g., paints, solvents, and fuels), cleaning and other maintenance products (used in the maintenance of buildings and equipment), diesel and other fuels (used in construction and maintenance equipment and vehicles), and the limited application of pesticides associated with landscaping. None of these materials would result in hazardous emissions or are considered acutely hazardous. The routine transport, use, and disposal of these materials would be subject to a wide range of laws and regulations intended to minimize potential health risks associated with their use or the accidental release of such substances.

All construction activity would be performed in compliance with applicable local regulations, and compliance with these regulations would ensure that the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction on the project site. All equipment maintenance work, including refueling, would occur off site or within the designated construction staging areas. All potentially hazardous construction waste, including trash, litter, garbage, and other solid wastes, as well as petroleum products and other potentially hazardous materials pertaining to the proposed project, would be removed to a hazardous waste facility permitted to treat, store, or dispose of such materials. Once construction is complete, fuels and other petroleum products would no longer remain on site. Moreover, the only school within 0.25 mile of the project site, Imperial Beach Preschool, would be located on the opposite side of SR-75, which would serve as a buffer during construction activities. Impacts would be less than significant.
Final Environmental Initial Study and Mitigated Negative Declaration for the Breakwater Project

Mitigation Measure(s)

No mitigation measures are required.

d) Would the project 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 environment?

Less than Significant Impact. A Phase I environmental site assessment (ESA) and Phase II subsurface assessment was prepared by SCS Engineers for the project site in order to determine the presence and nature of potential sources of contamination on and nearby the project site (SCS Engineers 2009). According to the ESA, the following site conditions were noted:

Project Site Conditions

- An on-site tenant space showed evidence of a former in-ground hydraulic lift that may have resulted in a release of hydraulic fluid into shallow subsurface soils
- A parts-cleaning unit was observed that may have had the potential for release of volatile organic compounds (VOCs) used in parts-cleaning units
- A rectangular concrete patch area with a brass cap/plug was observed in a service bay of one of the former tenants
- A 550-gallon underground storage tank (UST) was previously located at the site and given a closed status with no further action required by the Department of Environmental Health
- A review of historical aerial photographs indicated agricultural activity has taken place at the site and vicinity, possibly prior to 1928, which may have included use of organochlorine pesticides.

Off-Site Conditions

- A monitoring well indicated constituents of concern associated with a Mobil Service Station located at 681 SR-75 (presence of petroleum hydrocarbons, benzene, toluene, and xylene)
- Impacted groundwater migration associated with USTs at an adjacent Exxon/Union 76 service station may have occurred.

Due to the potential for hazardous conditions as noted above, it was recommended that soil samples and soil vapor samples be taken to assess whether any significant health risk would occur to construction workers or those occupying or visiting the site upon project completion.
The sampling activities were completed and the Phase II subsurface assessment made the following observations and conclusions (SCS Engineers 2009a):

- Eleven soil vapor samples were collected from selected locations at the project site. Various concentrations of benzene and toluene were reported in the soil vapor samples collected. Based on the health risk calculation associated with presence of benzene and toluene, it was determined that a low likelihood of significant human health risk exists at the site in regard to these materials.

- Eighteen soil samples were collected from six soil borings at the site to assess possible impacts to soils from former automotive service activities. Concentrations of petroleum hydrocarbons and VOCs were not found above laboratory detection limits in the soil samples analyzed for the site.

- Shallow soil samples were assessed for the presence of pesticides and toxic metals. Only one soil sample contained a reported concentration of arsenic that exceeds typical background ranges.

The Phase II subsurface assessment recommended that the area containing elevated arsenic concentrations be excavated and disposed of off-site or, alternatively, be kept on site and buried under at least 5 feet of clean fill or buried beneath hardscape.

Prior to and separate from construction of the proposed Breakwater project, the City of Imperial Beach would demolish existing buildings on the project site and complete necessary site remediation as recommended in the Phase I ESA and Phase II subsurface assessment. In addition, a Hazardous Building Materials Survey report was prepared to locate and identify visible and accessible potentially hazardous materials that would require abatement prior to demolition of buildings on the project site (Advantage Environmental Consultants 2011). The survey focused on asbestos-containing materials (ACMs), lead-based paint (LBP), polychlorinated biphenyls (PCBs), and potential mercury sources within and on the buildings at the property. The survey indicated presence of ACMs in several on-site buildings. No LBP, PCBs, mercury, or other potentially hazardous building materials were noted during the course of the survey. The report concluded that all ACMs must be removed prior to proposed demolition activities and disposed of at an approved facility licensed to handle such waste. The hazardous materials abatement specification was prepared to specify the furnishing of labor, materials, facilities, equipment, services, employee training, permits, agreements, waste transport, and disposal necessary to perform the work required for the ACM removal. All procedures outlined in this document would be completed prior to building demolition by the asbestos removal contractor.
The City of Imperial Beach would complete demolition and all remediation activities prior to the redevelopment agency issuing building and grading permits for development of the Breakwater project. No other recognized environmental conditions at the project site having the potential for release of hazardous materials/waste from a known site or surrounding land use were noted. Impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

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?**

**Less Than Significant Impact.** The project site is located approximately 1 mile from the Naval Outlying Landing Field (NOLF) Imperial Beach. NOLF is part of the Naval Base Coronado, and is located approximately 10 miles south of the base adjacent to the Tijuana Slough National Wildlife Refuge in Imperial Beach. The NOLF Imperial Beach Airport Land Use Compatibility Plan (ALUCP) is currently being prepared and has not yet completed the necessary air installations compatibility use zones (AICUZ) study necessary for compatibility determinations (San Diego International Airport 2011). As the updated AICUZ study has not been released by the U.S. Navy, the Imperial Beach ALUCP cannot be certified by the San Diego Regional Airport Authority acting as the San Diego County Airport Land Use Commission. Until such certification occurs, all projects are required to be reviewed by the ALUC to ensure that no conflicts with aviation facilities and operations would occur.

The proposed project site is not located within an airport land use plan, nor is it located within 2 miles of a public airport; therefore, the project would not be expected to result in safety hazards for people residing or working in the project area. Impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

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?**

**Less Than Significant Impact.** The project site is located approximately 1 mile from NOLF Imperial Beach. NOLF is part of the Naval Base Coronado, and is located approximately 10 miles south of the base adjacent to the Tijuana Slough National Wildlife Refuge in Imperial Beach. The NOLF Imperial Beach ALUCP is currently being prepared and has not yet
completed the necessary AICUZ study necessary for compatibility determinations (San Diego International Airport 2011). The project is proposed in an urban area that is currently developed. Proposed retail buildings would be single-storied and similar to existing buildings adjacent to the project site. Impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less Than Significant Impact.** The City of Imperial Beach is considered potentially vulnerable to tsunamis and severe weather due to its proximity to the ocean. As a result, the city has taken steps to better prepare to handle severe weather and tsunamis, including posting tsunami evacuation route signs and adopting procedures for severe weather warnings. Additionally, the City of Imperial Beach is part of the Unified San Diego County Emergency Services Organization and the Unified Disaster Council and as such, is a participating municipality and jurisdiction in the development of the San Diego County Multi-Jurisdictional Hazard Mitigation Plan adopted July 2010 (San Diego County 2010). The county’s hazard mitigation plan does not identify specific routes to accommodate major evacuations in the event of a natural disaster or emergency; however, a number of goals and policies for each jurisdiction are outlined by disaster type.

In the event of an emergency, project patrons and workers would be able to access SR-75 and local surface streets in order to evacuate the area. The project site would be fully accessible to emergency vehicles, and the project itself is not expected to result in any impacts or interference with emergency response or emergency evacuation plans. Additionally, land uses on the project site would not change after construction of the project; therefore, the nature of the development would not place the site at greater risk during an emergency and would not create greater interference with any adopted emergency response plan than that currently existing at the site. Impacts would therefore be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.
h) **Would the project 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?**

**Less Than Significant Impact.** The California Department of Forestry maps fire hazards in the state and classifies them according to the potential risk, or severity. The City of Imperial Beach is not identified as a community at risk from wildfire (California Department of Forestry and Fire Protection 2011b), nor is any portion of the city identified as being located within a “very high fire hazard severity zone” (California Department of Forestry and Fire Protection 2011c). Therefore, impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**Sources**


a) Would the project violate any water quality standards or waste discharge requirements?

*Less Than Significant Impact With Mitigation Incorporated.* Section 303(d) of the Clean Water Act (CWA) (33 U.S.C. 1251 et seq.) requires that the regional water quality control board (RWQCB) identify water bodies that do not meet, or are not expected to meet, water quality standards, or are considered impaired. The affected water body and associated pollutant or stressor is then prioritized in the 303(d) list. The project site is located in the Otay Watershed (Hydrologic Unit 910) and is tributary to San Diego Bay (PDC 2011b). According to the Otay Watershed Urban Runoff Management Plan, the pollutants of concern for the watershed are coliform bacteria, trace metals, and other toxic constituents. The project site is not a direct tributary to a water body listed as a CWA 303(d)–impaired water body. The closest downstream impaired water body is the San Diego Bay, Hydrologic Sub-Area 910.10, which is 303(d)-listed as impaired for PCBs (PDC 2011b).

Taking into account the watershed pollutants of concern, the proximity of the site to impaired water bodies and environmental sensitive areas, and the potential pollutants from the proposed development, there are no primary target pollutant for the Breakwater project (PDC 2011b). Secondary pollutants of concern for a commercial project with a parking lot include sediments, nutrients, organic compounds, metals, trash and debris, oxygen-demanding substances, oil and grease, bacteria and viruses, and pesticides. As applied to the project, potential sources of these pollutants include urban runoff, storm drains, and parking areas.

During construction, gasoline, diesel fuel, lubricating oil, grease, and solvents may be used on the project site. Although only small amounts necessary to maintain the construction equipment would be on site at any one time, accidental spills of these materials during construction could result in potential water quality impacts. In addition, soil loosened during grading or miscellaneous construction materials or debris could also degrade water quality if mobilized and transported off site via water flow. As construction activities may occur during the rainy season or during a storm event, construction of the proposed project could result in adverse impacts to water quality without implementation of appropriate BMPs. Once operational, the primary source of pollutants would be the parking lot area. Long-term operational activities of the proposed project also have the potential to degrade water quality due to vehicles utilizing the site that could discharge contaminants such as oil, gas, and solvents.

Due to the existing impervious area at the project site, the proposed Breakwater project would not increase on-site impervious area. In fact, the project is designed to reduce urban runoff volume by incorporating permeable and vegetated areas to allow increased percolation and minimize the amount of runoff directed to impermeable surfaces. In addition, the project is designed to minimize pollutant sources by improving/minimizing the project footprint. This would be accomplished through incorporation of landscaped areas (approximately 16% of the...
total site area), use of drought-tolerant plant materials in landscaping, and slow conveyance of runoff through bioretention and vegetated areas. Source-control BMPs would include protective trash storage design, efficient irrigation and landscape design, stormwater conveyance system stenciling and signage, protective loading dock design, integrated pest management principles, management of fire sprinkler discharges and air conditioning condensate discharges, and the use of non-toxic roofing materials. Effective treatment of pollutants would be achieved through the use of source-control and treatment-control BMPs and low-impact development (LID) BMPs, as identified in the water quality technical report prepared for the project (PDC 2011b) and as required by City of Imperial Beach Municipal Code Chapter 8.32 (Storm Water Standards) (City of Imperial Beach 2011b). Treatment-control BMPs that are incorporated into the proposed project include a bioretention area, storm drain inlet inserts, a vegetated swale, and an underground baffle box.

Construction of the proposed project would help decrease the direct discharge of stormwater into San Diego Bay by allowing stormwater to pass through landscaped areas, a biofiltration retention area, and a vegetated swale prior to flowing to existing discharge points. The project would protect water quality by implementing LID, construction, source-control, and treatment-control BMPs; integrated management practices; and an operations and maintenance program to ensure BMPs operate effectively. By incorporating these measures, implementing BMPs to address the accidental spillage of hazardous materials as provided for in Mitigation Measure HYD-1, and preparing a grading and erosion control plan as required in Mitigation Measure HYD-2 and the project’s SWPPP (Mitigation Measure HYD-3), the project would be consistent with the City of Imperial Beach’s water quality and waste discharge requirements. Impacts would be less than significant with the application of BMPs and with mitigation incorporated.

Mitigation Measures

HYD-1: Prior to approval of final construction plans, the project applicant shall develop a final BMP plan based on the preliminary recommendations in the Preliminary Water Quality Technical Report by Project Design Consultants (October 2011) and in compliance with City of Imperial Beach Municipal Code Section 15.54.110 and 15.54.150. These recommendations and requirements are subject to change pending review by the City of Imperial Beach, implementation of future policy requirements, and final engineering design. The recommended post-construction water quality BMP plan shall include LID, source-control, and treatment-control BMPs. All BMPs for erosion prevention and sediment control shall be implemented and maintained in accordance with City of Imperial Beach Municipal Code Section 15.54.110 and 15.54.150, which require, in part, that all source- and structural-treatment BMPs shall be inspected prior to the rainy season and after each major storm to assure the functionality.
BMPs shall be incorporated into the final construction and design plans to be reviewed and approved by the City of Imperial Beach Engineering Department and shall include, but not be limited to, the following:

- All construction vehicles shall be adequately maintained and equipped to minimize/eliminate fuel spillage. All equipment maintenance work shall occur off site or within the designated construction staging area.

- Any construction materials that need to be temporarily stockpiled or equipment/supplies that need to be stored on site shall be kept within the construction staging areas and shall be covered when not in use.

- The parking lot and driveways shall be swept to maintain cleanliness of the pavement. At a minimum, the lot shall be thoroughly swept four times per year, or more often as necessary, with particular emphasis on thorough cleaning prior to the rainy season (generally from October 1 to April 30).

- Informational materials to promote the prevention of urban runoff pollutants are included in the preliminary water quality technical report for the project. These materials include general working site practices that contribute to the protection of urban runoff water quality and BMPs that eliminate or reduce pollution during property improvements. Notification of all water quality technical report requirements shall be provided as part of the property disclosure statements.

- The trash enclosure areas proposed on the project site shall be designed and maintained in an appropriate manner to ensure functionality. The trash enclosure areas shall be constructed as double-receptacle basic enclosures, enclosed on three sides by a minimum 6-foot-high decorative masonry wall and on the fourth side by an opaque and latchable gate. All trash containers shall have lids.

- The project applicant shall perform a visual inspection annually of the project site to ensure that proper litter/debris controls are maintained and that proper landscaping, fertilizer, and pesticide practices are upheld. An annual inspection report as described in the preliminary water quality management report for the project shall be prepared and submitted to the City of Imperial Beach.

**HYD-2:** Prior to approval of final construction plans, the project applicant or its contractor(s) shall prepare a grading and erosion control plan, which shall be reviewed and approved by the City of Imperial Beach Engineering Division. The plan shall be prepared in accordance with City of Imperial Beach Municipal Code Chapter 15.54 (Grading Permits and Plans), which shall be implemented for all activities associated with the proposed project.
The plan shall include measures to stabilize the soil to prevent erosion and retain sediment where erosion has already occurred. Stabilization measures may include temporary seeding, permanent seeding, or mulching. Structural control measures may include silt fencing, sand bagging, sediment traps, or sediment basins. Additional erosion control measures (e.g., hydrotechnology, mulching of straw, diversion ditches, retention basins) may be necessary as determined by field conditions to prevent erosion and/or the introduction of dirt, mud, or debris into existing public streets and/or onto adjacent properties during any phase of construction operations. Particular attention shall be given to additional erosion control measures during the rainy season, generally from October 1 to April 30. Topsoil shall be stockpiled and covered on the project site for reuse. The grading and erosion control plan shall be included as part of all contractor specifications and final construction plans to the satisfaction of the City of Imperial Beach’s Engineering Division.

All BMPs for erosion prevention and sediment control shall be implemented and maintained in accordance with City of Imperial Beach Municipal Code Section 15.54.110 and 15.54.150, which require, in part, that all source- and structural-treatment BMPs shall be inspected prior to the rainy season and after each major storm to assure the functionality.

HYD-3: Prior to the issuance of any grading or building permits for the project, the project applicant or its contractors shall prepare an SWPPP pursuant to the NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (Water Quality Order 2009-0009-DWQ). The SWPPP shall include site-specific BMPs, such as desilting basins, silt fences, gravel bags, fiber rolls, and other erosion control measures consistent with the NPDES general permit. The objectives of the SWPPP are to:

- Identify all pollutant sources, including sources of sediment that may affect the water quality of stormwater discharges associated with construction activity from the construction site
- Identify non-stormwater discharges
- Identify, construct, implement in accordance with a time schedule, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction
- Document the inspection and maintenance of the BMPs installed during construction and monitor their effectiveness.
The project applicant’s contractor(s) shall implement the approved SWPPP and any amendments thereafter as required for compliance.

b) Would the project 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?

**Less Than Significant Impact.** During the geotechnical investigation performed for the project site, groundwater was encountered at depths between 13 feet and 17 feet below the existing ground surface, corresponding to elevations between approximately 2.5 feet below mean sea level and 4 feet above mean sea level (Ninyo & Moore 2009). Grading for the proposed project involves elevating the site from its existing ground surface to a final grade that is level with the adjacent Palm Avenue roadway. As grading of the project site would not occur at depths less than 5 feet below existing grade, impacts to groundwater are not anticipated.

It is not anticipated that the proposed project would considerably increase the amount of water usage historically used at the site and therefore would not result in a substantial depletion of groundwater supplies or result in a lowering of the local groundwater table. The water provider for the City of Imperial Beach, California American Water, has indicated in a letter dated July 27, 2011, that it has the capacity provide water service for the project subject to water distribution system changes or additions in the public right-of-way. Groundwater recharge would not be significantly altered as the project would result in impervious surfaces similar to the previous land uses on the site. The incorporation of proposed BMPs would protect surface and groundwater resources by filtering sediments and particulates through biological activity or stormwater filtration prior to reaching water resources. The project would also incorporate post-construction BMPs, such as efficient irrigation systems and landscape design. The project does not propose the direct use of groundwater during any phase of development, and permanent dewatering would be prohibited by on-site operations.

The project is not expected to encounter groundwater and would not involve the permanent pumping of groundwater; therefore, the project would not substantially deplete groundwater supplies. Due to the incorporation of source- and treatment-control BMPs, post-construction BMPs, and similar impervious surfaces as under existing site conditions, the project would not substantially interfere with groundwater recharge. Impacts are considered less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.
c) Would the project substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or a river, in a manner which would result in substantial erosion or siltation on or off site?

Less Than Significant Impact with Mitigation Incorporated. The preliminary earthwork quantities for the proposed Breakwater project include approximately 1,882 cubic yards of cut and 24,803 cubic yards of fill, resulting in approximately 22,921 cubic yards of imported materials. As required by City of Imperial Beach, the project applicant would apply for and obtain a grading permit from the Engineering Division. As required in Mitigation Measures HYD-2 and HYD-3 in response 4.3.9(a) above, the grading and erosion control plan and SWPPP for the project would include erosion control measures such as silt fencing and sand bagging to prevent on- and off-site erosion. Additional erosion control measures may be used as appropriate depending on field conditions to prevent erosion and/or the introduction of dirt, mud, or debris into the existing public streets and/or onto adjacent properties during construction. As part of the erosion control plan, topsoil would be stockpiled and covered on the project site for reuse. Additionally, all BMPs for erosion prevention and sediment control would be implemented and maintained in accordance with City of Imperial Beach Municipal Code Section 15.54.110 and 15.54.150, which require, in part, that all source and structural treatment BMPs shall be inspected prior to the rainy season and after each major storm to assure the functionality.

Due to the existing impervious area at the project site, the proposed Breakwater project would not increase on-site impervious area. The project is designed to reduce urban runoff volume by incorporating permeable and vegetated areas to allow increased percolation and minimize the amount of runoff directed to impermeable surfaces. In addition, the project is designed to minimize pollutant sources by improving/minimizing the project footprint. This would be accomplished through incorporation of landscaped areas (approximately 16% of the total site area), use of drought-tolerant plant materials in landscaping, and slow conveyance of runoff through bioretention and vegetated areas. The proposed project would not substantially alter the drainage pattern of the area but would result in improvements to drainage and water quality. Furthermore, there are no streams or rivers that would be altered by the proposed project. Therefore, impacts would be considered less than significant with mitigation incorporated.

Mitigation Measure(s)

Implement Mitigation Measures HYD-2 and HYD-3.
d) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream of river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?*

**Less Than Significant Impact.** Existing on-site drainage generally flows toward the middle of the site along the extension of the 8th Street alignment, which then drains both to the south toward the alley along the site’s southern boundary and via surface flow to a low point near the northern property boundary near the extension of the 8th Street alignment (PDC 2011a). Due to the undersized capacity of the existing underground storm drain system within the City of Imperial Beach, portions of the site and both upstream and downstream properties currently experience flooding during storm events, causing excess runoff to collect on the surface and flood the lower portions of the site under existing conditions (PDC 2011a).

Under proposed conditions, runoff from the site would be collected in an on-site private storm drain system consisting of inlets, pipes, roof drains, and water quality features that would drain into the public storm drains at various locations after being treated on site. The private storm drain system will connect into the public storm drain system at various locations. The existing public 18-inch storm drain line within the site boundaries, currently aligned within 8th Street, will be removed, realigned, and upsized with a network of 18–36-inch RCP lines to improve the flow of runoff from the site so as not to further contribute to flooding conditions. In addition, the existing 15-inch line that collects drainage from 9th Street would be replaced with a larger 36-inch RCP pipe and realigned.

Based on the results of the hydrologic models, the upstream water surface elevations would be essentially the same for both existing and proposed conditions (PDC 2011a). Furthermore, the peak flow out of the system is roughly equivalent under existing and proposed conditions for the 100-year storm. For the 5- and 10-year storms, the proposed condition maximum water surface elevation would be slightly lower than existing conditions, which indicates that the project reduces upstream flooding conditions (PDC 2011a). The project would not increase the depth of flooding upstream and would significantly reduce the duration of ponding upstream during peak storm events; therefore, adverse effects on upstream or downstream flooding due to the development of the project are not anticipated. Furthermore, from a drainage perspective, the project would be an improvement over the existing conditions. Ponding conditions within the project site would be reduced by elevating the property above existing grade, further improving on-site drainage conditions (PDC 2011a). Impacts would be considered less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.
e) Would the project 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?

Less Than Significant Impact with Mitigation Incorporated. As described in responses 4.3.9(a), 4.3.9(c), and 4.3.9(d) above, the incorporation of permeable and vegetated areas, as well as bioretention systems, would allow increased percolation and minimize the amount of runoff directed to impermeable surfaces. During construction and post-construction, sources of polluted runoff would be minimized through the use of LID BMPs, construction BMPs, and source-control and treatment-control BMPs, such as a bioretention area, storm drain inlet inserts, a vegetated swale, and an underground baffle box. With implementation of BMPs as outlined in a final BMP plan for the project (Mitigation Measure HYD-1), the project would not contribute runoff that would result in substantial additional sources of polluted runoff. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure(s)

Implement Mitigation Measure HYD-1.

f) Would the project otherwise substantially degrade water quality?

Less Than Significant Impact With Mitigation Incorporated. As described in responses 4.3.9(a) and 4.3.9(e) above, implementation of LID, construction, source-control and treatment-control BMPs and integrated management practices, the project would protect water quality to the maximum extent practicable. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure(s)

Implement Mitigation Measures HYD-1, HYD-2, and HYD-3.

g) Would the project 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?

Less Than Significant Impact. According to Figure S-1 (100-Year Flood Plain) in the City of Imperial Beach General Plan Safety Element, the project site is not within a 100-year flood hazard area or other flood plain (City of Imperial Beach 2010b). Nonetheless, a peak 5-year, 10-year, and 100-year storm event hydrologic analysis was conducted for the project to determine the peak discharge flows for existing and proposed conditions (PDC 2011a). The analysis concluded that the existing 15-inch pipe collecting the runoff at the intersection of 9th Street and Palm Avenue is inadequate to convey the peak flow without implementation of appropriate improvements (PDC 2011a).
The proposed project would incorporate improvements to the existing on- and off-site storm drain systems to increase flow capacity and reduce the potential for flooding. Such improvements would include installation of a new on-site private and public storm drain system connecting into the public storm drain system at various locations, installation of an 8-inch PVC pipeline to be distributed to each of the proposed on-site buildings, replacement of the existing public 18-inch line within the site boundaries with a larger pipe, and replacement and realignment of the existing public 15-inch pipe collecting the 9th Street drainage with an upsized 36-inch RCP line (PDC 2011a). Based on the results of the hydrologic models, the upstream water surface elevations would be essentially the same for both existing and proposed conditions (PDC 2011a). Furthermore, the peak flow out of the system is roughly equivalent under existing and proposed conditions for the 100-year storm. For the 5- and 10-year storms, the proposed condition maximum water surface elevation would be slightly lower than existing conditions, which indicates that the project reduces upstream flooding conditions (PDC 2011a). The project would not increase the depth of flooding upstream and would significantly reduce the duration of ponding upstream during peak storm events; therefore, adverse effects on upstream or downstream flooding due to the development of the project are not anticipated. Impacts would be less than significant.

Furthermore, the proposed project does not involve the construction of housing. As previously described, the Breakwater project includes commercial development of an approximately 4.75-acre site located within the City of Imperial Beach. Therefore, the proposed project would not place housing within a 100-year flood hazard area as mapped on a flood hazard delineation map.

**Mitigation Measure(s)**

No mitigation measures are required.

**h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

**Less Than Significant Impact.** As described in response 4.3.9(g) above, the project site is not within a 100-year flood hazard area or other flood plain (City of Imperial Beach 2010b). The proposed project would incorporate improvements to the existing on- and off-site storm drain systems to increase the flow capacity, thereby reducing the potential for flooding. Incorporation of these proposed improvements would result in a less than significant impact.

**Mitigation Measure(s)**

No mitigation measures are required.
i) **Would the project 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?**

**Less Than Significant Impact.** There are numerous dams and levees in the region that support reservoirs or watercourses that could result in flooding in downstream areas in the event of failure. The San Diego County General Plan Update EIR indicates on Figure 2.8-7 that the project site is not within a dam inundation area (County of San Diego 2011a). People or structures within the project site are not expected to be exposed to significant risk of loss due to flooding as a result of failure of such structures. Impacts would be considered less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

j) **Would the project be susceptible to inundation by seiche, tsunami, or mudflow?**

**Less Than Significant Impact.** Due to the project’s location in close proximity to San Diego Bay and the Pacific Ocean, there is a remote possibility that the project site could be inundated by seiche (a standing wave oscillation on the surface of water in an enclosed or partially enclosed body of water) or tsunami (sea wave generated by a submarine earthquake or other disturbance) at some point in the future. While there are faults off the San Diego coast, they are strike-slip systems that are less likely to trigger a tsunami than the thrust faults in the subduction zones in the Pacific Northwest and Japan. Both of these events, though possible, are considered highly improbable and the chances of future occurrence cannot be predicted. As the project consists of infill redevelopment, it would not introduce a new area to these unlikely hazards; therefore, potential impacts are considered less than significant. Mudflows can result from steep hillside soils becoming rapidly saturated with water, extensive erosion, and/or a large disturbance on the hillside, such as an earthquake or boulder collapse. There are no steep slopes or other conditions on or adjacent to the project site that would expose the project to significant risk of mudflow hazards. Impacts are considered less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**Sources**

City of Imperial Beach. 2010b. “100-Year Flood Plain.” Figure (S-1). *City of Imperial Beach General Plan and Local Coastal Plan*. Updated October 2010.


4.3.10  Land Use and Planning

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) 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?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a) Would the project physically divide an established community?

**Less Than Significant Impact.** The proposed project involves the construction of approximately 46,200 square feet of commercial retail space and would include approximately 238 surface parking spaces, on- and off-site improvements, signage, and landscaping. The proposed project is compatible with adjacent land uses, which include general retail and single-family and multi-family residential uses, as well as the current General Commercial (C-1) land use designation for the project site (Figure 10). The construction of the proposed development would complement and expand the existing commercial uses within the project area and would continue to promote a link between western and eastern Imperial Beach. Surrounding land uses are divided by existing transportation facilities (i.e., roads, walkways); therefore, the proposed project is not expected to result in additional physical barriers between nearby land uses. Impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

b) Would the project 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?

**Less Than Significant Impact.** As indicated on the City of Imperial Beach General Plan Land Use Map, the designated land use for the project site is General Commercial (C-1). The General
Commercial land use designation provides for land to meet the local demand for commercial goods and services, as opposed to the goods and services required primarily by a tourist population. It is intended that the dominant type of commercial activity in this designation will be community- and neighborhood-serving retail and office uses, such as markets, specialty stores, professional offices, personal service department stores, restaurants, liquor stores, and hardware stores. Zoning for the project site is also General Commercial (C-1). The project would include development of a commercial retail center adjacent to existing major roadways (SR-75 and Palm Avenue), nearby community retail shopping centers, and residential neighborhoods. As the land use and zoning designation for the project site also provides for residential uses, the project would also be consistent with existing residential uses located adjacent to the site. The proposed use of the project site is an allowed use under the applicable land use and zoning designations and is compatible with adjacent land uses; therefore, the proposed project would not conflict with the applicable land use plans. Impacts would be less than significant.

Mitigation Measure(s)

No mitigation measures are required.

c) Would the project conflict with any applicable habitat conservation plan or natural communities conservation plan?

Less Than Significant Impact. As discussed in response 4.3.4(f) in Section 4.3.4, Biological Resources, the City of Imperial Beach is located in proximity to both the City of San Diego MSCP Subarea Plan planning area and the Water Authority’s NCCP/HCP planning area as indicated in the Water Authority’s draft subregional NCCP/HCP (Ogden Environmental 1998; San Diego County Water Authority 2010). The City of Imperial Beach has not developed an MSCP subarea plan as no recent projects within the city have warranted such a comprehensive planning effort. However, the city has agreed to the inclusion of portions of its jurisdiction in the City of San Diego MHPA.

The City of Imperial Beach is located adjacent to San Diego Bay and the Tijuana Estuarine Reserve, both of which are components of the MHPA as delineated in the City of San Diego Subarea Plan. Although the proposed project site is not located directly adjacent to either of these areas, it is located within close proximity. Therefore, indirect impacts resulting from the proposed project could affect these areas and thus potentially impede the City of San Diego’s ability to successfully implement its MSCP subarea plan.

Potential indirect impacts resulting from implementation of the proposed project would include conveyance of stormwater runoff (and associated water quality impacts), which could affect a portion of San Diego Bay to the north and/or the Tijuana Estuarine Reserve to the south of the
project site. Implementation of an SWPPP and a final post-construction BMP plan as outlined in Mitigation Measures HYD-1 and HYD-2 in Section 4.3.9, Hydrology and Water Quality, respectively, would ensure impacts related to stormwater runoff and water quality would remain less than significant. As all water quality impacts would be less than significant with mitigation incorporated, the project would not impede the City of San Diego’s ability to implement its MSCP subarea plan or the Water Authority’s ability to implement its draft subregional NCCP/HCP.

**Mitigation Measure(s)**

No mitigation measures are required.

**Sources**

Ogden Environmental. 1998. *Final Multiple Species Conservation Program*. MSCP Plan. Prepared for the City and San Diego and the County of San Diego.

FIGURE 10
Existing Land Uses

Z:\Projects\j700202\MAPDOC\MAPS\Draft IS-MND\Figure10-LandUse.mxd

- Project Boundary
- Residential
- Commercial and Office
- Public Facilities and Utilities
- Parks and Recreation
- Undeveloped

Project Site
4.3.11 Mineral Resources

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td>☒</td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a) Would the project 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?

No Impact. The City of Imperial Beach and the County of San Diego do not identify any mineral resource recovery sites within city boundaries (County of San Diego 2011c). According to the County of San Diego General Plan, the City of Imperial Beach is not located within a Mineral Resource Zone and is devoid of mineral resource potential (County of San Diego 2011c).

The City of San Diego General Plan Conservation Element (City of San Diego 2011b), as well as the County of San Diego Guidelines for Determining Significance – Mineral Resources (County of San Diego 2008), designates the City of Imperial Beach as being located within Mineral Resource Zone 3 (MRZ-3) (County of San Diego 2011b, 2011c). The MRZ-3 zone is defined as an area that contains “known mineral deposits that may qualify as mineral resources” and states, “further explorations of these areas could result in the reclassification of specific localities into the MRZ-2 category” (County of San Diego 2008). No significant mineral resources or deposits are known to occur within the City of Imperial Beach, however, and as the proposed project site has been previously graded and developed and does not propose mineral extraction activities, the project is not expected to result in the loss of availability of a known mineral resource that would be of value to the region or state. No impacts would occur.

Mitigation Measure(s)

No mitigation measures are required.

b) Would the project 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?
No Impact. As discussed in response 4.3.10(a) above, per the County of San Diego General Plan, the City of Imperial Beach is not located within a Mineral Resource Zone and is devoid of mineral resource potential (County of San Diego 2011c). In addition, the City of Imperial Beach and County of San Diego do not identify any mineral resource recovery sites within city boundaries (County of San Diego 2011c). As there are no mineral resource recovery sites occurring on or near the proposed project site, the project would not result in the loss of availability of a locally important mineral resource recovery site. No impact would occur.

Mitigation Measure(s)

No mitigation measures are required.

Sources


4.3.12 Noise

Environmental Issues
Would the project result in:

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

A noise study was prepared for the project by Ldn Consulting, Inc. (LDN) in order to evaluate the potential noise impacts related to project construction and operation (LDN 2011). The report is included as Appendix F and incorporated into this IS/MND by reference. The analysis and conclusions of this report provide the basis for the following responses.

Sound is measured in terms of intensity, which describes the sound’s loudness and is measured in decibels (dB); frequency or pitch, measured in cycles per second or hertz (Hz); and duration of sound. Sound is composed of various frequencies; however, the human ear does not respond to all frequencies. Sound level meters adjust for the weight the human ear gives to certain frequencies, applying a correction to each frequency range to approximate the human ear’s sensitivity within each range. This is called “A-weighting” and is commonly used in measurements of community environmental noise. The A-weighted sound level, abbreviated dB(A), is determined to be the most appropriate unit of measure for community noise.

Due to fluctuations in community noise over time, a single measurement called the Equivalent Sound Level (Leq) is often used to describe the time-varying character of community noise. The
Leq is the energy-averaged, A-weighted sound level during a measured time interval, and is equal to the level of a continuous steady sound containing the same total acoustical energy over the same period of time. The 1-hour A-weighted equivalent sound level, Leq (h), is the energy average of the A-weighted sound levels occurring during a 1-hour period and is often the basis for noise ordinance criteria.

Noise measurements were conducted at and adjacent to the project site on January 14, 2010, between the hours of 2:30 p.m. and 3:05 p.m., to determine the existing ambient noise levels. Two locations were selected by Ldn Consulting, Inc., for appropriate noise measurements (Figure 11). Table 5 summarizes the ambient noise levels measured at these two locations.

### Table 5
**Measured Ambient Noise Levels**

<table>
<thead>
<tr>
<th>Measurement Identification</th>
<th>Description</th>
<th>Measured Noise Level (dB (A))</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>Palm Ave</td>
<td>Leq 64.8, Lmax 84.1, Lmin 50.7, L10 63.3, L50 61.1, L90 54.7</td>
</tr>
<tr>
<td>M2</td>
<td>Southern Property Line</td>
<td>Leq 55.1, Lmax 55.1, Lmin 49.1, L10 57.4, L50 54.1, L90 51.7</td>
</tr>
</tbody>
</table>


a) **Would the project result in 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?**

**Less Than Significant Impact with Mitigation Incorporated.** The project site is located within the City of Imperial Beach; therefore, noise criteria from the City of Imperial Beach Municipal Code were utilized in the noise study and this evaluation to evaluate potential construction noise impacts. The City of Imperial Beach does not specify daytime noise limits on construction activities or property line noise limits for operational noise, however. Commonly, the City of Imperial Beach utilizes the County of San Diego’s Noise Ordinance noise limits for projects; therefore, the applicable County of San Diego property line noise limits also were utilized in the noise study (LDN 2011).

**Construction Noise Standards**

City of Imperial Beach Municipal Code Chapter 9.32.020 addresses the limits of disturbing or offensive construction noise. The municipal code states that the use of any tools, power machinery, or equipment so as to cause noises disturbing to the comfort and repose of any person residing or working in the vicinity, or in excess of 75 decibels (75 dBA), is prohibited between the hours of 10 p.m. and 7 a.m., except when necessary for emergency repairs required for the
health and safety of any member of the community (City of Imperial Beach 2011b). The municipal code does not set daytime noise limits on construction activities. Commonly, the City of Imperial Beach has utilized the County of San Diego’s Noise Ordinance noise limit of 75 dBA during the daytime hours of 7 a.m. to 7 p.m. for other projects; therefore, a standard of 75 dBA will be applied during the construction activities.

**Operational Noise Standards**

As described above, noise-generating sources in Imperial Beach are typically regulated by the County of San Diego Noise Ordinance as the City of Imperial Beach does not identify any specific property line noise level standards (LDN 2011). The County of San Diego Noise Ordinance establishes limits for individual noise sources or generators. The sound-level limits apply to noise generation from one property to an adjacent property and depend on the time of day and the receiving land use. The sound-level limits for noise-generating sources as set forth in the County of San Diego’s Noise Ordinance are identified in Table 6.

<table>
<thead>
<tr>
<th>ZONE</th>
<th>Applicable Limit One-Hour Average Sound Level (Decibels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-S, R-D, R-R, R-MH, A-70, A-72, S-80, S-81, S-87, S-88, S-90, S-92, R-V, and R-U. Use Regulations with a density of less than 11 dwelling units per acre</td>
<td>7 a.m. to 10 p.m. 75, 10 p.m. to 7 a.m. 45</td>
</tr>
<tr>
<td>R-RO, R-C, R-M, C-30, S-86, R-V, R-U and V5. Use Regulations with a density of 11 or more dwelling units per acre.</td>
<td>7 a.m. to 10 p.m. 55, 10 p.m. to 7 a.m. 50</td>
</tr>
<tr>
<td>S-94, V4, and all other commercial zones</td>
<td>7 a.m. to 10 p.m. 60, 10 p.m. to 7 a.m. 55</td>
</tr>
<tr>
<td>V1, V2</td>
<td>7 a.m. to 7 p.m. 60</td>
</tr>
<tr>
<td>V1, V2</td>
<td>7 p.m. to 10 p.m. 55</td>
</tr>
<tr>
<td>V1</td>
<td>10 p.m. to 7 a.m. 55</td>
</tr>
<tr>
<td>V2</td>
<td>10 p.m. to 7 a.m. 50</td>
</tr>
<tr>
<td>V3</td>
<td>7 a.m. to 10 p.m. 70, 10 p.m. to 7 a.m. 65</td>
</tr>
<tr>
<td>M-50, M-52, M-54</td>
<td>Anytime 70</td>
</tr>
<tr>
<td>S-82, M-58, and all other industrial zones</td>
<td>Anytime 75</td>
</tr>
</tbody>
</table>

**Table 6**

San Diego County Noise Ordinance Sound Level Limits

SOURCE: County of San Diego Noise Ordinance, Section 36.404.

dB(A) = A-weighted decibels
As shown in Table 6 above, Section 36.404 of the County of San Diego Noise Ordinance sets an operational exterior noise limit for the commercial uses of 60 dBA Leq for daytime hours of 7 a.m. to 10 p.m., and 55 dBA Leq during the noise-sensitive nighttime hours of 10 p.m. to 7 a.m. A residential noise limit of 50 dBA Leq is required during the daytime hours and 45 dBA Leq during the nighttime hours. Although most of the proposed uses will operate only during the daytime hours, some may operate during nighttime or early morning hours and therefore the most restrictive and conservative approach is to apply the 50 dBA Leq nighttime standard at the property lines. Based on this criteria, the project must meet a 50.0 dBA Leq standard (arithmetic mean between 55 dBA and 45 dBA between 7 a.m. to 7 p.m.) at the residential property line to the south.

Construction Impacts

Construction noise from the proposed project represents a short-term impact on the ambient noise levels. Noise generated by construction equipment includes haul trucks, water trucks, graders, dozers, loaders, and scrapers can reach relatively high levels. Grading activities typically represent one of the highest potential sources for noise impacts. The most effective method of controlling construction noise is through local control of construction hours and by limiting the hours of construction to normal weekday working hours.

Construction activities associated with the proposed project would generally involve the following: (1) demolition of existing paved areas; (2) site preparation, including grading; (3) building construction; and (4) paving. Specific project construction details and equipment fleet specifications are not available at this time. However, construction activities are expected to require the use of both mechanized and handheld equipment, including excavators, loaders, compactors, bull dozers, dump trucks, water trucks, forklifts, pneumatic equipment, graders, cranes, pavers, rollers, and cement mixers. Exact equipment would be determined as part of final construction plans. Construction activities are not expected to require the use of equipment with higher noise generation characteristics, such as pile drivers, rock drills, and blasting equipment.

According to the noise study prepared for the project, the worst-case noise levels from the construction equipment operations would occur during the demolition and grading phases (LDN 2011). The earthwork schedule identifies mass grading the site with anticipated equipment including an excavator, a loader, two compactors, a water truck, and two dozers and several haul trucks for material import. Most of the equipment will be spread out over the alignment of the existing buildings, except when loading haul trucks for export. This operation would require a dozer, compactor, and water haul truck. Therefore, the worst-case noise condition would occur when the dozer, compactor, and water haul truck are working in close proximity to each other at an average distance of approximately 50 feet from the southern property line.
The amount of time the equipment would be utilized over an 8-hour period at this distance from
the property line was also factored into the average noise level calculations. The noise levels
utilized in this analysis for the demolition and grading are shown in Table 7.

### Table 7
Estimated Worst-Case Construction Noise Levels

<table>
<thead>
<tr>
<th>Construction Equipment</th>
<th>Quantity</th>
<th>Source Level at 50-Feet (dBA)</th>
<th>Duty Cycle (hours/day)</th>
<th>Cumulative Noise Level at Property Line (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demolition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haul Truck</td>
<td>1</td>
<td>75</td>
<td>2</td>
<td>69.0</td>
</tr>
<tr>
<td>Skip Loader</td>
<td>1</td>
<td>72</td>
<td>4</td>
<td>69.0</td>
</tr>
<tr>
<td>Excavator</td>
<td>1</td>
<td>74</td>
<td>6</td>
<td>71.8</td>
</tr>
<tr>
<td><strong>Cumulative Noise Levels from Demolition</strong></td>
<td></td>
<td></td>
<td></td>
<td>74.9</td>
</tr>
<tr>
<td><strong>Grading</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Truck</td>
<td>1</td>
<td>70</td>
<td>4</td>
<td>67.0</td>
</tr>
<tr>
<td>Dozer</td>
<td>1</td>
<td>74</td>
<td>4</td>
<td>71.0</td>
</tr>
<tr>
<td>Compactor</td>
<td>1</td>
<td>72</td>
<td>4</td>
<td>69.0</td>
</tr>
<tr>
<td><strong>Cumulative Noise Levels from Grading</strong></td>
<td></td>
<td></td>
<td></td>
<td>74.1</td>
</tr>
</tbody>
</table>


As shown, with the equipment working closely together, the cumulative noise levels would be
74.9 dB(A) and 74.1 dB(A) for demolition and grading activities, respectively, at the nearest
property line. The average cumulative noise level for each of these activities would be below the
75 dBA threshold during construction; however, maximum construction noise levels at the
nearest property line may exceed 75 dB(A) based on the type and quantity of equipment
anticipated for construction. The project would limit construction hours, place mufflers on
equipment engines, and orient stationary sources to direct noise away from sensitive uses as
provided for in Mitigation Measure NOI-1; therefore noise impacts related to construction would
be considered less than significant with mitigation incorporated.

### Operational Impacts

Long-term operational noise would result from various commercial activities proposed on the
project site such as loading dock/delivery truck activities, outdoor mechanical equipment, and
the fast-food outdoor speaker. The project also would generate off-site traffic noise along various
roads in the area. In addition, the proposed commercial uses would be subject to noise from
existing roads and SR-75 adjacent to the project site.
Loading Docks and Delivery Trucks. There are seven buildings proposed for commercial/retail uses on the project site. Two buildings (Buildings A and F) would have loading docks and service areas as shown on Figure 3.

In general, the average noise level associated with delivery/loading dock noise would vary depending on such factors as truck engine power and idling times, the way loads are placed on hand trucks and forklifts, and the number of operating minutes in any hour. However, to determine the approximate noise levels that would be generated at the loading dock area, Ldn Consulting, Inc. utilized noise measurements conducted at an Albertson’s Shopping Center in San Diego, California in 2011 (LDN 2011). The measurements included truck drive-by noise, truck loading/unloading, and truck engine noise. Based on these comparative measurements, the unmitigated exterior noise levels for truck drive-by noise and truck engine noise were measured at 66.5 dBA Leq at a distance of 25-feet from the loading dock.

Noise levels drop 3 decibels each time the duration of the source is reduced in half; therefore, hourly truck noise level over a 15 minute period would be reduced 6 decibels to 60.5 dBA at a distance of 25-feet based on the limited time of operation. The loading dock proposed for Building A are approximately 90 to 95 feet from the southern property line; therefore, the noise level reduction due to distance would be 11.5 dBA. This would result in an unshielded noise level of 49 dBA Leq at the southern property line, which is below the most restrictive 50.0 dBA Leq property line standard set forth in the San Diego County Noise Ordinance and described above. The loading dock proposed for Building F is approximately 180 feet from the southern residential property line, resulting in an unshielded noise level of 43 dBA Leq. Therefore, noise impacts associated with delivery trucks would be considered less than significant.

Pursuant to California ARB requirements, commercial vehicles would not allow an engine to idle at any location for more than five consecutive minutes and shall turn off the engine if they are parking at any location within the project site. Additional deliveries would occur at the front of the other commercial/retail buildings using primarily small delivery trucks. These deliveries would not generate a substantial level of noise and would result in a less-than-significant impact. Should other commercial buildings propose loading docks or service areas in the future, a noise assessment would be necessary to evaluate that associated loading dock/delivery truck/service area noise would meet applicable noise ordinance criteria.

Outdoor Mechanical Equipment. Outdoor mechanical equipment, such as heating, ventilation, and air conditioning (HVAC) units would be installed on the rooftops of the proposed buildings. In order to evaluate the HVAC noise impacts for Buildings A through F, Ldn Consulting, Inc. utilized reference noise level measurements for rooftop HVAC equipment conducted at a Von’s Shopping Center in Murrieta, California in 2010 (LDN 2011). The unshielded noise levels for the HVAC units were measured at 65.9 dBA Leq at a distance of 6 feet. The grocery/market
(Building A) is proposed with a larger 18 ton unit and one smaller unit having a reference noise level of 76 dBA at 3-feet. The noise levels associated with the roof-top mechanical ventilation system would be limited with the proposed parapet walls on each building, which would vary in height but would be roughly 1-foot higher than the HVAC units to shield them both visually and acoustically.

The noise levels from proposed HVAC equipment at the nearest residential uses located along the southern property line, taking into consideration reductions due to distance and the rooftop parapet walls, would range up to 35.9 dB(A) and a cumulative noise level of 43.7 dB(A) as generated from Building E, the closest building to the southern property line. This would be below the most restrictive 50.0 dBA Leq property line standard set forth in the San Diego County Noise Ordinance; therefore, noise impacts associated with HVAC equipment would be considered less than significant.

**Drive-Through Speaker.** As shown on Figure 3, a drive-thru would be located at Building B. Noise associated with drive-through commercial uses is generally similar to other commercial uses, except that an outdoor menu board drive-through speaker may be used. To assess the potential drive-through speakerphone noise levels at the proposed Building B, Ldn Consulting, Inc. utilized noise level measurements conducted at an existing Jack in the Box in Fallbrook California in October 2010 (LDN 2011). The maximum measured noise level generated by the drive-thru speakerphone was 68.4 dBA at a distance of 15-feet. Taking into consideration the noise level reductions due to the distance of Building B from the nearest residential uses located along the southern property line and the noise reduction from other proposed buildings on the site would result in a noise level of 27.3 dB(A). This would be below the most restrictive 50.0 dBA Leq property line standard set forth in the San Diego County Noise Ordinance; therefore, noise impacts associated with drive-through speaker would be considered less than significant.

**Future Off-Site Traffic Noise Level Increase.** In addition to stationary noise generated at the project site, the project may also contribute traffic noise in the project vicinity due to increased traffic along adjacent roads generated by the proposed land uses on the project site. Off-site project-related roadway segment noise levels were calculated using the methods in the Highway Noise Model published by the Federal Highway Administration (FHWA Highway Traffic Noise Prediction Model, FHWA-RD-77-108, December, 1978). The FHWA Model uses the traffic volume, vehicle mix, speed, and roadway geometry to compute the appropriate equivalent noise level generated. For purposes of the noise analysis, a direct or cumulative roadway noise impacts would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL or if the project increases noise levels above an unacceptable noise level per applicable noise standards. A 3 dB increase is generally considered to be the point of change in environmental noise that can just be detected by the human ear.
To determine if direct off-site noise level increases associated with the development of the project would create significant noise impacts, the noise levels for the existing conditions were compared with the estimated noise level increase from traffic generated by the project as provided in the traffic impact analysis prepared for the project (USA 2011). The noise levels and reference distances to the 60 dBA CNEL contours for the roadways in the vicinity of the project site were also utilized, excluding the effect of any existing noise barriers or topography that may affect ambient noise levels. According to the noise study prepared for the project (LDN 2011), the overall off-site roadway segment noise levels would increase by up to 0.4 dBA CNEL as a result of the proposed project. The project does not create a direct noise increase of more than 3 dBA CNEL on any roadway segment; therefore, the project’s direct contributions to off-site roadway noise would not adversely affect existing or future noise sensitive land uses. Impacts would be considered less than significant.

**Cumulative Impacts**

Although not all noise sources from the proposed project are close enough to each other in distance or sound level to create a cumulative effect necessarily, a conservative approach was taken to estimate cumulative noise levels at three separate locations along the southern property line as shown on Figure 12. These projections include estimated noise levels generated by the delivery truck and loading/unloading areas at Buildings A and F, the drive-thru at Building B, and the HVAC units on each building. The resultant cumulative noise level was projected to be at or below 41.6 dB(A) Leq at the southwestern property line, at or below 47.2 dB(A) Leq at the southern property line, and at or below 49.8 dB(A) Leq at the southeastern property line. At each of these locations, cumulative noise levels from on-site commercial activities are projected to comply with the daytime and nighttime noise standards at the residential areas to the south. Impacts would be considered less than significant.

To determine if cumulative off-site traffic noise level increases associated with development of the project and other planned or permitted projects in the vicinity would create noise impacts, noise levels for near-term project building and other planned and permitted projects were compared with existing conditions (LDN 2011). Utilizing the project’s traffic impact analysis (USA 2011), Ldn Consulting, Inc. developed noise contours for existing and future conditions. According to the noise study prepared for the project, the overall roadway segment noise levels would increase from between 0.9 dB(A) CNEL to 2.1 dB(A) CNEL, which would be considered a less than significant impact.

**Mitigation Measure(s)**

No mitigation measures are required.
b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Heavy equipment used during the demolition, grading and construction activities may generate ground vibration; however, construction activities would be short-term, are not anticipated to result in continuous vibration levels, and would cease once construction is complete. Construction activities are not expected to require the use of equipment with higher noise generation and vibration characteristics such as pile drivers, rock drills, or blasting equipment; therefore, construction of the project is not expected to generate excessive ground borne vibration or ground borne noise levels. In addition, implementation of mitigation discussed in (a) above would further minimize potential for generation of groundborne noise. Impacts would be considered less than significant.

Mitigation Measure(s)

NOI-1 Prior to issuance of any grading permit(s) for the project, the project applicant or its contractor(s) shall ensure that:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.
- Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from or shielded from sensitive noise receivers.
- During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors.
- The project shall be in compliance with the County of San Diego’s Noise Ordinance such that construction shall occur on the weekdays (Monday through Friday) between the hours of 7:00 a.m. to 7:00 p.m. Construction hours, allowable workdays and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners and residents to contact the job superintendent. In the event that the City of Imperial Beach receives a complaint regarding construction noise, appropriate corrective actions shall be implemented and a report of the action provided to the reporting party.
c) **Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

*Less Than Significant Impact.* As indicated in Response 4.3.12(a), the project’s permanent contribution to the ambient noise environment would not result in significant impacts to any sensitive receptors in the project vicinity due to onsite activities and uses. Project generated traffic would not contribute to a substantial permanent noise increase on area roadways above existing conditions. Therefore, impacts would be considered less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

*d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

*Less Than Significant Impact.* As described above, noise measurements were conducted at and adjacent to the project site on January 14, 2010 between the hours of 2:30 p.m. to 3:05 p.m. to determine the existing ambient noise levels. Two locations were selected by Ldn Consulting, Inc. for appropriate noise measurements (Figure 11). The measured average $L_{eq}$ noise levels were at these sites were 64.8 dB(A) at the northeastern portion of the project site and 55.1 dB(A) at the southern property line near 8th Street. As described in the noise study prepared for the project, 90% of the time the noise levels were between 51 and 55 dB(A). The primary noise source was traffic along Palm Avenue.

Redevelopment of the project site into a commercial shopping center would result in an increase in ambient noise levels existing without the project; however, noise levels generated by the project would not be substantially greater than the existing ambient noise levels measured at and adjacent to the project site. Therefore, due to the ambient noise levels associated with traffic along Palm Avenue, noise generated by the proposed project would not result in a substantial permanent increase in ambient noise levels. In addition, as described in response 4.3.12(a) above, short-term noise impacts from construction activities would not exceed the established noise threshold at the residential properties to the south. Impacts would be considered less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.
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 of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. As described in response 4.3.8(e), the proposed project site is not located within an airport land use plan, nor is it located within two miles of a public airport. No impacts would occur.

Mitigation Measure(s)

No mitigation measures are required.

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?

Less Than Significant Impact. As previously discussed in response 4.3.8(f), the project site is located approximately one mile from the Naval Outlying Landing Field (NOLF) Imperial Beach. NOLF is part of the Naval Base Coronado, and is located approximately 10 miles south of the base adjacent to the Tijuana Slough National Wildlife Refuge in Imperial Beach. The proposed commercial uses would not expose people residing or working in the project area to excessive noise levels, however. As such, impacts due to airport-generated noise would be considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

Sources


**4.3.13 Population and Housing**

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

**Discussion**

a) *Would the project induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*

**Less Than Significant Impact.** The proposed project involves the construction of commercial uses, including a food market, a retail/convenience store, and specialty retail uses. The project would not directly introduce substantial population growth in the area as no residential units are proposed and the surrounding properties are currently developed under Imperial Beach’s general plan. Despite an increase in development intensity at the site and greater use of underutilized space, the commercial development proposed would continue to serve the existing population of Imperial Beach and would not be of a scale that would induce substantial population growth. Although the project may slightly increase the permanent population of surrounding areas through new employment opportunities, the majority of future workers would be expected to reside in the surrounding community. Any population migration resulting from new employment opportunities generated by the project would be minimal as the project would not increase the existing housing supply in the area.

Infrastructure improvements required for the operation of the project would not indirectly induce population growth as the project promotes infill development rather than encouraging new development within a currently undeveloped area. The project does not propose development on a “greenfield” site within the city limits, and all major public services and utilities currently service the area. As no new utilities or substantially expanded infrastructure are required, growth inducement as a result of the extension of these types of facilities would not occur. Moreover, as residential, commercial, and industrial uses are currently located near the project site, the project is expected to extend existing infrastructure for the sole purpose of serving the proposed project...
and not accommodate future development or growth in the area. Impacts would be considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. Housing units do not exist currently on the proposed project site, and the project does not involve the demolition of buildings or residential housing. No impacts would occur.

Mitigation Measure(s)

No mitigation measures are required.

c) Would the project displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

No Impact. As discussed in response 4.3.13(b) above, housing units do not exist currently on the proposed project site and the project does not involve the demolition of buildings or residential housing. Project construction would not necessitate the construction of replacement housing and the proposed project would not displace residents living on or within the vicinity of the project site. No impacts would occur.

Mitigation Measure(s)

No mitigation measures are required.

Sources

None applicable.
department has upgraded its emergency medical services to the paramedic level. At least one firefighter/paramedic is on duty at all times. All other department personnel are trained at the Basic Life Support (emergency medical technician) level. Currently, the city contracts with a private ambulance company for transport of patients to hospitals.

The Imperial Beach Fire Department responds to approximately 1,800 emergency service calls annually, including structure fires, wildland fires, vehicle fires, hazardous materials incidents, traffic collisions, emergency medical aids, and public service requests. According to Tom Clark and Tom Santos of the Imperial Beach Fire Department, the department has adopted the following goals for response times:

- Deployment and arrival of the first-in engine company within five minutes, 90% of the time (Clark, pers. comm. 2011a).
- Deployment and arrival of the first-in engine company within one to three minutes, when responding within city limits (Santos, pers. comm. 2011).

According to Fire Chief Tom Clark, the anticipated response time to the proposed project site from the nearest engine company, Engine 39, would be approximately one minute, which is consistent with the department’s response time goals (Clark, pers. comm. 2011b).

The proposed project would not require a change in land use at the site that would increase existing demand on fire services within the city (i.e., high-density residential or industrial sites containing flammable/hazardous materials). All proposed buildings would be single-storied and fully-sprinklered, providing full roof access to any fire trucks equipped with aerial ladders in the event of a fire emergency. Additionally, the proposed project would be reviewed by the City of Imperial Beach Fire Prevention Bureau to ensure all project components and emergency access points are in compliance with applicable codes and requirements, including the California Fire Code, California Code of Regulations, and California Health and Safety Code (Imperial Beach Fire Department 2011). Although the proposed project would require fire protection services in the event of an emergency, the project is not expected to result in the need for new or physically altered fire facilities, or result in the Imperial Beach Fire Department’s inability to maintain acceptable service ratios, response times, or other performance objectives. Impacts resulting from fire service demand would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.
b) Police Protection?

**Less Than Significant Impact.** Law enforcement services are provided to the City of Imperial Beach by the San Diego County Sheriff’s Department. The Sheriff’s Department also serves the cities of Del Mar, Encinitas, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, and Vista. In these cities, the Sheriff’s Department functions as the primary police department, providing a full range of law enforcement services, including patrol, traffic, and investigative services. The San Diego County Sheriff’s Department is comprised of approximately 4,000 employees, both sworn officers and professional support staff. The department provides general law enforcement, detention, and court services for San Diego County in a service area of approximately 4,200 square miles. In addition, the department provides specialized regional services to the entire county, including the incorporated cities and the unincorporated areas of the county (San Diego County Sheriff’s Office 2011).

The San Diego County Sheriff’s Department Law Enforcement Bureau deploys approximately 275 patrol cars and employs 1,300 personnel, of which half are deputies. The Law Enforcement Bureau maintains 18 active patrol stations within the County of San Diego. The nearest patrol station to the proposed project site is located at 845 Imperial Beach Boulevard in Imperial Beach, approximately 0.7 mile from the project site. During the 2010 calendar year, 21 calls for service at the Priority 1 level (most urgent) were made to locations within the City of Imperial Beach. The average response time to Priority 1 calls (i.e., duration of time from call received to a deputy arriving at the scene) was approximately 2.9 minutes (Walters, pers. comm. 2011).

The proposed commercial development is intended as a community-serving use and would be served by the Sheriff’s Department and associated patrol station in Imperial Beach, as appropriate. Although the proposed project would require the provision of police protection services, the project is not expected to result in the need for new or physically altered police facilities or an increase in police staffing, or result in the Sheriff Department’s inability to maintain acceptable service ratios, response times, or other performance standards. Impacts to police protection services would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

c) Schools?

**No Impact.** The project does not propose the development of residential units, nor would it directly contribute to population growth within the area such that demand for local school services would increase. The proposed project is a commercial development that would attract
local workers and customers assumed to reside in the surrounding community; therefore, the project would not generate the need for additional school capacity. No impacts would occur.

**Mitigation Measure(s)**

No mitigation measures are required.

d)  **Parks?**

**No Impact.** The City of Imperial Beach maintains five municipal parks in addition to recreational opportunities provided by the Sports Park Recreation Center & Park, local beach areas, the Boys & Girls Club of Imperial Beach, and Portwood Pier Plaza. Construction and operation of the proposed project would not directly increase the population in the area or increase demand for the provision of additional park facilities such that physical deterioration of recreational facilities would occur. The proposed project would attract local customers and workers; however, customers and workers would not generate additional demand for parks facilities or cause the need for new or improved parks or recreational facilities to meet City of Imperial Beach General Plan policies regarding the provision of parks. No impacts would occur.

**Mitigation Measure(s)**

No mitigation measures are required.

e)  **Other public facilities?**

**Less Than Significant Impact.** The proposed project would not result in adverse impacts related to the provision of other public facilities, including emergency medical services or libraries. As the project would not directly or indirectly induce population growth, public facilities in the area are not expected to experience additional use that would generate additional demand for facilities. Impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**Sources**

Clark, T. 2011a. E-mail communication between T. Clark (Imperial Beach Fire Department Fire Chief) and J. Selby (City of Imperial Beach redevelopment coordinator). September 26.

Clark, T. 2011b. E-mail communication between T. Clark (Imperial Beach Fire Department Fire Chief) and J. Selby (City of Imperial Beach redevelopment coordinator). September 22.


Santos, T. 2011. E-mail communication between T. Santos (Imperial Beach Fire Department Fire Inspector) and J. Selby (City of Imperial Beach redevelopment coordinator). October 3.

Walters, M. 2011. E-mail communication between M. Walters (San Diego County Sheriff’s Office crime analyst) and J. Longabaugh (Dudek). August 17.
4.3.15 Recreation

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td>☐</td>
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<tr>
<td>b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?</td>
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</tr>
</tbody>
</table>

Discussion

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. As provided in response 4.3.14(d), the proposed project would not increase the use of existing parks or other recreational facilities. The project would not add permanent residents to the area who would use existing park facilities such that physical deterioration of recreational facilities would occur. The proposed project is a commercial development and would not increase demand for parks or result in the need for new or improved parks or recreational facilities to meet the City of Imperial Beach’s general plan policies regarding the provision of parks. No impacts would occur.

Mitigation Measure(s)

No mitigation measures are required.

b) Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. As provided in response 4.3.15(a) above, the project does not propose residential uses that would increase demand for recreational facilities in the project area or require construction or expansion of recreational facilities to meet Imperial Beach’s general plan policies regarding the provision of parks. As a commercial development, the project would not be required to construct recreational facilities for customers and workers. Therefore, no impacts would occur.
Mitigation Measure(s)

No mitigation measures are required.

Sources

None applicable.
Less Than Significant Impact. According to the traffic impact analysis prepared for the project (USA 2011), the project is expected to generate approximately 6,495 average daily trips (ADT) with 361 a.m. peak hour trips (206 inbound and 155 outbound) and 554 p.m. peak hour trips (286 inbound and 268 outbound). Taking into account cumulative trip reduction for “pass-by-trips,” the project is expected to generate approximately 5,558 cumulative ADT with 311 a.m. peak hour trips (177 inbound and 134 outbound) and 376 p.m. peak hour trips (195 inbound and 181 outbound).

As indicated in Section 3.2 of this IS/MND, former commercial businesses on the project site have been closed, with all buildings expected to be demolished by the City of Imperial Beach prior to initiating construction of the Breakwater project. Nonetheless, in order to provide a basis of comparison between proposed and former commercial land uses on the project site, driveway and cumulative trip generation for the site as it existed when all businesses were open and operational has been estimated. Those estimates indicate driveway ADT to have been 4,532 (190 trips occurring during the a.m. peak hour and 419 trips occurring during the p.m. peak hour) and 3,807 ADT cumulative trip generation (160 trips during a.m. peak hour and 333 trips during p.m. peak hour) taking into account cumulative trip reduction for “pass-by-trips” (USA 2011). As described above, future project trip generation once the proposed Breakwater project is operational would be 6,495 ADT and 5,558 cumulative ADT. As compared to trips associated with previous on-site uses the resulting net driveway trip generation would be 1,963 ADT with 171 a.m. peak hour trips (93 inbound and 78 outbound) and 135 p.m. peak hour trips (72 inbound and 63 outbound) (USA 2011). Net cumulative trip generation, taking into account trip reduction for “pass-by-trips”, would be 1,751 ADT with 152 a.m. peak hour trips (82 inbound and 69 outbound) and 43 p.m. peak hour trips (25 inbound and 18 outbound) (USA 2011).

The traffic impact analysis prepared for the project utilizes the San Diego Region Traffic Engineer’s Council (SANTEC) and Institute of Transportation Engineers (ITE) Guidelines for Traffic Impact Studies in the San Diego Region, in addition to the 2008 SANDAG Congestion Management Update as a basis for analysis and impact significance criteria. Evaluation of traffic impacts for the project was based on examination and comparison of six scenarios:

- Existing Year 2011 Conditions
- Existing with the Project
- Near Term
- Near Term with Project
- Year 2030; and
- Year 2030 with the Project.
Using traffic projections and computerized traffic models, along with available existing traffic counts, the project was evaluated for each of above timeframes and scenarios. When analyzing street segments and intersections, the level of service (LOS) was determined. LOS is a measure used to describe the conditions of traffic flow and is expressed using letter designations from “A” to “F” with LOS A representing the best case with little or no congestion and LOS F representing the worst case with severe congestion. The City of Imperial Beach considers LOS D or better to be acceptable intersection operating conditions during peak traffic periods and LOS C acceptable for street segments. In addition, for roadway segments, a significant project traffic impact may occur if, at segments with “E” or “F” levels of service, the volume-to-capacity ratio is changed by more than 0.02 with the addition of traffic from the project site. For intersections, a significant impact may also occur if the project adds an amount of traffic sufficient to change the average intersection delay by more than 2 seconds.

**Direct Impacts**

In order to determine and evaluate potential direct impacts resulting from the project, expected traffic from the project was added to existing traffic, and existing traffic conditions were compared to traffic conditions once traffic from the proposed project was added. In addition, project traffic for the a.m. and p.m. peak hours was added to existing traffic at these times and compared to existing conditions in order to identify direct project impacts at intersections.

Under Existing Year 2011 conditions, all six study roadway and freeway segments were calculated to operate at LOS C or better, and all 11 study intersections were calculated to operate at LOS D or better in both a.m. and p.m. peak hours. Under existing Year 2011 With Project conditions, all of the study roadways were calculated to operate at LOS C or better with a change in volume-to-capacity ratio of less than 0.02. No significant direct impacts to roadway segments would occur. Similarly, all of the study intersections were calculated to operate at LOS D or better; therefore, no significant direct impacts to intersections would occur.

**Cumulative Impacts**

In order to determine potential cumulative traffic impacts, projected traffic from other projects in the area was combined with existing traffic volumes to determine approximate Near Term conditions. Other projects considered include the City of Imperial Beach Commercial Zoning Review, Bikeway Village, and Seacoast Inn. Projected traffic from the Breakwater project was then combined with the Near Term conditions to determine Near Term with Project conditions. Project traffic was combined with traffic model projections for Year 2030 to obtain a long-term analysis. The traffic impact analysis evaluated impacts caused as a result of community traffic growth as well as traffic from the project area. No significant cumulative impacts to roadway
segments or study area intersections were identified in the “Near Term, Near Term with Project, or Year 2030 scenarios.

Under existing conditions, the project site includes three access points: one off Palm Avenue, one at the northeast corner of the site off 9th Street, and one off Delaware Street where the roadway extends into the site. As shown on Figure 8, vehicular access from these three points would no longer exist under the proposed project. The project would involve closing existing access points to the site, including vacation of Delaware Street at the southern boundary of the project site and a portion of the alley south of the project site at 9th Avenue, and removal of certain roadway easements within the project site.

Once constructed, access to the project site would be provided via two new driveways along the northern property boundary (one off Palm Avenue and one off SR-75), as well as via new access points at the southeast corner of the site at 9th Street and from the alley along the southern project boundary near 9th Street. Semi-truck ingress and egress to the project site would not be allowed via the main project driveway off SR-75, but rather by secondary access driveways off Palm Avenue at the northwest corner of the project site and via 9th Street at the southeast corner of the project site. These secondary driveways provide direct access to the loading/service dock areas associated with Buildings A and F. Access at the southeastern corner of the project site via the alleyway south of the project site would be for emergency access only and the occasional truck attempting to enter the site from this point.

Although the project would not result in any significant direct or cumulative impacts related to traffic and circulation, a number of improvements to the site and adjacent intersections are proposed as part of the project to improve access and circulation to and around the project site, and also to promote safe circulation for vehicles, bicycles, and pedestrians. These include improved pedestrian access along the project frontage and a reconfigured intersection at SR-75 and Palm Avenue, which would eliminate a free-right turn from eastbound Palm Avenue to SR-75. This right turn would be replaced by a dual-right turn lane from Palm Avenue to SR-75. All traffic at this new alignment would be controlled via a modified traffic signal on SR-75 at Palm Avenue. Also controlled by the modified traffic signal, a dedicated left-hand and U-turn traffic lane would be provided from westbound SR-75 to eastbound SR-75 at the new intersection with Palm Avenue. Additionally, a right-in/right-out channelized turn lane would be provided along the project frontage on SR-75 per Caltrans requirements. A new sidewalk would be provided on the south side of SR-75 along the project frontage to facilitate pedestrian movement and minimize pedestrian and vehicle conflicts. Pending Caltrans approval, a marked crosswalk would be provided across SR-75 on the west and/or east side of the intersection of 9th Street and SR-75, combined with a modified traffic signal and a median refuge at the 9th Street/SR-75 intersection consistent with the Palm Avenue Master Plan Study.
Improvements at the project’s primary access point off SR-75 would include construction of a new two-lane driveway with a partial median dividing directional traffic. A right-in/right-out channelized turn lane would be provided for both ingress and egress from the site at this access point. Within the project site, vehicular access would be provided directly to the commercial/retail buildings via on-site roads. In addition to vehicular paths, the internal circulation network for the Breakwater project includes dedicated on-site paths of travel supported by enhanced paving and crosswalks to encourage pedestrian and bicycle accessibility. Site design and building placement would include a designated circulation route interconnecting all uses on site, including site entrances, primary building entrances, public facilities, and plaza areas, and adjacent uses to existing external pedestrian facilities and streets, thereby minimizing barriers to pedestrian access and interconnectivity. The project site would include clearly marked pedestrian pathways and enhanced paving to minimize conflict between vehicular and pedestrian circulation.

The proposed project would not result in significant direct or cumulative impacts to relevant components of the circulation system as established by the SANTEC and ITE Guidelines for Traffic Impact Studies in the San Diego Region or the 2008 SANDAG Congestion Management Update as outlined in the traffic impact analysis prepared for the project and summarized above. The project applicant would make its fair-share contribution of all development impact fees and transportation development impact fees to the appropriate jurisdiction, as applicable. Additionally, the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation, as described in more detail in response 4.3.16(f) below. Impacts would be considered less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

*b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

**Less Than Significant Impact.** As described in the traffic impact analysis prepared for the project, the Regional Congestion Management Program (CMP) Guidelines, as adopted by SANDAG, as well as Caltrans guidelines, were used to evaluate the performance of intersections during peak hour times. As described in response 4.3.17(a) above, no significant direct or cumulative impacts to any of the 11 study area intersections would occur as a result of the proposed project. Impacts would be less than significant.
In addition, the CMP guidelines adopted by SANDAG provide a set of procedures for completing enhanced CEQA review for certain development projects. The CMP guidelines determine whether a large project (i.e., greater than 2,400 daily trips and more than 250 peak hour trips) would adversely impact the CMP transportation system and therefore must be evaluated in accordance with the Regional Congestion Management Program most recently updated in 2008. As described in response 4.3.17(a) above, the resulting net cumulative trip generation of the proposed project would be 1,751 ADT with 152 a.m. peak hour trips (82 inbound and 69 outbound) and 43 p.m. peak hour trips (25 inbound and 18 outbound), as compared to trips associated with previous on-site uses and cumulative trip reduction for “pass-by-trips” (USA 2011). According to the traffic impact analysis, therefore, the project is not required to provide additional CMP analysis.

**Mitigation Measure(s)**

No mitigation measures are required.

c) **Would the project 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?**

*No Impact.* The proposed project site is not located within an airport land use plan, nor is it located within 2 miles of a public airport. The project site is located approximately 1 mile from NOLF Imperial Beach; however, the project would not create a change in air traffic patterns or air traffic levels that would result in substantial safety risks. No impacts would occur.

**Mitigation Measure(s)**

No mitigation measures are required.

d) **Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

*Less Than Significant Impact with Mitigation Incorporated.*

**Construction Impacts**

Access to the site during construction would be from both SR-75 and 9th Street, depending on the timing of the off-site improvements at Palm Avenue and SR-75. Traffic to and from the project site during construction would primarily utilize SR-75 to bring vehicles and equipment to the site. During the initial phase of construction, a general construction staging area would be located on the western portion of the project site where Buildings F and G would eventually be
constructed. While Buildings E, F, and G are constructed, the staging area would be placed in the proposed parking areas on the western portion of the site.

During all phases of construction, construction vehicles would park and deliver necessary materials to the construction staging areas via SR-75 and 9th Street. Transportation, removal, and disposal of any construction materials, waste, or other project-related materials would occur at the general construction staging areas. To the extent possible, construction equipment would be contained within the construction staging areas or within the project footprint. Any earthwork material or topsoil needing to be temporarily stockpiled or equipment/supplies needing to be stored would be located within the staging areas and not along 9th Street or within the residential neighborhoods. Similarly, parking for construction vehicles and equipment would be prohibited on 9th Street, the alley immediately south of the project site, and in the adjacent residential neighborhoods throughout the duration of construction. Parking for construction equipment, vehicles, and workers would occur within the construction staging areas or within the project footprint to the extent feasible. If necessary, construction workers may park at a designated off-site area that is not within a residential neighborhood and then shuttle/carpool to the project site, or within a designated area identified by the project applicant and City of Imperial Beach.

A short-term and periodic increase in vehicle trips generated by construction workers and equipment delivering and removing materials has the potential to cause traffic hazards, including hazards to pedestrians, bicyclists, and motorists. In addition, reconfiguration of the SR-75/Palm Avenue intersection and construction of a new driveway at the project’s main access point off SR-75 has the potential to result in traffic hazards during construction at this intersection and along SR-75. By implementing a construction traffic control plan as provided in Mitigation Measure TRAF-1, the project would manage traffic and circulation-related impacts during construction and ensure that pedestrian/bicycle/motorist traffic circulates safely in and around the project site. Additionally, this mitigation would avoid or reduce potential impacts that construction of the proposed project may have on existing LOSs on surrounding roadways. Impacts would therefore be less than significant with mitigation incorporated.

Operational Impacts

Access to the project site would be provided via two new driveways along the northern property boundary (one off Palm Avenue and one off SR-75), as well as new access points at the southeast corner of the site at 9th Street and from the alley along the southern project boundary near 9th Street. Semi-truck ingress and egress to the project site would not be allowed via the main project driveway off SR-75, but rather by secondary access driveways off Palm Avenue at the northwest corner of the project site and via 9th Street at the southeast corner of the project site. These secondary driveways provide direct access to the loading/service dock areas associated with Buildings A and F. Access at the southeastern corner of the project site via the
alleyway south of the project site would be for emergency access only and the occasional truck attempting to enter the site from this point.

Improvements at the project’s primary access point off SR-75 would include construction of a new two-lane driveway with a center median dividing directional traffic. A right-in/right-out channelized turn lane would be provided for both ingress and egress from the site at this access point. In addition, the project would involve a reconfigured intersection at SR-75 and Palm Avenue, which would eliminate a free-right turn from eastbound Palm Avenue to SR-75. This right turn would be replaced by a dual-right turn lane from Palm Avenue to SR-75. All traffic at this new alignment would be controlled via a modified traffic signal on SR-75 at Palm Avenue. Also controlled by the modified traffic signal, a dedicated left-hand and U-turn traffic lane would be provided from westbound SR-75 to eastbound SR-75 at the new intersection with Palm Avenue. Additionally, a right-in/right-out channelized turn lane would be provided along the project frontage on SR-75 per Caltrans requirements. A new sidewalk would be provided on the south side of SR-75 along the project frontage to facilitate pedestrian movement and improve pedestrian safety. Pending Caltrans approval, a marked crosswalk would be provided across SR-75 on the west and/or east side of the intersection of 9th Street and SR-75, combined with a modified traffic signal and a median refuge at the 9th Street/SR-75 intersection consistent with the Palm Avenue Master Plan Study.

Project driveways would be constructed according to City of Imperial Beach roadway standards to the satisfaction of the City of Imperial Beach traffic engineer. Driveways to the project site would not contain sharp curves or any other dangerous design features. Intersections along the primary project access points would be signal-controlled, which would minimize the potential for dangerous turns and movements. The proposed parking lot would incorporate a traditional non-angled parking pattern. Additionally, with implementation of Mitigation Measure TRAF-1, potential hazardous movements would be reduced. As a result, operation of the project would not increase hazards due to a design feature or incompatible use. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure(s)

TRAF-1 Prior to the approval of final construction plans, the project applicant shall prepare a construction traffic control plan to be reviewed and approved by the City of Imperial Beach Traffic Engineering Department. The following measures shall be included as part of the plan to reduce or eliminate potential traffic hazards associated with construction activities:

- The primary ingress/egress points to the project site during construction shall be from SR-75 and 9th Street, depending on which buildings are being constructed
on the project site and the timing of the off-site improvements along SR-75 and Palm Avenue. Traffic to and from the project site during construction shall follow two primary routes, utilizing SR-75 and 9th Street to bring traffic to the site.

- Parking for construction vehicles or equipment shall be prohibited on 9th Street south of SR-75, the alley immediately south of the project site, or within any of the surrounding residential neighborhoods for the duration of construction (including south of SR-75 on 8th Street, Delaware Street, or 7th Street). Parking on 9th Street north of SR-75 shall be limited to necessary construction-related vehicles and equipment. To the extent possible, construction equipment shall be contained within the construction staging area or within the project footprint. Construction workers shall be encouraged to carpool to the project area from maintenance yards or the contractor’s primary location. Additional construction vehicle parking areas may be designated through coordination between the project applicant and the City of Imperial Beach. Public residential streets shall not be used for the storage or staging of construction materials or equipment.

- Haul routes shall be defined for transportation of construction materials. Hauling shall occur Monday through Friday between the hours of 7 a.m. and 7 p.m.

- Traffic control and safety measures shall be outlined to provide safe circulation around the project site during construction of the new project access driveway off SR-75 and the reconfigured SR-75/Palm Avenue intersection. Such measures may include, but are not limited to, temporary fencing, signage, road detours, lane consolidation, road barriers, or appropriate traffic diversion methods to the satisfaction of the City of Imperial Beach Traffic Engineering Department. All temporary traffic control measures shall be removed after construction activities are complete and related hazards are no longer present.

**e) Would the project result in inadequate emergency access?**

*Less Than Significant Impact.* The proposed project would provide vehicular access to the site via a new driveway connecting to Palm Avenue on the northwest corner of the project site, a new driveway connecting to SR-75 at the northern boundary of the project site, and a new driveway at the southeast corner of the project site off of 9th Street. There would also be a driveway connecting to the alleyway at the southern project boundary for emergency access. All driveways would be designed to comply with the width requirements of emergency access vehicles, including fire trucks as required by the Imperial Beach Fire Department. Therefore, the project would not result in inadequate emergency access and impacts would be less than significant.
Mitigation Measure(s)

No mitigation measures are required.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact. Relevant alternative transportation policies and objectives of the City of Imperial Beach General Plan Circulation Element focus on one primary goal: a safe and efficiently operating circulation system that provides for pedestrians, bicycles, trucks, automobiles and public transportation (City of Imperial Beach 2010a). This goal is supported by a number of policies in promotion of a balanced circulation system, including:

- **Policy C-9: Comprehensive Transit Services** – The city shall support the availability of transit service as a means to reduce automobile congestion, to provide transportation for those who have no other form of transportation, as a means to reduce air pollution, and as a service to visitors.

- **Policy C-10: Light Rail** – The city shall support the potential of light rail service to Imperial Beach to the extent that regional agencies can project sufficient ridership to assure economic feasibility.

- **Policy C-11: Bus Stops and Bus Transfer Points** – The city should encourage the San Diego Metropolitan Transit System (MTDB) to enhance Imperial Beach bus loading and unloading stops as well as bus transfer points. The SR-75/Palm Avenue at 9th Street bus stop should be upgraded to a MTDB Level IV stop to include accessibility to disabled persons, bicycle racks and storage facilities, expanded sidewalk, seating, passenger shelter, route destinations, route map, lighting, time tables for each route, trash receptacles, system map, and telephone. The city should encourage MTDB to provide route buses that can accommodate the transportation of bicycles for passengers. The city shall also explore the long-term potential for an expanded multi-model transfer station on SR-75/Palm Avenue.

- **Policy C-13: Ridesharing** – The city shall promote ridesharing and shall provide ridesharing information to the public.

- **Policy C-14: Management Programs** – The City shall cooperate with SANDAG to implement future congestion management programs and transportation demand management requirements included in the San Diego Regional Air Quality Strategy.
• **Policy C-15: Bikeways Plan** – Bikeways shall be located and classified appropriately. Westbound Palm Avenue between 7th Street and Rainbow Drive is classified as a Class III Route. Eastbound Palm Avenue is classified as a Class II Bicycle Route from Rainbow Drive to 7th Street. The bikeway plan is designed to tie into the City of San Diego’s Class II bike lane on SR-75, to connect to the bayshore bikeway, and to connect to a new eco-route bikeway as described in Policy C-16.

• **Policy C-16: Ecoroute Bikeway** – A special ecoroute bikeway shall be established to encompass Imperial Beach’ environmental assets, including South San Diego Bay, the Tijuana River Estuary, the dunes on South Seacoast Drive, the beach, the pier, and the breakwaters. The eastern portion of the Palm Avenue Ecoroute Bikeway Project should provide a transition between the proposed full-width improvements and the existing four-lane street road section and improvements, as currently constructed. Opportunities for interpretive stations should occur along the route.

• **Policy C-17: Bayshore Bikeway Extension** – The city shall encourage the construction of an additional leg of the bayshore bikeway paralleling SR-75 for a distance of approximately 3,000 feet. This route would be located on the east side of SR-75, from Rainbow Drive north to a connection with the bayshore bikeway. Such a route would provide a desired connection to the city beach and pier plaza area.

• **Policy C-18: Bike Route – Palm Avenue Corridor** – Palm Avenue between 3rd Street and 9th Street shall be designated as Class II and Class III bikeway routes. This segment of Palm Avenue shall be signed to encourage bicyclists and identify the corridor as a part of the city’s ecoroute bikeway.

• **Policy C-19: Bicycle Facilities Encouraged** – Bikeways shall be encouraged within the city and adjoining jurisdictions as a complement to Imperial Beach’s small-town residential character and recreation emphasis, as an effective alternative to automobile travel, to maximize the impact on air quality and energy conservation, and for the convenience of residents and visitors. Bicycle storage facilities should be considered as a required condition of approval on new development applications for proposed commercial, hotel, or major residential projects and/or provided at mass transit and bus system facilities or designated transit stops.

• **Policy C-21: Pedestrian Circulation** – Sidewalks shall be required for all new developments. Techniques shall be encouraged to create a pleasant walking experience including concern for views, paving materials, landscaping, street furniture, and
pedestrian-scaled lighting. Traffic calming measures, specifically on the Palm Avenue corridor between 9th Street and Seacoast Drive, should be employed as a measure to enhance public safety (City of Imperial Beach 2010a).

Implementation of the proposed project would not conflict with any of the above-referenced City of Imperial Beach General Plan policies regarding public transit, pedestrian and bicycle access, facility development, or safety of such facilities and improvements. The project also would not conflict with adopted policies, plans, or programs supporting alternative transportation.

The city is currently served by three bus routes providing local and regional connections. Service is provided by MTDB Contract Services. Regional routes with stops in the city include Route 901 serving downtown San Diego. Local bus service is provided by Routes 933 and 934 with stops on Palm Avenue, Seacoast Drive, Imperial Beach Boulevard, Coronado Avenue, the Iris Avenue Trolley Station, and the Palm Avenue Trolley Station facilities (City of Imperial Beach 2010a). There is currently a bus stop with a shelter for Route 901 just east of the project site along 9th Street. Location of the proposed buildings and other improvements would not interfere with continued operation of this stop or conflict with the continued operation of any MTDB routes serving the city. The proposed project would also provide the required Americans with Disabilities Act (ADA)–compliant handicapped parking spaces, an ADA-accessible path of travel throughout the project site, and sufficient on-site bicycle storage facilities (i.e., bike racks) for customers.

There are several designated bike routes within the city, including Class I bike paths, which provide separate right-of-way from vehicular traffic; Class II bike paths, which provide limited vehicular access; and Class III bike paths, which provide signs or markings within vehicular right-of-way. There are no designated bike routes adjacent to the project site; however, Palm Avenue/SR-75 is recommended for Class II and III facilities (City of Imperial Beach 2010a, Figure C-6). The proposed project would not conflict with or hinder implementation of these routes.

There are currently no sidewalks along most of the site frontage due to separation in grade between the site and Palm Avenue/SR-75. The project would elevate the site to be level with Palm Avenue, allowing for sidewalks along the entire project frontage and crosswalks at the SR-75 driveway, thereby improving pedestrian access and complying with City of Imperial Beach General Plan Circulation Element Policy C-21 regarding pedestrian circulation. Additional pedestrian access would be provided at the southern project boundary from Delaware and 8th Streets, including an ADA-accessible ramp adjacent to Building E. The project would not conflict with applicable policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Impacts would be considered less than significant.
Mitigation Measure(s)

No mitigation measures are required.

Sources

City of Imperial Beach. 2010a. *City of Imperial Beach General Plan and Local Coastal Plan*. Updated October 2010.

4.3.17 Utilities and Service Systems

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>a) Exceed wastewater treatment requirements of the applicable regional water quality control board?</td>
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<td>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?</td>
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<tr>
<td>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?</td>
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<td>d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td>☐</td>
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<td>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?</td>
<td>☐</td>
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<tr>
<td>f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>☐</td>
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<tr>
<td>g) Comply with federal, state, and local statutes and regulations related to solid waste?</td>
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Discussion

a) Would the project exceed wastewater treatment requirements of the applicable regional water quality control board?

**Less Than Significant Impact.** The City of Imperial Beach operates its own wastewater collection system, which is comprised of 11 pump stations, approximately 16,200 feet of forced sanitary sewer main, and approximately 36 miles of sewer lines ranging in diameter from 6 inches to 21 inches. The City of Imperial Beach is a member of the San Diego Metropolitan Sewerage System (Metro). Once wastewater is collected, the city transports it to Metro’s South Bay Interceptor, which then conveys it to the regional water treatment plant on Point Loma. The Point Loma Wastewater Treatment Plant treats approximately 175 million gallons per day (mgd) of wastewater with a treatment capacity of 240 mgd. The plant complies with all state and federal requirements governing the treatment and discharge of wastewater through a combination of industrial source controls, advanced primary treatment, and comprehensive environmental
monitoring. The U.S. Environmental Protection Agency (EPA) renewed the modified NPDES permit for the Point Loma Wastewater Treatment Plant on May 27, 2010; the permit was previously adopted by the RWQCB on June 10, 2009.

The city is located within the jurisdiction of the San Diego (Region 9) RWQCB and is thus required to comply with its wastewater treatment requirements. The Point Loma Wastewater Treatment Plant, which treats wastewater generated in Imperial Beach, complies with the wastewater treatment requirements of the EPA and RWQCB. The proposed project would result in an overall reduction in commercial building space at the site compared to the previous on-site uses. Consequently, the quantity of effluent from the project is expected to be similar or slightly less than what was generated under previous conditions. Wastewater generated by the proposed project would not exceed the treatment capacity of the Point Loma Wastewater Treatment Plant and would not exceed the wastewater treatment requirements of the RWQCB; therefore, impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

*Less Than Significant Impact.* The project’s sewer and water needs would be served by the existing sewer and water infrastructure present in and around the project site, with certain improvements necessary to serve the proposed commercial/retail development and extensions conveyed into the project site as necessary. The project would connect to the existing 16-inch water line in Palm Avenue via an 8-inch PVC pipeline to be distributed to each of the proposed on-site buildings (PDC 2011a). The proposed project would also include installation of a new on-site private storm drain system consisting of inlets, pipes, roof drains, and water quality features (PDC 2011a). The private storm drain system would connect into the public storm drain system at various locations. The existing public 18-inch line within the site boundaries would be removed and replaced with a larger pipe. The existing public 15-inch pipe collecting the 9th Street drainage would be upsized to a 36-inch RCP line and realigned. The project would construction all necessary infrastructure extensions of existing lines to the site to meet the water and sewer demands of the project, as well as all necessary laterals to provide water service to the proposed buildings. Finally, the project would install all necessary fire service with backflow device lines and on-site fire hydrants to ensure a reliable and appropriate water source exists on site for firefighting purposes.
Additionally, the project would be required to pay all applicable sewer and water connection fees to the applicable sewer and water provider and pay all development impact fees to the City of Imperial Beach. Construction of new water and sewer lines would be conducted in accordance with standard specifications for public works construction and city regulations. The project applicant would obtain any necessary sewer lateral connection permits from the City of Imperial Beach. The project is not expected to require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities beyond those required to provide service to the proposed development. Impacts are therefore considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

c) Would the project 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?

Less Than Significant Impact. As indicated in response 4.3.9(b) above, the proposed project would include an on-site private storm drain system consisting of inlets, pipes, roof drains, and water quality features. The private storm drain system will connect into the public storm drain system at various locations. The existing public 18-inch line within the site boundaries would be removed and replaced with a larger pipe. The existing public 15-inch pipe collecting the 9th Street drainage would be upsized to a 36-inch RCP line and realigned. This proposed change would significantly reduce the ponding potential at the 9th Street/Palm Avenue intersection. Ponding conditions within the project site would be further reduced by elevating the property above existing grade, further improving on-site drainage conditions (PDC 2011a). The proposed type and intensity of uses proposed for the site is similar in nature to the previous on-site development, and would not result in the need for substantial improvements to or expansion of off-site stormwater drainage facilities. Impacts are considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. The California American Water Company (CAWC) provides water service to the City of Imperial Beach, the City of Coronado, and portions of south San Diego and Chula Vista. As a private water company, CAWC is not a member of the Water Authority. Instead, its water is purchased directly from the City of San Diego. CAWC’s contract agreement with the City of San Diego affords CAWC the right to purchase as much water as it
requires to supply its customers for an indefinite period of time. In the event of a drought, which would require water restrictions, the contract provides for San Diego’s and CAWC’s customers to be restricted proportionately.

Currently, CAWC services approximately 20,300 customers, approximately 25%–30% of which are located within Imperial Beach city limits. The current water distribution for CAWC’s entire service area is approximately 13,000 acre-feet annually, with a proportional usage coming from the City of Imperial Beach. None of CAWC’s storage tanks, wells, and/or booster pumps is located within Imperial Beach. Water service in the city is provided through individual connections to lateral mains generally running beneath north–south streets. The main supply line for the distribution system is a 16-inch line located beneath Palm Avenue (City of Imperial Beach 2010a). Water would be distributed to each of the proposed on-site buildings via an 8-inch PVC pipeline connected to the 16-inch water line located beneath Palm Avenue. CAWC issued a will-serve letter for the proposed project, dated July 27, 2011, indicating intent to serve the proposed project’s water needs. Current water sources are therefore considered sufficient to serve the project and impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**e) Would the project 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?**

**Less Than Significant Impact.** As indicated in response 4.3.17(a) above, the Point Loma Wastewater Treatment Plant treats approximately 175 mgd of wastewater with a treatment capacity of 240 mgd. Wastewater generated by the project would not exceed the treatment capacity of the Point Loma Wastewater Treatment Plant; therefore, impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?**

**Less Than Significant Impact.** EDCO Waste & Recycling is the sole provider of solid waste and recycling collection services for residential, commercial, and industrial solid waste within the City of Imperial Beach. During construction and operation of the proposed project, therefore, EDCO Waste & Recycling would service the project’s solid waste disposal needs. EDCO transports collected
materials to one of several material recovery facilities where recyclable materials are separated. From there, non-recyclable material would be transported to the Otay Landfill in Chula Vista for disposal. According to the Department of Resources Recycling and Recovery (CalRecycle), the Otay Landfill has a maximum permitted capacity of approximately 62 million cubic yards (CalRecycle 2011). As of November 30, 2006, the Otay Landfill had a remaining capacity of approximately 33 million cubic yards (CalRecycle 2011). Therefore, the project would be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs. Additionally, through compliance with the waste diversion goals of Imperial Beach’s recycling programs, as discussed below in response 4.3.17(g), the proposed project would not substantially impact the Otay Landfill’s capacity thresholds. Impacts would be considered less than significant.

Mitigation Measure(s)

No mitigation measures are required.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. As described in response 4.3.17(f) above, EDCO Waste & Recycling would serve the project’s waste and recycling needs during construction and operation of the project. Non-recyclable materials would be transported to a local landfill with sufficient permitted capacity. Recyclables would also be collected and separated by EDCO and transported to appropriate collection facilities.

AB 939, The Integrated Waste Management Act, established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (eliminated as of January 1, 2010, with all duties and responsibilities transferred to CalRecycle) and local agencies in the implementation of programs associated with (in order of priority): (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. AB 939 also included waste diversion mandates that require all cities and counties to divert 50% of all solid waste through source reduction, recycling, and composting activities (CalRecycle 2011). The city has committed to source reduction and recycling through Policy F-19 in the general plan, which states, “The City shall emphasize source reduction by its residents and businesses to decrease the amount of solid waste generated. The City shall also maintain a recycling program to minimize impacts on regional solid waste disposal sites.”

The project would also comply with requirements outlined in Imperial Beach Municipal Code Chapter 8.36, regarding refuse collection, and Chapter 8.38, regarding construction and demolition debris recycling. Chapter 8.36 requires applicants for construction or demolition permits to complete and submit a waste management plan (City of Imperial Beach 2011b). The completed plan shall indicate total volume of construction or demolition debris, total volume of recycled materials.
construction or demolition debris, and a description of the means of diversion to include the approved facility that would be used for that purpose. The proposed project would generate solid waste typical of commercial businesses and would comply with the city’s waste diversion goals, as well as construction and demolition debris diversion requirements, as described above. The project would not violate any federal, state, or local statutes or regulations related to solid waste; therefore, impacts would be less than significant.

**Mitigation Measure(s)**

No mitigation measures are required.

**Sources**


City of Imperial Beach. 2010a. *City of Imperial Beach General Plan and Local Coastal Plan*. Updated October 2010.


4.3.18 Mandatory Findings of Significance

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
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<td>b) Does the project have impacts that are individually limited, but cumulatively considerable? (&quot;Cumulatively considerable&quot; 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.)</td>
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<td>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
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</tbody>
</table>

Discussion

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?

Less Than Significant Impact. As described in Sections 4.3.4 and 4.3.5 of this IS/MND, the proposed project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife species 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.
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.)

**Less Than Significant Impact With Mitigation Incorporated.** In addition to direct impacts resulting from the project, this IS/MND (as described in Sections 4.3.1 through 4.3.17) considered the project’s potential incremental effects that may be cumulatively considerable. Mitigation measures identified in the applicable sections of this IS/MND would reduce both the project-specific impacts, as well as any cumulatively considerable impacts attributable to the project’s incremental environmental effects. With implementation of these mitigation measures, there is no substantial evidence that there are cumulatively considerable impacts associated with the project. The City of Imperial Beach, as the lead agency, would enforce implementation of all required mitigation measures, thereby reducing all environmental impacts to below a level of significance.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**Less Than Significant Impact With Mitigation Incorporated.** The potential for significant adverse direct or indirect impacts to human beings was identified in this IS/MND in Section 4.3.1, Aesthetics; Section 4.3.3, Air Quality; Section 4.3.6, Geology and Soils; Section 4.3.7, Greenhouse Gas Emissions; Section 4.3.8, Hazards and Hazardous Materials; Section 4.3.9, Hydrology and Water Quality; Section 4.3.12, Noise; and Section 4.3.16, Transportation and Traffic. Based on the evaluation provided in this IS/MND, there is no substantial evidence that construction or operation of the proposed Breakwater project would result in a substantial adverse effect on human beings with mitigation incorporated.

**Mitigation Measure(s)**

Implementation of mitigation measures described in Sections 4.3.1 through 4.3.17.

**Sources**

Please refer to Section 6.0 of this IS/MND for references.
5.0 LIST OF MITIGATION MEASURES

AE-1 Prior to installation of any lighting on the project site, the project applicant shall submit a lighting plan for the project, which shall be reviewed and approved by the City of Imperial Beach Community Development Department in compliance with City of Imperial Beach Municipal Code Section 19.52.040. The lighting plan shall address the following:

- A detailed lighting plan of all buildings and walkways shall include details such as location, design, and lighting specifications
- Design, location, and spacing of light poles and fixtures shall meet the appropriate City of Imperial Beach standards
- All outdoor lighting shall be directed, oriented, and shielded to minimize light spillover onto adjacent residential properties, public rights-of-way, and off-site driveway areas consistent with City of Imperial Beach Municipal Code Section 19.56.020 as it applies to commercial zones.

BIO-1 To avoid any direct impacts to raptors and/or migratory birds, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the breeding season for these species (January 15 to August 31). If removal of habitat on the proposed project site occurs during the breeding season, the project applicant shall retain a qualified biologist to conduct a pre-construction survey in order to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The project applicant shall submit the results of the pre-construction survey to the City of Imperial Beach for review and approval prior to initiating any construction activities.

If nesting birds are detected, a letter report or avoidance plan as deemed appropriate by the City of Imperial Beach, shall be prepared to include proposed implementation measures to ensure that disturbance of breeding activities is avoided. Such implementation measures shall consist of an appropriate setback distance determined in consultation with the project applicant, the biologist, and the City of Imperial Beach. Grading and construction activities shall be avoided within the setback buffer area until the juvenile birds have fledged and nesting activity has been completed or the nest is relocated with the approval of the U.S. Fish and Wildlife Service and the California Department of Fish and Game. Limits on construction to avoid an active nest may be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas.
A qualified biologist shall serve as a construction monitor during those periods when
collection activities are to occur near active nest areas to avoid inadvertent impacts
to these nests. The biologist may adjust the setback at his or her discretion, depending
on the species and the location of the nest. The report or plan shall be submitted to the
City of Imperial Beach for review and approval and implemented to the satisfaction
of the City of Imperial Beach.

CR-1  In the event that any potentially historical resources are encountered during
construction activities (including clearing, grubbing, rough grading, or grading), all
construction work shall cease in the vicinity of the discovery until a registered
professional archaeologist retained by the project applicant and approved by the City
of Imperial Beach can visit the site of discovery and evaluate the nature and
significance of any such discoveries. If the resource is determined to be of historic
significance, the archaeologist may make recommendations to the City of Imperial
Beach concerning the avoidance, relocation, or preservation of any confirmed
significant historical resources.

CR-2:  Prior to issuance of any grading permits for the proposed project, the project applicant
shall retain a qualified archaeologist to monitor all ground-disturbing activities in
order to identify any unknown archaeological resources. In the event that
archaeological resources or sites containing human remains are inadvertently
discovered during construction activities (including grading), all construction work
shall cease in the vicinity of the discovery until a registered professional archaeologist
and a qualified Native American monitor can visit the site of discovery and assess the
significance and origin of the archaeological resource. If the resource is determined to
be of Native American origin, the appropriate Native American tribe shall be
consulted. Treatment of encountered archaeological resources and sites containing
human remains shall be conducted in accordance with State Health and Safety Code
Section 7050.5 and Public Resources Code 5097.98 (California Health and Safety
Code 7050.5 et seq.; California Public Resources Code 5097.9 et seq.).

If human remains are discovered during project activities, the City of Imperial Beach
Redevelopment Coordinator and the San Diego County Coroner’s office shall be
notified immediately under state law (California Health and Safety Code, Section
7050.5) and all activities in the immediate area of the find shall cease until
appropriate and lawful measures have been taken. If the County Coroner determines
that the remains are Native American, the Native American Heritage Commission
shall also be contacted per California state law (Public Resources Code, Section
5097.98). The Native American Heritage Commission shall designate a Most Likely
Descendant who may make recommendations concerning the disposition of the
remains in consultation with the City of Imperial Beach and the qualified archaeologist.

**CR-3:** Prior to issuance of any grading permits for the proposed project, the project applicant shall retain a qualified paleontologist to provide professional paleontological services. Specifically, during grading activities, the qualified paleontologist shall conduct on-site paleontological monitoring for the project site. Monitoring shall include inspection of exposed surfaces to determine if fossils are present. In the event that paleontological resources are inadvertently discovered during construction activities (including grading), all construction work shall cease in the vicinity of the discovery until the qualified paleontologist can assess the significance of the archaeological resource. The monitor shall have authority to divert grading away from exposed fossils temporarily in order to recover the fossil specimens.

**GEO-1:** Proposed buildings shall be designed to accommodate settlement and reduce soil expansion through soils remediation and ground improvement or structural techniques, as appropriate. Remedial grading activities shall entail the removal and re-compaction of undocumented fill and alluvium materials. Additional remedial grading activities may also include overexcavation and recompaction to a specific depth underneath the building pads. Examples of potential ground improvement and structural techniques that could be employed to support the proposed buildings may include conventional slab-on-grade foundations, shallow spread or continuous footing foundation systems, reinforced concrete flatwork and foundation design, and underlain compacted fill.

Final design specifications for building foundations shall be submitted to the City of Imperial Beach Engineering Department for review and approval. The project applicant’s geotechnical and structural engineers shall coordinate with the City of Imperial Beach Engineering Department to certify that the remedial earthwork and foundation designs meet the required design standards and specifications outlined in the final geotechnical report(s) applicable to the buildings.

**HAZ-1** Prior to approval of final construction plans, the project applicant or its contractors shall prepare a hazardous materials management plan for the construction phase of the project, which shall be reviewed and approved by the City of Imperial Beach, and shall include the following components:

- The plan shall identify all hazardous materials that would be present on any portion of the construction site, including, but not limited to, fuels, solvents, and petroleum products. The plan shall address storage, use, transport, and disposal of
each hazardous material anticipated to be used at the site. The plan shall establish inspection procedures, storage requirements, storage quantity limits, inventory control, non-hazardous product substitutes, and disposition of excess materials.

- The plan shall identify secondary containment and spill prevention countermeasures, as well as a contingency plan to identify potential spill hazards, how to prevent their occurrence, and responses for different quantities of spills that may occur. Secondary containment and countermeasures shall be in place throughout construction so that if any leaks or spills occur, responses would be made immediately.

- The plan shall identify materials (and their locations) that would be on site and readily accessible to clean up small spills (i.e., spill kit, absorbent pads, and shovels). Such emergency spill supplies and equipment shall be clearly marked and located adjacent to all areas of work and in construction staging areas. The plan shall identify the spill-response materials that must be maintained in vehicles and substation sites during construction and procedures for notification to the appropriate authorities.

- The plan shall identify adequate safety and fire suppression devices for construction-related activities involving toxic, flammable, or explosive materials (including refueling construction vehicles and equipment). Such devices shall be readily accessible on the project site, as specified by the City of Imperial Beach Fire Marshal and per the Uniform Building Code and Uniform Fire Code. The plan shall be included as part of all contractor specifications and final construction plans to the satisfaction of the appropriate agency. The plan shall also identify requirements for notices to federal and local emergency response authorities, and shall include emergency response plans.

- Prior to construction, all contractor and subcontractor personnel shall receive training regarding the components of the hazardous materials management plan, as well as applicable environmental laws and regulations related to hazardous materials handling, storage, and spill prevention and response measures. The plan shall be submitted to the City of Imperial Beach at least 30 days prior to construction.

**HYD-1:** Prior to approval of final construction plans, the project applicant shall develop a final BMP plan based on the preliminary recommendations in the Preliminary Water Quality Technical Report by Project Design Consultants (October 2011) and in compliance with City of Imperial Beach Municipal Code Section 15.54.110 and 15.54.150. These recommendations and requirements are subject to change pending review by the City of Imperial Beach, implementation of future policy requirements, and final engineering design. The recommended post-construction water quality BMP
plan shall include LID, source-control, and treatment-control BMPs. All BMPs for erosion prevention and sediment control shall be implemented and maintained in accordance with City of Imperial Beach Municipal Code Section 15.54.110 and 15.54.150, which require, in part, that all source- and structural-treatment BMPs shall be inspected prior to the rainy season and after each major storm to assure the functionality.

BMPs shall be incorporated into the final construction and design plans to be reviewed and approved by the City of Imperial Beach Engineering Department and shall include, but not be limited to, the following:

- All construction vehicles shall be adequately maintained and equipped to minimize/eliminate fuel spillage. All equipment maintenance work shall occur off site or within the designated construction staging area.

- Any construction materials that need to be temporarily stockpiled or equipment/supplies that need to be stored on site shall be kept within the construction staging areas and shall be covered when not in use.

- The parking lot and driveways shall be swept to maintain cleanliness of the pavement. At a minimum, the lot shall be thoroughly swept four times per year, or more often as necessary, with particular emphasis on thorough cleaning prior to the rainy season (generally from October 1 to April 30).

- Informational materials to promote the prevention of urban runoff pollutants are included in the preliminary water quality technical report for the project. These materials include general working site practices that contribute to the protection of urban runoff water quality and BMPs that eliminate or reduce pollution during property improvements. Notification of all water quality technical report requirements shall be provided as part of the property disclosure statements.

- The trash enclosure areas proposed on the project site shall be designed and maintained in an appropriate manner to ensure functionality. The trash enclosure areas shall be constructed as double-receptacle basic enclosures, enclosed on three sides by a minimum 6-foot-high decorative masonry wall and on the fourth side by an opaque and latchable gate. All trash containers shall have lids.

- The project applicant shall perform a visual inspection annually of the project site to ensure that proper litter/debris controls are maintained and that proper landscaping, fertilizer, and pesticide practices are upheld. An annual inspection report as described in the preliminary water quality management report for the project shall be prepared and submitted to the City of Imperial Beach.
HYD-2: Prior to approval of final construction plans, the project applicant or its contractor(s) shall prepare a grading and erosion control plan, which shall be reviewed and approved by the City of Imperial Beach Engineering Division. The plan shall be prepared in accordance with City of Imperial Beach Municipal Code Chapter 15.54 (Grading Permits and Plans), which shall be implemented for all activities associated with the proposed project.

The plan shall include measures to stabilize the soil to prevent erosion and retain sediment where erosion has already occurred. Stabilization measures may include temporary seeding, permanent seeding, or mulching. Structural control measures may include silt fencing, sand bagging, sediment traps, or sediment basins. Additional erosion control measures (e.g., hydrosedding, mulching of straw, diversion ditches, retention basins) may be necessary as determined by field conditions to prevent erosion and/or the introduction of dirt, mud, or debris into existing public streets and/or onto adjacent properties during any phase of construction operations. Particular attention shall be given to additional erosion control measures during the rainy season, generally from October 1 to April 30. Topsoil shall be stockpiled and covered on the project site for reuse. The grading and erosion control plan shall be included as part of all contractor specifications and final construction plans to the satisfaction of the City of Imperial Beach’s Engineering Division.

All BMPs for erosion prevention and sediment control shall be implemented and maintained in accordance with City of Imperial Beach Municipal Code Section 15.54.110 and 15.54.150, which require, in part, that all source- and structural-treatment BMPs shall be inspected prior to the rainy season and after each major storm to assure the functionality.

HYD-3: Prior to the issuance of any grading or building permits for the project, the project applicant or its contractors shall prepare an SWPPP pursuant to the NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (Water Quality Order 2009-0009-DWQ). The SWPPP shall include site-specific BMPs, such as desilting basins, silt fences, gravel bags, fiber rolls, and other erosion control measures consistent with the NPDES general permit. The objectives of the SWPPP are to:

- Identify all pollutant sources, including sources of sediment that may affect the water quality of stormwater discharges associated with construction activity from the construction site
- Identify non-stormwater discharges
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- Identify, construct, implement in accordance with a time schedule, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction.

- Document the inspection and maintenance of the BMPs installed during construction and monitor their effectiveness.

The project applicant’s contractor(s) shall implement the approved SWPPP and any amendments thereafter as required for compliance.

**NOI-1** Prior to issuance of any grading permit(s) for the project, the project applicant or its contractor(s) shall ensure that:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.

- Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.

- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from or shielded from sensitive noise receivers.

- During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors.

- The project shall be in compliance with the County of San Diego’s Noise Ordinance such that construction shall occur on the weekdays (Monday through Friday) between the hours of 7:00 a.m. to 7:00 p.m. Construction hours, allowable workdays and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners and residents to contact the job superintendent. In the event that the City of Imperial Beach receives a complaint regarding construction noise, appropriate corrective actions shall be implemented and a report of the action provided to the reporting party.

**TRAF-1** Prior to the approval of final construction plans, the project applicant shall prepare a construction traffic control plan to be reviewed and approved by the City of Imperial Beach Traffic Engineering Department. The following measures shall be included as part of the plan to reduce or eliminate potential traffic hazards associated with construction activities:
• The primary ingress/egress points to the project site during construction shall be from SR-75, Palm Avenue, and 9th Street, depending on which buildings are being constructed on the project site and the timing of the off-site improvements along SR-75 and Palm Avenue. Traffic to and from the project site during construction shall follow two primary routes, utilizing SR-75, Palm Avenue, and 9th Street to bring traffic to the site.

• Parking for construction vehicles or equipment shall be prohibited on 9th Street south of SR-75, the alley immediately south of the project site, or within any of the surrounding residential neighborhoods for the duration of construction (including south of SR-75 on 8th Street, Delaware Street, or 7th Street). Parking on 9th Street north of SR-75 shall be limited to necessary construction-related vehicles and equipment. To the extent possible, construction equipment shall be contained within the construction staging area or within the project footprint. Construction workers shall be encouraged to carpool to the project area from maintenance yards or the contractor’s primary location. Additional construction vehicle parking areas may be designated through coordination between the project applicant and the City of Imperial Beach. Public residential streets shall not be used for the storage or staging of construction materials or equipment.

• Haul routes shall be defined for transportation of construction materials. Hauling shall occur Monday through Friday between the hours of 7 a.m. and 7 p.m.

• Traffic control and safety measures shall be outlined to provide safe circulation around the project site during construction of the new project access driveway off SR-75 and the reconfigured SR-75/Palm Avenue intersection. Such measures may include, but are not limited to, temporary fencing, signage, road detours, lane consolidation, road barriers, or appropriate traffic diversion methods to the satisfaction of the City of Imperial Beach Traffic Engineering Department. All temporary traffic control measures shall be removed after construction activities are complete and related hazards are no longer present.
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6.0 INFORMATIONAL SOURCES


California Public Resources Code, Section 4521–4529.5.


City of Imperial Beach. 2011a. City of Imperial Beach Department of Public Works, Sewer Capacity Letter for the Sudberry Development Project. September 15.


City of Imperial Beach. 2010a. *City of Imperial Beach General Plan and Local Coastal Plan*. Updated October 2010.

City of Imperial Beach. 2010b. “100-Year Flood Plain.” Figure (S-1). *City of Imperial Beach General Plan and Local Coastal Plan*. Updated October 2010.


Clark, T. 2011a. E-mail communication between T. Clark (Imperial Beach Fire Department Fire Chief) and J. Selby (City of Imperial Beach redevelopment coordinator). September 26.

Clark, T. 2011b. E-mail communication between T. Clark (Imperial Beach Fire Department Fire Chief) and J. Selby (City of Imperial Beach redevelopment coordinator). September 22.


Ogden Environmental. 1998. Final Multiple Species Conservation Program. MSCP Plan. Prepared for the City and San Diego and the County of San Diego.


Santos, T. 2011. E-mail communication between T. Santos (Imperial Beach Fire Department Fire Inspector) and J. Selby (City of Imperial Beach redevelopment coordinator). October 3.


Walters, M. 2011. E-mail communication between M. Walters (San Diego County Sheriff’s Office crime analyst) and J. Longabaugh (Dudek). August 17.

7.0 PREPARERS

This IS/MND was prepared by Dudek. The following individuals either directly participated in its preparation or provided information which was incorporated into the document by Dudek.

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