3.12 Water Resources

3.12.1 Introduction

This section addresses potential impacts on groundwater and surface water resources that could result from the construction and operation of the proposed Project. The following paragraphs provide an overview of the environmental characteristics of groundwater and surface water resources in the vicinity of the proposed Project, the federal, state and local regulations that are pertinent to the analysis of impacts associated with the proposed Project, followed by analysis of those impacts and any mitigation measures that can be implemented to eliminate or reduce those impacts to a less than significant level.

3.12.2 Environmental Setting

The following discussion describes the environmental characteristics and regulatory framework related to groundwater and surface water resources and impacts that could potentially affect, or could potentially be affected by, implementation of the proposed Project.

3.12.2.1 Groundwater

The primary source of information on groundwater resources underlying the Project area are The Source Group, Incorporated (SGI) (2006a-e) and Diaz Yourman & Associates (2008), which are considered representative of the time of the NOP. The Los Angeles Coast Plain has been spatially divided by the California Department of Water Resources (CDWR) into four groundwater basins (West Coast Basin, Central Basin, Santa Monica Basin, and Hollywood Basin) based on the hydrogeologic characteristics of the underlying strata and the locations of bounding geologic structures, such as non-water-bearing rock and/or faults that impede groundwater movement. The proposed Project is located within the West Coast Basin, west of the Central Basin and south of the Santa Monica and Hollywood groundwater basins. The West Coast Basin is bordered on the east by the Newport-Inglewood Fault; on the west by Santa Monica Bay; on the north by the Ballona Gap (north of the Los Angeles International Airport), and on the south by the Palos Verdes Hills (Port of Los Angeles, 2007).

Soils in the proposed Project area consist of varying sequences of clays, silts, sands, and gravels (see Section 3.5 for additional detail). With respect to groundwater occurrence, in general, sands and gravels act as groundwater “conduits” or aquifers, and intervening clays and sometimes silts act as “impediments” or aquitards/aquicludes to groundwater flow. Subsurface soil conditions at the proposed Project site consist of loose to medium-dense silty sands and clayey sands, and very soft to firm fine-grained soils; silts, clays,
Section 3.12 Water Resources

and elastic silts (Diaz Yourman and Associates, 2008). Given the proximity to the SCIG site, soils at the relocation sites would be expected to be very similar.

The soils in the upper 5 feet have lower expansion potential. The SCIG Geotechnical Investigation (Diaz Yourman and Associates, 2008) identifies potentially liquefiable soils in the upper 50 feet, soft, compressible, and weak silts and clays, and moisture content of the upper 5 feet of soils at 20 percent above the optimum moisture in some locations. According to Diaz Yourman and Associates (2008), groundwater levels at the Project site vary between 10 to 20 feet below ground surface (bgs), and the study did not identify any sources of groundwater contamination other than seawater intrusion (see below).

Soil contamination has been identified in the Project area (see Section 3.7.2.2) resulting from activities such as oil extraction, transportation, vehicle maintenance, and aboveground storage. Contaminants of concern and contaminants of potential concern identified include petroleum hydrocarbons, metals (including lead-containing paint), solvents, volatile organic compounds (VOCs, including perchloroethylene [PCE], 1,1-Dichloroethane [1,1-DCA] and 1,1-dichloroethylene [1,1-DCE]), and polychlorinated biphenyls (PCBs). Based on lateral distribution and varying hydrogeologic characteristics, five major aquifers have been identified in the geologic formations underlying the West Coast Basin. The aquifers consist of (from oldest to youngest) the Silverado and Lynwood Aquifers of the San Pedro Formation; the Gage Aquifer of the Lakewood Formation; and the Gaspur and Semiperched aquifers of the recent Holocene age alluvium. In general, the older/deeper Silverado and Lynwood aquifers are currently designated as drinking water sources and the younger shallow aquifers (Gage, Gasper, and Semiperched) currently are not used for drinking water purposes due to low yield and/or generally poor quality due to seawater intrusion (Port of Los Angeles, 2007).

An important variable in understanding the groundwater regime beneath the proposed Project is the Dominguez Gap Barrier Project (Barrier Project). The Barrier Project consists of a series of groundwater injection and monitoring wells that were installed and are maintained by the Los Angeles County Department of Public Works (LACDPW, formerly the Los Angeles County Flood Control District). The purpose of these wells is to control salt water intrusion into the freshwater aquifers of the West Coast Basin through the Dominguez Gap. Salt water intrusion has been occurring since the early part of the 20th century and has been progressing inland through the shallow freshwater aquifers such as the Gage and the Gaspur Aquifers.

The Barrier Project functions by injecting freshwater into the aquifers through a series of injection wells extending east-west from the Harbor Freeway to Alameda Street, and northeast-southwest between Anaheim Street and Sepulveda Boulevard. The wells are generally located along Anaheim Street and Alameda Street (approximately 0.5 mile west of the proposed Project). Injection along the Barrier Project commenced in February 1971 and was primarily into shallow aquifer units including the Gage Aquifer. This injection produces a groundwater mound which results in pressure gradients in the aquifers from the point of the injection wells. The pressure gradients “push” against the invading salt water, thus preventing further migration northward. The injection wells, therefore, are thought to significantly influence groundwater gradients in the aquifers beneath the site and surrounding area. The proposed Project area is located approximately 0.5 mile east of the Dominguez Gap Barrier Project.

Based on groundwater monitoring and sampling activities conducted by Ninyo and Moore in 2004 within the Alameda Corridor Transportation Authority (ACTA) maintenance yard property, depth to groundwater beneath this area of the Project site is
approximately 8 to 10 feet bgs (1.20 to 1.60 feet above MSL) and the groundwater flow
direction is to the southwest (Port of Los Angeles, 2007). Groundwater contamination has
been identified in the Project area (see Section 3.7.2.2) that has resulted from past
activities such as oil extraction, petroleum and chemical refining, and underground
storage tank leakage.

### 3.12.2.2 Surface Water

Surface water on and in the vicinity of the proposed Project includes the Dominguez
Channel and surface water runoff primarily from storm events and irrigation.

#### 3.12.2.2.1 Dominguez Channel

Historically, the area that is now the Los Angeles-Long Beach port complex consisted of
salt and freshwater (Dominguez Slough) marshes and mudflats. The Los Angeles River
frequently flowed along what is now the Dominguez Channel. In the early 20th century,
with the development of the port complex and the increasing development of the
surrounding region, the Los Angeles River was relocated eastward to its present location
and its course, as well as Dominguez Slough, was channelized for flood protection,
creating the present Dominguez Channel (LACDPW, 2011), which drains an area of
western and southern Los Angeles County designated the Dominguez Watershed.

The Dominguez Channel runs in a north-south direction adjacent to the west of the
proposed Project. The channel banks in the vicinity of the proposed Project are
predominantly rock rip rap; a portion of the northern banks consists of compact bare dirt
and gravel. The banks are devoid of vegetation with the exception of a few occurrences
of pickleweed (Section 3.3).

Today, the Dominguez Watershed is comprised of approximately 133 square miles of
land in the southern portion of Los Angeles County. Ninety-three percent of its total area
is developed and the overall watershed land use is predominantly residential. Rather than
being defined by the natural topography of its drainage area, the Dominguez watershed
boundary is defined by a complex network of storm drains and smaller flood control
channels.

The Dominguez Channel extends from the Los Angeles International Airport to the Los
Angeles Harbor and drains large portions, if not all, of the cities of Inglewood,
Hawthorne, El Segundo, Gardena, Lawndale, Redondo Beach, Torrance, Carson and Los
Angeles (Figure 3.12-1). The remaining land areas within the watershed drain to several
debris basins and lakes or directly to the Los Angeles and Long Beach Harbors (MEC,
2004).
Figure 3.12-1. Location of Dominguez Watershed and Dominguez Channel.
There are approximately 60 active, individual National Pollution Discharge Elimination System (NPDES) permitted discharges to the Dominguez Channel and to the Los Angeles and Long Beach Harbors. These include four refineries which discharge stormwater to the Dominguez Channel intermittently, two generating stations which discharge to the inner harbor areas and the Terminal Island Treatment Plant. The Terminal Island Treatment Plant is the single publicly owned treatment works (POTW; defined as a wastewater treatment facility owned by a state or municipality) that discharges to the watershed. This secondary-treated effluent is discharged to the outer Los Angeles and Long Beach Harbor and is under a time schedule order to eliminate the discharge. In addition, there are approximately 50 active, general NPDES permitted discharges to the watershed.

Section 303(d)(1)(A) of the federal Clean Water Act (CWA) requires each state to conduct a biennial assessment of its waters, and identify those waters that are not achieving water quality standards. The resulting list is referred to as the 303(d) list. The CWA also requires states to establish a priority ranking for waters on the 303(d) list of impaired waters and to develop and implement Total Maximum Daily Loads (TMDLs; waste load allocations for water bodies that ensure that the capacity of the water body to assimilate pollutant loads is not exceeded) for those waters. Table 3.12-1 provides a summary of pollutants/stressors that have been identified in the unlined and lined portions of Dominguez Channel, the potential sources of the pollutions, the estimated affected size, and the dates that TMDLs must be established for each identified pollutant/stressor (LARWQCB, 2006).

Table 3.12-1. 2006 303(d) List of Pollutant Impairments for the Dominguez Channel.

<table>
<thead>
<tr>
<th>Pollutant/Stressor</th>
<th>Potential Sources</th>
<th>Estimated Size Affected</th>
<th>Proposed TMDL Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lined Portion of Dominguez Channel (above Vermont Avenue)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia</td>
<td>Nonpoint/Point Source</td>
<td>6.7 miles</td>
<td>2019</td>
</tr>
<tr>
<td>Copper</td>
<td>Nonpoint/Point Source</td>
<td>6.7 miles</td>
<td>2019</td>
</tr>
<tr>
<td>Dieldrin (tissue)</td>
<td>Nonpoint/Point Source</td>
<td>6.7 miles</td>
<td>2019</td>
</tr>
<tr>
<td>Indicator Bacteria</td>
<td>Nonpoint/Point Source</td>
<td>6.7 miles</td>
<td>2007</td>
</tr>
<tr>
<td>Lead (tissue)</td>
<td>Nonpoint/Point Source</td>
<td>6.7 miles</td>
<td>2019</td>
</tr>
<tr>
<td>Sediment Toxicity</td>
<td>Unknown</td>
<td>6.7 miles</td>
<td>2019</td>
</tr>
<tr>
<td>Zinc (sediment)</td>
<td>Nonpoint/Point Source</td>
<td>6.7 miles</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Unlined Portion of Dominguez Channel (below Vermont Avenue)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia</td>
<td>Nonpoint/Point Source</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Benthic Community Effects</td>
<td>Nonpoint/Point Source</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Benzo(a)pyrene</td>
<td>Unknown</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Benzo(a)anthracene</td>
<td>Unknown</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Chlordane (tissue)</td>
<td>Nonpoint/Point Source</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Chrysene (C1-C4)</td>
<td>Unknown</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Coliform Bacteria</td>
<td>Nonpoint/Point Source</td>
<td>140 acres</td>
<td>2007</td>
</tr>
<tr>
<td>DDT (tissue &amp; sediment)</td>
<td>Nonpoint/Point Source</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Dieldrin (tissue)</td>
<td>Nonpoint/Point Source</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Lead (tissue)</td>
<td>Nonpoint/Point Source</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>PCBs</td>
<td>Unknown</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Phenanthrene</td>
<td>Unknown</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Pyrene</td>
<td>Unknown</td>
<td>140 acres</td>
<td>2019</td>
</tr>
<tr>
<td>Zinc (sediment)</td>
<td>Nonpoint/Point Source</td>
<td>140 acres</td>
<td>2019</td>
</tr>
</tbody>
</table>

Abbreviation: TMDL = total daily maximum load
The Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan designates beneficial uses for water bodies in the Los Angeles Region. These uses are recognized as existing (E), potential (P), or intermittent (I) uses. All beneficial uses, whether E, P or I, must be protected.

As shown in Table 3.12-2, beneficial use designations in the lower portion of the Dominguez Channel, in the area of the proposed Project, include Navigation (NAV), Contact (REC-1) and Non-contact Recreation (REC-2), Commercial and Sport Fishing (COMM), Estuarine Habitat (EST), Marine Habitat (MAR), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species Habitat (RARE), Migration of Aquatic Organisms (MIGR), and Spawning, Reproduction and/or Early Development (SPWN) (LARWQCB, 2006).

<table>
<thead>
<tr>
<th>Water Body Name</th>
<th>Hydrogeologic Unit</th>
<th>Beneficial Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lined Portion of Dominguez Channel</td>
<td>405.12</td>
<td>MUN(P), REC1(P), REC2(E), WARM(P), WILD(P), RARE(E)</td>
</tr>
<tr>
<td>Unlined Portion of Dominguez Channel</td>
<td>405.12</td>
<td>NAV(P), REC1(E), REC2(E), COMM(E), EST(E), MAR(E), WILD(E), RARE(E), MIGR(E), SPWN(E)</td>
</tr>
</tbody>
</table>

1) 405.12 is identified in the Basin Plan as the Dominguez Channel Watershed.

TMDL development requires a calculation of pollutant loading from point and non-point sources within the watershed of concern. Point sources include discharges from discrete, engineered points. These types of discharges are regulated through the federal NPDES program. Non-point sources include rainwater and runoff which carries pollutants that reach surface waters overland through a number of different land uses and activities. In the Dominguez Channel Watershed, however, much of the pollution carried in rainwater and runoff is conveyed via the network of storm drains throughout the watershed, and reaches the channel and Harbors as direct drain discharges. Storm water discharges from these drains are regulated under storm water NPDES permits. Due to their direct discharge to the channel and Harbors, urban and storm water runoff are treated as point source discharges in these TMDLs.

### 3.12.2.2.2 Surface Water Runoff

Surface runoff from the Primary Project Area consists entirely of stormwater and dry weather flow through storm drains. According to a site reconnaissance (SGI, 2006a-e), the Primary Project Area is served by several storm drains. The Phase I ESA report that summarizes the site reconnaissance activities indicates that, with regard to the portion of the primary Project Area occupied by Cal Cartage and identified as P-1 (this area occupies the majority of the Primary Project Area), “Storm drains are located in various places throughout the site. In addition to drains in the pavement of the parking lots and roads, there are drains at the entrance/exits to many of the bays as well as on the loading platforms”. The exact number and location of these storm drains is not identified in the Phase I ESA report. In addition to the storm drains that are located in Area P-1, the Phase I ESA report identifies specific locations within the Primary Project Area where
additional storm drains are located. These areas, shown on Figure 3.12-2 are described below.

- Approximately 300 forklifts are maintained and washed within the Primary Project Area at a location near the Cal Cartage truck maintenance area. This facility has one central drain extending its length, allowing the wash water to enter the storm drain. As the forklift wash water is not treated prior to entering the storm drain, it is assumed that contaminated wash water enters the storm drain and discharges into the Dominguez Channel. Files reviewed at the LARWQCB confirmed that the facility has a storm water permit.

- Two storm drains are situated at the southern end of the portion of the Primary Project Area occupied by San Pedro Fork Lift. The storm drains collect runoff from rain or any washing activities, and discharge to the Dominguez Channel.

- A single storm drain is located near the southern end portion of the Primary Project Area occupied by the Los Angeles Harbor Grain Terminal.

With regard to the tenant relocation areas, no storm drains were identified during the 2006 site reconnaissance. One area was identified as a possible stormwater collection pond, but the exact location of this area was not identified and confirmation as to its purpose was not obtained. The four-acre proposed ACTA relocation site, located on the west side of the Dominguez Channel south of the Primary Project Area is currently undeveloped land used for miscellaneous storage and, therefore, does not contain storm drains.
Figure 3.12-2. Storm Drains in SCIG Primary Project Area.
### 3.12.2.2.3 Infiltration from Surface Water Runoff

The proposed Project site is predominantly paved, resulting in minimal surface water infiltration during rainfall events and flooding. Infiltration occurs in unpaved areas located primarily along the eastern boundary of the Primary Project Area (adjacent to the Terminal Island Freeway) and along the southern and southwestern boundaries of the Project Site in the vicinity of the proposed South Lead Track area (Section 2.4.2.2).

### 3.12.3 Applicable Regulations

The following sections discuss the applicable codes, regulations, and policies pertaining to water resource issues on a federal, state, regional, and local level.

#### 3.12.3.1 Clean Water Act

The federal Clean Water Act (CWA) governs federal, state, and local regulations regarding the protection of water quality. Sections 303(d) and 401 through 404 are relevant to water resources associated with the proposed Project and are summarized below.

**3.12.3.1.1 CWA Section 303(d)**

Under CWA section 303(d), states, territories, and authorized tribes are required to develop a list of water bodies that are considered to be “impaired” from a water quality standpoint. Water bodies that appear on this list do not meet water quality standards even after the minimum required levels of pollution control technology have been implemented to reduce point sources of pollution. In turn, the law requires that respective jurisdictions (i.e., RWQCBs) establish priority rankings for surface water bodies on the lists and develop action plans, referred to as TMDLs, to improve water quality. The California State Water Resources Control Board (SWRCB) publishes the list of water quality-limited segments in California (Section 3.12.2.2.1). Table 3.12-1 lists 303(d) pollutants for Dominguez Channel.

**3.12.3.1.2 CWA Section 401**

Every applicant for a federal permit or license for any activity that may result in a discharge to a water body must obtain State Water Quality Certification for the proposed activity and comply with state water quality standards prescribed in the Certification. In California, these certifications are issued by the SWRCB under the auspices of the RWQCB.

**3.12.3.1.3 CWA Section 402**

CWA section 402 sets forth regulations that prohibit the discharge of pollutants into “waters of the U.S.” from any point source without obtaining a NPDES permit. The SWRCB implements the NPDES program by regulating point-source discharges of wastewater and agricultural runoff to both land and surface waters to protect their beneficial uses. To comply with the CWA water quality regulations, the various RWQCBs in California (nine regions) require permits for discharging or proposing to discharge materials that could affect water quality. The SWRCB and its RWQCBs administer the NPDES permit program.
SWRCB Water Quality Order 97-03-DWQ/NPDES General Permit CAS000001 (General Industrial Permit) regulates industrial site storm water management. These regulations prohibit discharges of storm water to waters of the U.S. from a broad range of industrial activities, including mining, manufacturing, disposal, recycling, and transportation, unless such discharges comply with a site-specific NPDES permit.

In 1990, the NPDES program was extended to address storm water pollution and required all operators of “medium” and “large” municipal separate storm sewer systems (MS4s) to implement a storm water management program. Under phase II of the NPDES program, the storm water program was expanded to include small MS4s located in urbanized areas.

3.12.3.1.4 CWA Section 403

CWA section 403 provides that point source discharges to the territorial seas, contiguous zones, and oceans are subject to regulatory requirements in addition to the technology- or water quality-based requirements applicable to typical discharges. The requirements are intended to ensure that no unreasonable degradation of the marine environment will occur as a result of a discharge, and to ensure that sensitive ecological communities are protected. These requirements can include ambient monitoring programs designed to determine degradation of marine waters, alternative assessments designed to further evaluate the consequences of various disposal options, and pollution prevention techniques designed to further reduce the quantities of pollutants requiring disposal and thereby reduce the potential for harm to the marine environment. If CWA section 403 requirements for protection of the ecological health of marine waters are not met, an NPDES permit will not be issued.

3.12.3.1.5 CWA Section 404

This section establishes a program to regulate the discharge of dredge or fill materials into waters of the U.S., including wetlands. Activities in waters of the U.S. that are regulated under this program include fills for development, water resource projects (such as dams and levees), infrastructure development (such as highways and bridges), and conversion of wetlands to uplands for farming and forestry. CWA section 404 permits are issued by the USACE.

3.12.3.2 Porter-Cologne Water Quality Control Act (California Water Code § 13000 et seq.)

The Porter-Cologne Water Quality Control Act is the principal law governing water quality regulation in California. This law establishes a comprehensive program to protect water quality and the beneficial uses of State waters. The Act established the SWRCB and the nine RWQCBs that are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The Porter-Cologne Act also implements many provisions of the federal Clean Water Act, such as the NPDES permitting program.

CWA Section 401 gives the SWRCB the authority to review any proposed federally permitted or federally licensed activity that may impact water quality and to certify, condition, or deny the activity if it does not comply with State water quality standards. If the SWRCB imposes a condition on its certification, those conditions must be included in the federal permit or license.
In obligating the SWRCB and RWQCBs to address all discharges of waste that can affect water quality, the legislature provided these agencies with authority in the form of administrative tools (waste discharge requirements (WDRs), waivers of WDRs, and Basin Plan waste discharge prohibitions) to address ongoing and proposed waste discharges. Hence, all current and proposed discharges must be regulated under WDRs, waivers of WDRs, or a prohibition, or some combination of these administrative tools. Since the USEPA delegated responsibility to the State and Regional Boards for implementation of the NPDES program, WDRs for discharges to surface waters also serve as NPDES permits.

### 3.12.3.3 California General Industrial Storm Water NPDES Permit

The California Industrial Storm Water General Permit (CAS000001) was issued by the SWRCB on November 19, 1991, and reissued on April 17, 1997 (Order 97-03-DWQ). The General Permit regulates the discharge of storm water associated with certain types of industrial activities. Facilities must self-enroll by filing a Notice of Intent (NOI) to be covered under the General Permit. The General Permit regulates discharges from industrial activities [as defined at 40 C.F.R. 122.26(b)(14)] at the Ports that have the potential to discharge contaminated storm water runoff. At the POLA, individual tenant facilities are responsible for filing an NOI and for conducting monitoring and sampling of their storm water discharges.

The General Permit requires each facility covered under the permit to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) (see Part A.1. of the General Permit). The SWPPP must include the following (Part A.8):

- Identification of potential storm water pollution sources specific to the facility;
- Development of site-specific best management practices, which are designed to eliminate or reduce storm water pollution;
- Implementation of the best management practices identified in its SWPPP; and
- Development of a facility site map that must include, among other items, the boundaries of the facility, the outline of storm water drainage areas including the direction of flow, storm water discharge locations and areas of industrial activity.

In addition, the General Permit requires each facility to develop a written monitoring program (see Part B.1 of the General Permit), which must include the following (Parts B.3.through B.5):

- Identification of non-storm water discharges from the facility and quarterly inspections for such discharges, noting characteristics of such discharges, if observed;
- Identification of storm water discharge locations, and monthly observations of storm water discharges from the facility for the period October to May, noting the characteristics of such discharges;
- Storm water discharge sampling and analysis of two rain events during the wet season (October to May).

The POLA does not assume any liability for General Permit compliance at facilities under the Port’s jurisdiction. Each facility, private or tenant, is responsible for submittal of the NOI and compliance with all portions of the General Permit. As individual tenant facilities are responsible for sampling and monitoring storm water discharges, there is no
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routine comprehensive port-wide monitoring program associated with the General Permit.

3.12.3.4 California Toxics Rule

This rule establishes numeric criteria for priority toxic pollutants in inland waters, as well as enclosed bays and estuaries, to protect ambient aquatic life (23 priority toxics) and human health (57 priority toxics). The California Toxics Rule (CTR) also includes provisions for compliance schedules to be issued for new or revised NPDES permit limits when certain conditions are met. The numeric criteria are the same as those recommended by the EPA in its CWA Section 304(a) guidance.

3.12.3.5 California Water Quality Control Plan, Los Angeles Region (Basin Plan)

The Basin Plan (Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties [LARWQCB, 1994]) is designed to preserve and enhance water quality and to protect beneficial uses of regional waters (inland surface waters, groundwater, and coastal waters such as bays and estuaries). The Basin Plan designates beneficial uses of surface water and groundwater, such as contact recreation or municipal drinking water supply. The Basin Plan also establishes water quality objectives, which are defined as “the allowable limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance in a specific area.”

The Basin Plan specifies water quality objectives for a number of constituents/characteristics that could be affected by the proposed Project. These constituents include: bioaccumulation, biostimulatory substances, chemical constituents, dissolved oxygen, oil and grease, pesticides, pH, polychlorinated biphenyls, suspended solids, toxicity, and turbidity. With the exceptions of DO and pH, water quality objectives for most of these constituents are expressed as descriptive rather than numerical limits. For example, the Basin Plan defines limits for chemical contaminants in terms of bioaccumulation, chemical constituents, pesticides, PCBs, and toxicity as follows:

- Toxic pollutants shall not be present at levels that bioaccumulate in aquatic life to 40 levels which are harmful to aquatic life or human health;
- Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use;
- No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life;
- All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life. There shall be no chronic toxicity in ambient waters outside mixing zones.

The Basin Plan also specifies water quality objectives for other constituents, including ammonia, bacteria, total chlorine residual, and radioactive substances. These are not evaluated further in this draft EIR because the proposed Project does not include any discharges or activities that would affect the water quality objectives for these parameters.
A discussion of best management practices (BMPs) and permitting practices designed to meet the objectives of the Basin Plan is provided below.

**Best Management Practices**

The term BMPs refers to a variety of measures used to reduce pollutants in stormwater and other non-point source runoff (see Section 2.4.3.1 for a description of common BMPs that could be used on the proposed Project). Measures range from source control, such as use of permeable pavement, to treatment of polluted runoff, such as use of detention or retention basins and constructed wetlands. Maintenance practices (e.g., street sweeping) and public outreach campaigns also fall under the category of BMPs. The effectiveness of a particular BMP is highly contingent upon the context in which it is applied and the method in which it is implemented. The expected effectiveness of various commonly-used BMPs is summarized in Table 3.12-3. As demonstrated below, BMPs are best used in combination to most effectively remove target pollutants.

**Table 3.12-3. 2006 303(d) Best Management Practice Expected Pollutant Removal Efficiency.**

| BMP Type                     | Typical Pollutant Removal (percent) | | | |
|------------------------------|-------------------------------------|---|---|---|---|---|
|                              | Suspended Solids | Nitrogen | Phosphorus | Pathogens | Metals |
| **Structural**               |                      | | | | | |
| Dry Detention Basins         | 30–65                | 15–45    | 15–45      | <30       | 15–45  |
| Constructed Wetlands         | 50–80                | <30      | 15–45      | <30       | 50–80  |
| Infiltration Basins          | 50–80                | 50–80    | 50–80      | 65–100    | 50–80  |
| Porous Pavement              | 65–100               | 65–100   | 30–65      | 65–100    | 65–100 |
| Grass Swales                 | 30–65                | 15–45    | 15–45      | <30       | 15–45  |
| Vegetated Filter Strips      | 50–80                | 50–80    | 50–80      | <30       | 50–80  |
| Surface Sand Filters         | 50–80                | <30      | 50–80      | <30       | 50–80  |
| Other Media Filters          | 65–100               | 15–45    | <30        | <30       | 50–80  |
| **Construction Site**        |                      | | | | | |
| Silt Fence                   | 50–80                | N/A      | N/A        | N/A       | N/A    |
| Sediment Basin               | 55–100               | N/A      | N/A        | N/A       | N/A    |
| Sediment Trap                | 60                   | N/A      | N/A        | N/A       | N/A    |


**Construction and Industrial Permitting**

The LARWQCB administers the NPDES permitting program for construction and industrial activities. Two of these permits, issued by the California SWRCB, are a statewide general construction activities storm water permit (GCASP) and a statewide general industrial activities storm water permit (GIASP). The GCASP requires all dischargers where construction activity disturbs 1 acre or more to:

- develop and implement a SWPPP, which specifies BMPs that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters;
- eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and
• perform inspections of all BMPs.

The State of California adopted a new GCASP on September 2, 2009. SWRCB Water Quality Order 2009-0009-DWQ/NPDES General Permit CAS000002 regulates construction site storm water management. The permit includes several new requirements (as compared to the previous Construction General Permit, 99-08-DWQ), including minimum BMPs, risk level assessment for construction sites and for risk level II and III sites, an active storm water effluent monitoring and reporting of pH and turbidity evaluated against numeric action levels and rain event action plans. For risk III sites, the permit requires effluent monitoring and reporting for pH and turbidity, evaluation against numeric effluent limitations, and receiving water and bioassessment monitoring and reporting in the event effluent limitations are exceeded. The permit became effective July 1, 2010, and thus would be applicable to construction of the proposed Project and alternatives.

Similar to the GCASP, the GIASP requires industrial stormwater dischargers to:

• develop and implement a SWPPP to reduce or prevent industrial pollutants in stormwater discharges;
• eliminate unauthorized non-storm discharges; and conduct visual and analytical stormwater discharge monitoring to indicate the effectiveness of the SWPPP in reducing or preventing pollutants in stormwater discharges.

Post-Construction Permitting

On January 26, 2000, the LARWQCB adopted and approved Board Resolution No. R-00-02, which requires new development and significant redevelopment projects in Los Angeles County to control the discharge of stormwater pollutants in post construction stormwater. The Regional Board Executive Officer issued the approved Standard Urban Stormwater Mitigation Plan (SUSMP) on March 8, 2000. The California SWRCB in large part affirmed the LARWQCB action and SUSMP in State Board Order No. WQ 2000-11, issued on October 5, 2000. The Los Angeles County SUSMP are covered in more detail below, in section 3.12.3.7. The City of Los Angeles is covered under the Permit for Municipal Storm Water and Urban Runoff Discharges within Los Angeles County (NPDES Permit No. CAS004001) and is obligated to incorporate provisions of this document in City permitting actions. The portions of the proposed project that fall in the City of Long Beach are covered under the City of Long Beach Municipal Storm Water NPDES Permit (NPDES Permit No. CAS004003). The Long Beach and Los Angeles County Permits and their requirements are discussed in further detail in section 3.12.3.6 below.

3.12.3.6 Los Angeles County and City of Long Beach Municipal Separate Storm Water Permits

Municipal Separate Storm Sewer Systems (MS4s) in Los Angeles, Long Beach, and Carson are regulated by NPDES permits issued by the LARWQCB to the City of Long Beach (CAS004003, City of Long Beach MS4 Permit) and the County of Los Angeles (and co-permitted cities) (CAS004001, County of Los Angeles MS4 Permit). The City of Los Angeles and City of Carson are co-permittees under the County of Los Angeles MS4 permit. The County of Los Angeles’ MS4 permit was issued on December 13, 2001 and contains an expiration date December 12, 2006. The City of Long Beach MS4 permit was adopted on June 30, 1999 and contains an expiration of June 29, 2004. Both permits have been administratively extended pending reissuance. In accordance with the SUSMP
discussed in further detail in section 3.12.3.7, both MS4 permits require treatment control BMPs for projects falling within certain development and redevelopment categories. The treatment control BMP requirement applies throughout the proposed project area and requires infiltration, filtration, or treatment of the runoff from the first 0.75 inches of rainfall (or equivalent numerical design criteria) prior to its discharge to a stormwater conveyance system.

These MS4 permits do not contain specific operations-related requirements for railyard operations, and the requirements of each permit vary. For example, the Long Beach MS4 Permit issued in 1999 does not require compliance inspections of industrial and commercial facilities, but the Los Angeles MS4 Permit does require such inspections.

The City of Los Angeles, Department of Public Works, Bureau of Sanitation, Watershed Protection Division (WPD) implements the MS4 inspection program of industrial/commercial “critical sources” located within the City of Los Angeles. The Port of Los Angeles does not assume any liability for General Permit compliance at facilities within the Port boundary. Each facility, whether on private property or a Port tenant, is responsible for submittal of the NOI and compliance within all portions of the General Permit.

### 3.12.3.7 SWRCB Standard Urban Stormwater Mitigation Plans

The Los Angeles County permit incorporates the requirements of the Standard Urban Stormwater Mitigation Plan (SUSMP) for Los Angeles County and Cities of Los Angeles County (LARWQCB, 2011). The SUSMP includes implementation of treatment control BMPs for projects falling in certain development and redevelopment categories, such as 100,000-square-foot commercial developments. The SUSMP contains a list of the minimum required BMPs that must be used for a designated project. Additional BMPs may be required by ordinance or code adopted by the Permittee and applied generally or on a case-by-case basis. The Permittees are required to adopt the requirements set herein in their own SUSMP. Developers must incorporate appropriate SUSMP requirements into their project plans. Each Permittee will approve the project plan as part of the development plan approval process and prior to issuing building and grading permits for the projects covered by the SUSMP requirements.

The City of Long Beach MS4 permit requires that projects meet SUSMP requirements for the following categories only: (i) 10-99 home subdivisions; (ii) 100 or more subdivisions; (iii) 100,000 or more square foot commercial developments; and (iv) Projects located adjacent to or discharging to environmentally sensitive areas. For the remaining five categories, equivalent requirements have been included directly in the City of Long Beach Storm Water Management Plan.

### 3.12.3.8 City of Los Angeles Ordinances

The Stormwater Ordinance, LAMC 64.70, makes it a crime (misdemeanor, punishable by fine, imprisonment, or both) to discharge pollutants into a stormwater disposal system. The Stormwater Ordinance is the primary vehicle for City enforcement of NPDES permits.

In December 2010 the City of Los Angeles developed an ordinance that amended the LAMC to include Low Impact Development (LID) practices in new development and redevelopment projects. LID refers to the method of developing or redeveloping urban areas that serves to both reduce the quantity and improve the quality of stormwater that
discharges from the development, essentially seeking to maintain or restore the natural pre-development hydrologic characteristics of the site.

The intention of the LID ordinance is to:

- Require the use of LID standards and practices in future developments and redevelopments to encourage use of rainwater and urban runoff;
- Reduce stormwater/urban runoff while improving water quality;
- Promote rainwater harvesting;
- Reduce off-site runoff and provide increased groundwater recharge;
- Reduce erosion and hydrologic impacts downstream; and
- Enhance the recreational and aesthetic values in communities.

The LID ordinance essentially expands the SUSMP requirements by increasing the number of new and redevelopment conditions under which stormwater mitigation measures must be implemented. As with SUSMP requirements, the LID requirements would need to be met for a building permit to be issued. For new nonresidential development or for redevelopment projects that result in an alteration of at least 50 percent or more of the impervious surfaces of an existing developed site, the entire site shall comply with the standards and requirements of the ordinance and of the LID section of the Development BMP Handbook.

The ordinance provides that where LID requirements cannot be met, at a minimum SUSMP requirements would instead need to be met onsite. For the remaining runoff that cannot be managed onsite (the difference between the amount of runoff that is managed by SUSMP requirements and the amount that was required to have been managed to meet LID requirements), either the runoff would need to be managed somewhere else in the same subwatershed, or a fee would need to be paid to the City of Los Angeles Stormwater Pollution Abatement Fund, whereby the City would allocate that fee toward stormwater mitigation projects within that subwatershed.

### 3.12.4 Impacts and Mitigation Measures

#### 3.12.4.1 Methodology

Potential impacts of the proposed Project on water quality were assessed through a combination of literature review (including applicable water quality criteria), review of water quality data collected in surface waters near the proposed Project area, and scientific expertise of the preparers. Impacts are considered significant if any of the significance criteria described below would be met or exceeded as a result of the effects of construction or operation of the proposed Project.

The assessment of impacts is based on the assumption that the proposed Project would include the following:

- The storm water control measures (permeable areas, swales, berms, treatment, operational BMPs, etc.) described in Section 2.4.3.1 would be implemented.
- All contaminated soil and groundwater encountered during construction of the proposed Project would be handled, transported, remediated, and/or disposed of in accordance with LAHD lease conditions and all applicable federal, state, and local laws and regulations.
3.12-17

- An individual NPDES permit for construction stormwater discharges or coverage
under the GCASP would be obtained by the tenants, including BNSF. The associated
SWPPP would specify measures for controlling contamination of stormwater by
construction activities, including:
  - Equipment would be inspected regularly (daily) during construction, and any
    leaks found would be repaired immediately.
  - Refueling of vehicles and equipment would be in a designated, contained area.
  - Drip pans would be used under stationary equipment (e.g., diesel fuel
generators), during refueling, and when equipment is maintained.
  - Drip pans would be covered during rainfall to prevent washout of pollutants.
  - Appropriate containment structures and BMPs would be implemented or built
    and maintained to prevent offsite transport of pollutants from spills and
    construction debris.
  - Soil stabilization measures such as geotextiles, erosion control blankets, bonded
    fiber matrix (BFM), visqueen, hydroseeding, wood mulch, fiber rolls, or other
    measure approved by Director of Public Works.
  - Storm drain inlet protection, gravel bag berms to dissipate flow, and silt fence
    along the perimeter of the work area. Minimum BMPs, risk level assessments,
    and storm water effluent monitoring and reporting as required by the new
    permits issued pursuant to the Basin Plan (see Section 3.12.3.5).

- Monitoring would be performed to verify that the BMPs were implemented and kept
  in good working order.
- All contaminated soils would be characterized and remediated in accordance with
  LAHD, LARWQCB, DTSC, and Los Angeles County Fire Department protocol and
  clean-up standards.
- The tenants would obtain and implement the appropriate stormwater discharge
  permits for operations.
- A Section 404 (of the Clean Water Act) and Section 10 (of the Rivers and Harbors
  Act) permit from the USACE would be secured for construction activities in the
  Dominguez Channel.
- A Section 401 (of the Clean Water Act) Water Quality Certification from the
  RWQCB would be secured for construction activities in the Dominguez Channel that
  contains conditions including standard WDRs.
- A Lake or Streambed Alteration Agreement would be obtained from the CDFG.
- A Debris Management Plan and SPCC Plan would be prepared and implemented
  prior to the start of demolition and construction activities associated with the
  proposed Project.

3.12.4.2 Thresholds of Significance

Criteria for determining the significance of impacts related to groundwater and surface
water are based on the State CEQA Guidelines, the Los Angeles CEQA Thresholds
Guide, and the scientific judgment of the report preparers. The proposed Project would
have a significant impact relating to water resource issues if it would:

WR-1 Create discharges that cause pollution, contamination, or a nuisance as defined
in Section 13050 of the California Water Code (CWC) or that cause regulatory
standards to be violated, as defined in the applicable NPDES stormwater permits or Water Quality Control Plan for the receiving water body.

WR-2 Accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled onsite.

WR-3 Substantially alter the existing drainage pattern of the site or area in a manner which would produce a substantial change in the current or direction of water flow.

WR-4 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.

WR-5 Place within a 100-year floodplain structures which would impede or redirect flood flows or have the potential to harm people or damage property.

WR-6 Expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, which would be deleterious to humans, based on regulatory standards established by the lead agency for the site.

WR-7 Cause changes in the rate or direction of movement of existing groundwater contaminants, expansion of the area affected by contaminants, or increased level of groundwater contamination, which would increase risk of harm to humans.

CEQA guidelines include criteria related to potable water supplies from groundwater recharge. Groundwater in the proposed Project area has significant saltwater intrusion and is unsuitable for use as drinking water. The proposed Project would obtain its drinking water supply from the City of Los Angeles Department of Water and Power. Since the proposed Project area is underlain by saline, non-potable groundwater (see Section 3.12.2.1) and no production wells are located in the area, the proposed Project would not deplete groundwater supplies. Furthermore, the Project site is currently developed and mostly consists of impermeable surfaces that do not support substantial groundwater recharge. Accordingly, those criteria are not included in this impact analysis.

### 3.12.4.3 Impacts and Mitigation

#### 3.12.4.3.1 Construction Impacts

**Impact WR-1a:** Construction activities could create discharges that would cause pollution, contamination, or a nuisance as defined in Section 13050 of the CWC or cause regulatory water quality standards to be violated.

The proposed Project would include the construction of a new intermodal railyard (the SCIG facility) and new facilities for relocated businesses on nearby parcels. As described in Section 2.4, the basic construction components of the proposed Project are:

- Demolition of existing site features;
- Site preparation including grading, and soil and groundwater remediation as necessary;
- Relocating or reinforcing in place underground pipelines;
• Installation of bridges, tracks, signals, buildings, utilities, paving, and other facilities; and

• Pile driving and in-water construction to widen the Dominguez Channel rail bridge.

The potential exists for contaminants to enter the storm drains at the Project site through the following activities:

• Earthwork associated with the construction of the proposed improvements would include excavating, repositioning, and compacting approximately 325,000 cubic yards of earth and hauling another 175,000 cubic yards offsite for reuse elsewhere or disposal in approved landfills. Some of the soils could require environmental remediation prior to or during the earthwork phase of construction if contamination is discovered. In that case, testing and disposal would be conducted under the oversight of an approved environmental professional in accordance with local, state, and federal regulations (Section 2.4.3.2). Contaminated soil could enter storm drains during storm events unless control measures (construction best management practices) are implemented.

• Demolition and construction activities would require the use of dust suppression methods (i.e., wet methods) to limit the volume of airborne particulates generated during these activities. Runoff from the spraying of soil and construction materials with water could enter storm drains during storm events unless control measures are implemented.

• Demolition activities may involve disturbance of building materials that contain asbestos and or lead. These contaminants could enter the storm drains during storm events unless control measures are implemented.

• Demolition and/or construction activities could involve spills or releases from associated equipment (e.g., spills during refueling and maintenance activities, oil leaks from equipment). These contaminants could enter storm drains during storm events unless control measures are implemented.

Erosion controls would be used during construction to reduce the amount of soils disturbed and to prevent runoff from entering the storm drain system. Erosion controls would include both logistical practices, such as scheduling construction to avoid the November-April rainy season to the extent feasible, and sediment control practices. Typically, erosion control programs consist of a system of practices that are tailored to site-specific conditions. The combined effectiveness of the erosion and sediment control systems is not easily predicted or quantified (USEPA, 1993).

The WDRs for stormwater runoff in the County of Los Angeles and incorporated cities covered under NPDES Permit No. CAS004001 (13 December 2001) as well as the statewide GCASP (NPDES No. CAS000002) require implementation of runoff control from all construction sites. Prior to the start of construction activities for the proposed Project, the contractor would prepare a SWPPP that specifies logistics and schedule for construction activities that would minimize potentials for erosion and standard practices that include monitoring and maintenance of control measures named in the SWPPP. Control measures would be installed at the construction sites prior to ground disturbance. Implementation of all conditions of proposed project permits would minimize proposed project-related runoff into the harbor and impacts on water quality.

Standard BMPs, such as soil barriers, sedimentation basins, site contouring, and others listed in Table 3.12-3 would be used during construction activities to minimize runoff of soils and associated contaminants in compliance with the GCASP (NPDES No.
CAS000002) and a Project SWPPP. Sediment basins and sediment traps are engineered impoundments that allow soils to settle out of runoff prior to discharge to receiving waters. Filter fabric fences and straw bale barriers are used under different site conditions to filter soils from runoff. Inlet protection consists of a barrier placed around a storm drain drop inlet to trap soils before they enter a storm drain. One or more of these types of runoff control structures would be placed and maintained around each construction area to minimize loss of site soils to the storm drain system. As another standard measure, concrete truck wash water and runoff of any water that has come in contact with wet cement would be contained on site, via barriers, so that it does not run off site.

Most BMPs used to treat urban runoff are designed to remove or reduce trash, nutrients, or contaminants associated with suspended particles (Brown and Bay, 2007). Studies by Caltrans (2004) determined that BMPs that used infiltration or sand filtration methods were most effective at reducing levels of suspended solids, nutrients, and metals in runoff. The USEPA (1993) reported that measures such as sedimentation basins, sediment traps, straw bale barriers, and filter fabric fences were about 60–70% effective at removing soils from runoff (Table 3.12-3). In contrast, recent studies by Brown and Bay (2007) showed that effectiveness at removing suspended solids and reducing toxicity varied among BMPs tested, including hydrodynamic and biofiltration methods, and results for individual BMPs were inconsistent. BMPs designed to remove suspended particles are not effective at reducing toxicity associated with dissolved components in the runoff (Brown and Bay, 2007).

Although the specific BMPs that would be used, as well as their effectiveness under conditions at the proposed project site, cannot be determined prior to permit issuance, the data in Table 3.12-3 indicate that erosion and runoff control BMPs would likely be 50 percent or more effective at removing soils from runoff that occurred during construction. A limited area of soils would be subject to erosion during the construction phase because the large majority of the proposed project area is flat and runoff patterns can be easily controlled by grading and temporary berms. Moreover, rainfall events in southern California are of limited duration. These factors, in conjunction with the construction BMPs that would be implemented as required by the GCASP, indicate that a minimal amount of soil would be introduced to the storm drains from runoff.

Reconstruction of the Dominguez Channel Railroad Bridge would involve alterations to the abutments and piers, pile driving, and placing new bridge elements within the channel, which would result in temporary impacts to “waters of the U.S.” Placing new bridge elements within the channel would also disturb the bed and banks of the channel. Impacts could include short-term increases in suspended sediments and turbidity levels, decreases in DO concentrations, increases in nutrient concentrations, and increases in dissolved and particulate contaminant concentrations in areas where contaminated sediments would be disturbed by demolition and construction activities. These changes to water quality would be temporary and expected to be confined to the immediate vicinity (e.g., within 300 feet) of in-water construction activities (USACE and LAHD, 2009).

The proposed alterations would require a permit from the USACE (Section 404 of the Clean Water Act) permit from the USACE, a Section 401 (of the Clean Water Act) Water Quality Certification from the RWQCB, and a Lake or Streambed Alteration Agreement by the CDFG. The certification and permits would include water quality standards that must be met at various distances from the in-water activities and would specify Best Management Practices (BMPs) to be employed during construction. In order to meet these permitting requirements as well as the requirements of the GCASP and Los Angeles County MS4 Permit, construction BMPs such as fiber rolls, gravel bag berms,
sediment basins, silt fences, and erosion control blankets would be implemented. These
BMPs would be specified in the proposed Project SWPPP and associated Erosion Control
and Water Pollution Control plans. Appropriate water quality control measures would be
in place prior to the start of Dominguez Channel Bridge alterations.

In addition to soils, runoff from a construction site could contain a variety of
contaminants, including metals and PAHs, associated with construction materials,
stockpiled soils, and spills of oil or other petroleum products. Accidents resulting in spills
of fuel, lubricants, or hydraulic fluid from construction equipment could occur during
Project construction. Site remediation activities could result in localized release of
contaminants that could enter surface water runoff. Based on the history for this type of
work in the port area, accidental leaks and spills of large volumes of hazardous materials
or wastes containing contaminants during construction activities have a very low
probability of occurring because large volumes of these materials typically are not used
or stored at construction sites. Spills associated with construction equipment, such as
oil/liquid drips or gasoline/diesel spills during fueling, typically involve small volumes
that can be effectively contained in the work area and cleaned up immediately (Port of
Los Angeles Spill Prevention and Control Procedures [CA012]). Construction and
industrial SWPPPs and standard Port BMPs (e.g., use of drip pans, contained refueling
areas, regular inspections of equipment and vehicles, and immediate repairs of leaks)
would reduce the potential for materials from construction activities to enter storm drains.

The potential for encountering groundwater requiring extraction and disposal during
onshore construction of the proposed Project is uncertain. If dewatering is deemed
necessary, the dewatering effluent would be tested to determine specific contaminant
levels in order to select the appropriate disposal options. Depending on the contaminant
concentrations, dewatering effluent would likely be discharged into the sanitary sewer,
under permit with the City of Los Angeles Sanitation Bureau. Such permit requirements
typically include onsite treatment to remove pollutants prior to discharge. Alternatively,
the dewatering effluent could be temporarily stored onsite in holding tanks, pending
offsite disposal at a facility approved by the RWQCB. Standard Port BMPs (e.g.,
excavating, stockpiling, and disposing of chemically impacted soils [02111]; solid waste
management [CA020]; contaminated soil management [CA022]) specify procedures for
handling, storage, and disposal of contaminated materials encountered during excavation.
These procedures would be followed for upland construction activities associated with
the proposed Project to ensure that soil or groundwater contaminants were not transported
offsite by runoff.

**Impact Determination**

Construction activities associated with the landside features of the proposed Project have
the potential to adversely affect the quality of stormwater runoff. However, the proposed
Project would implement a SWPPP incorporating BMPs, such as sediment basins or traps
and fabric filter fences or straw bale barriers, to control runoff of eroded soils and
pollutants, and drip pans, containment, and other measures to control leaks and spills.
The SWPPP would also incorporate monitoring requirements as outlined in the updated
GCASP, intended to minimize potential impacts and verify BMP effectiveness. These
measures, combined with the low potential for erosion, would limit the soil and
contaminant loading to storm drain outlets. Therefore runoff from landside construction
activities would not create pollution, contamination, a nuisance, or violate any water
quality standards, and impacts on water quality would be less than significant.
Construction activities in and adjacent to the Dominguez Channel could result in discharges or spills of silt, debris, and contaminants to the water. The BMPs required by the federal, state, and local permits and implemented through the SWPPP would reduce the risk and magnitude of those discharges. Nevertheless, the violation of water quality standards that could result from a discharge is considered a significant impact requiring mitigation.

Mitigation Measures

Mitigation Measure WR-1 would reduce the risk of discharges and spills of silt, debris, and contaminants reaching the waters of the Dominguez Channel by imposing controls and restrictions on construction activities.

Mitigation Measure WR-1: The following measures shall be implemented during the reconstruction of the Dominguez Channel Railroad Bridge

1. No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to erosion or could flow into the channel. Construction materials shall not be stored in contact with the soil.

2. Floating booms shall be used to assist in containing debris discharged into Dominguez Channel, and any debris discharged shall be removed as soon as possible but no later than the end of each day.

3. A silt curtain shall be utilized to assist in controlling turbidity during reconstruction of the Dominguez Channel Bridge. The Port of Los Angeles shall limit, to the greatest extent possible the suspension of benthic sediments into the water column.

4. Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery or construction equipment or power tools into the Dominguez Channel. Such measures include deployed oil booms and a silt curtain around the proposed construction zone at all times to minimize the spread of any accidental fuel spills, turbid construction-related water discharge, and debris. Other measures include training construction workers on emergency spill notification procedures, proper storage of fuels and lubricants, and provisions for on-site spill response kits.

Residual Impacts

Residual impacts would be less than significant.

Impact WR-2a: Construction of the proposed Project would not substantially accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled onsite.

As described above in Impact WR-1a, construction activities associated with the proposed Project have the potential to expose bare soils that would be subject to wind and water erosion. However, the proposed Project is subject to the GCASP, and as such is required to prepare and maintain a Project SWPPP onsite at all times during construction. The SWPPP would include construction BMPs, such as logistical practices (see above), hydroseeding of bare slopes, fiber rolls, sediment basins or traps, and fabric filter fences, to minimize and control runoff of eroded soils and pollutants. The effectiveness of those measures is described in Impact WR-1a and in Table 3.12-3). The SWPPP would also
incorporate monitoring requirements as outlined in the updated GCASP, intended to verify BMP effectiveness.

Although some wind and water erosion of construction areas is likely to occur, the BMPs that would be implemented would allow the erosion to be controlled on-site, preventing substantial quantities of dust and sediments from escaping into the surrounding environment.

**Impact Determination**

With implementation of the BMPs required under existing regulations and included as part of the proposed Project (as described above), impacts related to wind or water erosion would be less than significant.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

Less than significant impact.

**Impact WR-3a: Construction of the proposed Project would not substantially alter the existing drainage pattern of the site or substantially increase the rate or amount of surface runoff in a manner which would produce a substantial change in the current or direction of water flow.**

Construction activities associated with the proposed Project have the potential to alter the existing drainage pattern of the railyard and relocation sites by minor changes in site elevations resulting from stockpiled soils and open trenches, and by short-term removal or blockage of the existing storm drain system.

The proposed Project would be subject to the GCASP, and as such required to prepare and maintain a Project SWPPP as described in Impact WR-1a. These measures, combined with the low potential for erosion, would limit the effects of any construction-related changes in the drainage pattern of the site.

The rail bridge over the Dominguez Channel would be widened to accommodate the proposed south lead tracks. This would involve widening the piers in the downstream direction, driving piles to support the larger abutments, and placing a new span wide enough to accommodate three tracks. The construction would not be expected to alter the flow of the Dominguez Channel because the pilings and abutments would be placed parallel to the shoreline, which is straight and is hardened with riprap, and aligned with the existing abutments. Debris booms and silt curtains, if employed, would be flexible and therefore would not impede current flow. Furthermore, hydrodynamic modeling and design refinements in support of the US Army Corps of Engineers, Regional Water Quality Control Board, and Department of Fish and Game permits, as well as conditions of those permits, would ensure that flood flows would be unimpeded and that bank and channel erosion would not occur during construction.

**Impact Determination**

With implementation of the measures required under existing regulations and included as part of the proposed Project (as described above), the impacts would be less than significant.
Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact WR-4a: Construction of the proposed Project would not 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.

Construction of the proposed Project would involve short-term removal or closures of portions of the existing storm drain system while project features and the new storm drain system were installed. Site runoff could, in such a case, exceed the capacity of the system. As stated in Impacts WR-1a, 2a, and 3a above, the proposed Project is subject to the GCASP, meaning that construction BMPs would be in place during project construction. BMPs related to managing storm water volumes could include impounding water on the site via barriers and letting it infiltrate into the ground or pumping it into holding tanks for subsequent release into the storm drain system or treatment facilities, as described in Impact WR-1a. With the incorporation of these BMPs and implementation of the required project SWPPP, construction runoff would be contained and treated onsite, and construction of the proposed Project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems.

Construction of the proposed Project would involve the use of potential water pollutants in the form of fuels, lubricants, solvents, paints, and other materials used in the normal course of construction. In addition, contaminated soils and ground water that might be encountered represent a potential source of water pollution. These substances could, if not controlled, enter surface water runoff from the construction site and degrade receiving water quality in the Dominguez Channel. Since the proposed Project is subject to the GCASP, construction BMPs would be in place during project construction. The BMPs described in Impact WR-1a would prevent contaminated runoff water from entering storm drains or flowing to the Dominguez Channel in substantial quantities. Accordingly, construction of the proposed Project would not provide substantial additional sources of polluted runoff.

Impact Determination

With implementation of the measures required under existing regulations or included as part of the proposed Project (as described above), the impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.
Impact WR- 5a: The proposed Project would not place within a 100-year floodplain structures which would impede or redirect flood flows, or have the potential to harm people or damage property.

The Project site, including the relocation sites, is located in a FEMA-mapped flood zone X, which, except for the Dominguez Channel railroad bridge, is an area that is determined to be outside the 100- and 500-year floodplains (FEMA, 2008). Accordingly, the proposed Project would not place within a 100-year floodplain structures which would impede or redirect flood flows, or have the potential to harm people or damage property. Construction equipment would operate from the banks of the Dominguez Channel and from the existing bridge, and thus would not impede or redirect flood flows. Debris booms and silt curtains, if employed, would be flexible and therefore would not impede water flow. Ongoing and future climate change may alter the potential for flooding at the site by altering sea level and the frequency and severity of storms. Because climate change in the context of CEQA is linked to greenhouse gas emissions, this issue is addressed in Section 3.6, Greenhouse Gases.

Impact Determination

Because landside features of the proposed Project are not located within the 100-year floodplain, structures associated with the proposed Project would not be placed within the 100-year floodplain during construction. Any in-water construction equipment necessary for construction of the Dominguez Channel railroad bridge expansion would be temporary and moveable, and thus would not impede or redirect flood plows. Accordingly, no impact to the 100-year floodplain would result from the proposed Project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

Impact WR-6a: Construction of the proposed Project could expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, but would not be deleterious to humans, based on regulatory standards established by the lead agency for the site.

Soils and groundwater at the Project site and relocation areas have been affected by hazardous substances and petroleum products as a result of past industrial uses (see Section 3.7 for more detail on known site contamination). Most construction would involve only shallow soils, within ten feet of the surface, and would therefore not encounter contaminated groundwater. Utility relocations and the construction of building foundations or pilings could, however, encounter groundwater (see Impact 7a).

Soil contamination represents a threat to groundwater and surface water resources because contaminated soil can enter surface runoff and contamination from soil can migrate down into the groundwater. Construction of the proposed Project would encounter soil contamination, and could expose contaminated soils.
Contaminated materials encountered during construction would be remediated as described in Impact WR-1, Section 2.4.3.2, and Section 3.7. Construction BMPs would minimize the likelihood that contaminated soils would enter surface runoff water. In addition, remediation activities would result in a reduction, rather than an increase or expansion, of onsite contaminants, which would be a beneficial effect of Project construction.

Implementation of BMPs and the remediation of contamination in accordance with federal, state, and local regulations would minimize exposure to contamination in amounts that would exceed regulatory limits for human health or the environment. Furthermore, the following conditions would be required in accordance with POLA leasing requirements:

**Site Remediation Lease Requirement.** Unless otherwise directed by the lead regulatory agency for any given site, the Tenant shall remediate all contaminated media within proposed Project boundaries that are encountered and managed during demolition and grading activities. Any discolored and/or odorous soil encountered during excavation shall be handled and disposed in compliance with local, state, and federal regulations, as described in Section 3.12.3, and as directed by the Los Angeles Fire Department, DTSC, and/or RWQCB. Excavated contaminated soil shall not be placed in another location onsite; it must be properly disposed of off-site. All imported soil to be used as backfill in excavated areas should be sampled to ensure that the soil is free of contamination. Current Los Angeles Harbor Department import soil guidance documents must be followed and all import soil must meet criteria as defined in those documents. Unless otherwise authorized by the lead regulatory agency for any given site, areas of soil contamination shall be remediated prior to, or in conjunction with, project demolition, grading, and construction.

Existing groundwater contamination encountered during the excavation within the boundary of the proposed Project shall continue to be monitored and remediated, simultaneous and/or subsequent to site redevelopment, in accordance with direction provided by the RWQCB or lead regulatory agency.

**Contamination Contingency Plan Lease Requirement.** The following contingency plan shall be implemented by the Tenant to address previously unknown contamination during demolition, grading, and construction:

a) All excavation and filling operations within the boundaries of the construction area shall be observed for the presence of free petroleum products, chemicals, or otherwise chemically impacted soil (CIS). Deeply discolored soil, suspected contaminated soil, or soil registering greater than 50 ppmv when measured with a photoionization detector (PID) or organic vapor analyzer (OVA) shall be segregated from clean soil. In the event unexpected suspected chemically impacted material (soil or water) is encountered during construction, the contractor shall notify the Los Angeles Harbor Department's Chief Harbor Engineer and Director of Environmental Management (EMD). Harbor Department EMD personnel shall confirm the presence of the suspect material and direct the contractor to remove, stockpile or contain, and characterize the suspect material(s). Continued work at a contaminated site shall require the approval of the Chief Harbor Engineer.

b) A photoionization detector (or other similar devices) shall be present during grading and excavation of suspected chemically impacted soil.
c) Excavation of VOC-impacted soil (defined as soil which registers a concentration of 50 ppm or greater of Volatile Organic Compounds as measured before suppression materials have been applied and at a distance of no more than three inches from the surface of the excavated soil with an organic vapor analyzer calibrated with hexane) will require the Tenant to obtain and comply with a South Coast Air Quality Management District Rule 1166 permit.

d) The remedial option(s) selected shall be dependent upon a number of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, cost, etc.) and shall be determined on a site-specific basis. Both off-site and on-site remedial options shall be evaluated.

e) The extent of removal actions shall be determined on a site-specific basis. At a minimum, the chemically impacted area(s) within the boundaries of the construction area shall be remediated to the satisfaction of the lead regulatory agency for the site and/or to ensure protection of project workers. The Port Project Manager overseeing removal actions shall inform the contractor when the removal action is complete.

f) Copies of hazardous waste manifests or other documents indicating the amount, nature, and disposition of such materials shall be submitted to the Chief Harbor Engineer within 30 days of project completion.

g) In the event that contaminated soil is encountered, all on-site personnel handling or working in the vicinity of the contaminated material shall be trained in accordance with Occupational Safety and Health and Administration (OSHA) regulations for hazardous waste operations. These regulations are based on CFR 1910.120 (e) and 8 CCR 5192, which states that “general site workers” shall receive a minimum of 40 hours of classroom training and a minimum of three days of field training. This training provides precautions and protective measures to reduce or eliminate hazardous materials/waste hazards at the work place.

h) In cases where potential chemically impacted soil is encountered, a real-time aerosol monitor shall be placed on the prevailing downwind side of the impacted soil area to monitor for airborne particulate emissions during soil excavation and handling activities.

i) All excavations shall be filled with structurally suitable fill material which is free from contamination (i.e., meets the criteria in current LAHD import soil guidance documents).

Impact Determination

The implementation of construction controls (BMPs) and POLA lease requirements for soil remediation and groundwater contamination contingency activities at the Project site would prevent exposure of contaminated soils to the extent of being deleterious to human health and the environment. Furthermore, the placement of an impermeable layer (paving) over the Project site would prevent further contamination of soil and groundwater. Implementation of these preventive measures would minimize the potential for contaminated soils and worker exposure, resulting in a less than significant impact.
Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact WR-7a: Construction of the proposed Project would not cause changes in the rate or direction of movement of existing groundwater contaminants, expansion of the area affected by contaminants, or increased levels of groundwater contamination, which would increase risk of harm to humans.

Soil and groundwater in the Project site and relocation areas have been affected by hazardous substances and petroleum products as a result of past industrial uses. Construction of the proposed Project could involve dewatering to lower groundwater around locations in which subsurface features such as foundations, footings, and underground utilities are being installed. Any such dewatering would be temporary and localized, and therefore would not cause substantial alterations of groundwater movement on the site as a whole. Consequently, construction of the proposed Project is not expected to change the rate, direction, or extent of existing soil and/or groundwater contamination.

During construction, if contaminated materials are encountered, they would be remediated as described in Impact WR-1a and Section 3.7. Potential remediation activities associated with Project development would result in a reduction, rather than an increase or expansion, of onsite contaminants. To the extent contaminated groundwater is removed from the site, construction could have a beneficial effect on groundwater contamination.

Construction potentially could increase groundwater contamination if contaminants such as fuels, lubricants, paints, and solvents used in the construction process were to be spilled and migrate downwards into the groundwater. As stated in Impacts WR-1a, 2a, and 3a above, the proposed Project is subject to the GCASP, meaning that construction BMPs would be in place during project construction. Typical BMPs are summarized in Section 3.12.4.1 and Impact WR-1a. Implementation of those BMPs and the fact that, typically, such materials are not present on construction sites in large quantities means that groundwater contamination by construction activities is unlikely.

Impact Determination

The likely soil remediation activities at the Project site and the implementation of BMPs during construction would prevent further contamination of groundwater or expansion of the existing area affected by contaminants. Accordingly, construction of the proposed Project would have less than significant impacts related to groundwater contamination.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.
3.12.4.3.2 Operational Impacts

Impact WR-1b: Operation of the proposed Project would not create discharges that would cause pollution, contamination, or a nuisance as defined in Section 13050 of the CWC or cause regulatory standards to be violated.

Water pollution during operations could occur as a result of spills or leaks of hazardous substances (including cargo) and storm water inputs to receiving waters. Hazardous substances at the proposed SCIG facility and at the Cal Cartage relocation site would fall into two categories: (1) fuels and other products (solvents, lubricants, batteries, etc.) used in the operation of the facility; and (2) cargo contained in some of the shipping containers. Hazardous substances at the other relocation sites would be similar to the substances used or stored under baseline conditions, i.e., solvents, lubricants, batteries, and fuels.

Hazardous substances used during operation of the SCIG facility and the relocated facilities would be stored and handled in accordance with the facilities’ Business Plans, which would be submitted to the LACFD for approval, and, for the SCIG facility, BNSF’s corporate hazardous substances management plans (see section 3.7.2 for details). Those plans incorporate standard practices for storage and handling, notifications, and emergency response.

Based on the fact that hazardous materials would be used, handled, and stored at the SCIG facility and hazardous wastes would be generated, the potential exists for contaminants to enter the storm drains at the Project Site if spills or other unauthorized releases occur. However, operation of the proposed Project would not involve any new direct point source discharges of wastes or wastewaters. Stormwater runoff from the proposed Project site would be collected on site by the new storm drain systems. Because stormwater discharges in the area currently receive no treatment, the stormwater treatment technologies implemented under the proposed Project would result in a reduction in the concentrations of various pollutants that are commonly present in stormwater runoff from industrialized areas. Those pollutants and the effectiveness of treatment technologies are described further below.

The facilities associated with the proposed Project would be operated in accordance with one or more industrial SWPPPs that contain monitoring requirements to ensure that stormwater quality complies with permit conditions. Stormwater runoff associated with facility operations would also be governed by SUSMP requirements that would be incorporated into the proposed project plan, and that must be approved prior to issuance of building and grading permits. The SUSMP for the Los Angeles County Urban Runoff and Stormwater NPDES Permit requires “minimization of the pollutants of concern” by incorporating “a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent possible” (LACDPW, 2002). Examples of BMPs used for minimizing the introduction of pollutants of concern from site runoff include oil/water separators, catch basin inserts, storm drain inserts, and media filtration. These BMPs (either individually or several of the BMPs working in concert) would be used by the proposed Project. These BMPs must meet specified design standards to mitigate (infiltrate or treat) stormwater runoff and control peak flow discharges.

Additionally, the proposed Project is subject to the requirements and operational procedures outlined in the Industrial Storm Water Permit (SWRCB Water Quality Order 97-03-
Regulatory controls for runoff and storm drain discharges are designed to reduce impacts on water quality and would be fully implemented for the proposed Project. Tenants would be required to obtain and meet all conditions of applicable stormwater discharge permits.

The proposed Project falls under the "100,000 or more square feet of impervious surface area industrial developments" SUSMP category, and, as such, is subject to SUSMP requirements as outlined in sections 3.12.3.3 through 3.12.3.5 of this document. Accordingly, the following requirements must be met (LACDPW, 2002):

- Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion
- Clearing and grading of native vegetation at the project site shall be limited to the minimum amount needed and preserve riparian areas and wetlands
- Natural vegetation shall be promoted by using parking lot islands and other landscaped areas, where feasible
- Pollutants of concern shall be minimized through the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the Maximum Extent Practicable (MEP)
- Runoff shall be conveyed safely from the tops of slopes and stabilize disturbed slopes
- Natural drainage systems shall be utilized to the MEP
- Flow shall be controlled or eliminated (additional flow due to proposed project) to natural drainage systems to the MEP
- Permanent channel crossings shall be stabilized
- Slopes shall be vegetated with native or drought tolerant vegetation
- Energy dissipaters, such as riprap, shall be installed at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion, with the approval of all agencies with jurisdiction
- Peak flow discharge shall be controlled to provide stream channel and over bank flood protection, based on flow design criteria selected by the local agency
- Storm water runoff from the Proposed Project site shall be mitigated (infiltrated or treated) using either volumetric treatment control BMPs (detention or retention basins, infiltration, etc.) and associated numeric criteria, or flow-based treatment control BMPs (swales, sand filters, proprietary devices, etc.) and associated numeric criteria

Additionally, 100,000 square foot industrial or commercial developments have the following requirements:

- Cover loading dock areas or design drainage to minimize run-on and runoff of storm water
- Direct connections to storm drains from depressed loading docks (truck wells) are prohibited
• Repair/maintenance bays must be indoors or designed in such a way that do not allow storm water runon or contact with storm water runoff

• Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited

• Self-contained and/ or covered, equipped with a clarifier, or other pretreatment facility, and properly connected to a sanitary sewer

• Infiltration BMPs are not recommended for areas of industrial activity unless appropriate pretreatment is provided

Post-construction BMPs to be used at the proposed Project site for minimizing the introduction of pollutants of concern from site runoff during the operational phase include but are not limited to: oil/water separators, catch basin inserts, storm drain inserts, and media filtration. Extended detention basins can be used to mitigate for increased flows due to the Proposed Projects. These BMPs must meet specified design standards to mitigate (infiltrate or treat) stormwater runoff and control peak flow discharges, per the County SUSMP. If structural or treatment control BMPs are included in the Project plan, the tenant would be required to provide verification of maintenance provisions.

Regulatory controls for runoff and storm drain discharges are designed to reduce impacts to water quality and would be fully implemented for the proposed Project, as required by the County of Los Angeles and City of Long Beach MS4 Permits. Tenants would be required to obtain and meet all conditions of applicable stormwater discharge permits as well as meet all Port (Industrial Storm Water Permit) pollution control requirements.

Atmospheric deposition related to local operations could introduce particulate contaminants to the local watershed, primarily related to resuspended dust from vehicular traffic and coarse particles such as zinc from tire wear and copper from brake pad wear. Fine particulates from vehicle exhaust may also contribute to the local watersheds but to a lesser degree (USACE and LAHD, 2009). These particles likely accumulate during dry weather conditions and are later washed off during storm events. The magnitude of this effect is not known, but there is no reason to expect that project operations would result in substantially greater atmospheric deposition than currently exists, and the modern storm drain facilities that would be installed at the Project and relocation sites would intercept more of such pollutants than at present.

Without project design measures, operational activities associated with the proposed Project due to the increase in paved surface from new SCIG facility and associated buildings, roads and paved areas, relocated businesses, and widened bridges have the potential to adversely affect the quality of stormwater runoff. Stormwater sampling at other industrial facilities in the Project area (MBC, 2005) detected pollutants such as metals and semivolatile organic compounds: copper, lead, mercury, nickel, and zinc occurred in stormwater samples at elevated concentrations. However, the study concluded that mixing with receiving waters would rapidly dilute the pollutants so that receiving water standards would not be exceeded. It is reasonable to expect that these findings would also apply to stormwater runoff from the proposed Project site. The proposed Project would be subject to the County SUSMP and its water quality treatment and flow mitigation requirements, as outlined above, and the operators of the Project facilities would implement the requirements of their Industrial Stormwater General permits, which would mandate the use of post-construction design-phase BMPs such as (but not limited to) oil/water separators, catch basin inserts, media filtration, and extended detention basins. With these controls, runoff during the operational phase of the
proposed Project would not create pollution, contamination, a nuisance, or violate any water quality standards.

Operations at the relocation sites would be similar to current operations, and would therefore not be expected to generate additional impacts related to leaks or spills of hazardous substances. Increased impermeable surfaces in some areas (for example, the currently largely unpaved ACTA relocation site would be mostly paved under the proposed Project) would result in increased runoff, but the sites would have improved stormwater management facilities and new operational SWPPPs, and other areas such as the railyard would have less impermeable surface than at present, which would reduce the potential for contaminated runoff compared to baseline conditions.

**Impact Determination**

With implementation of the measures described above, operations associated with the proposed Project would not result in discharges that would create pollution or cause water quality standards to be violated. Therefore, the impact to water quality from operational discharges would be less than significant.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

Less than significant impact.

**Impact WR-2b: Operation of the proposed Project would not substantially accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled onsite.**

Surfaces at the SCIG facility and relocation sites would be either paved or stabilized with landscaping, and thus not susceptible to wind or water erosion. Operation of the proposed Project would not include routine disturbance or exposure of soil surfaces. Accordingly, operation of the proposed Project would not accelerate the natural processes of wind and water erosion. BMPs implemented under the operational water quality permits (see Impact WR-1b) would further reduce the likelihood of silt and other particulates generated onsite reaching receiving waters.

**Impact Determination**

Because operation of the proposed Project would not increase erosion of site soils, it would not result in sediment runoff or deposition that could not be controlled onsite. Accordingly, impacts related to sediment runoff and deposition would be less than significant.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

Less than significant impact.
Impact WR-3b: Operation of the proposed Project would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner which would produce a substantial change in the current or direction of water flow.

The physical features of the proposed Project would be similar to baseline conditions in consisting of industrial structures on essentially flat land. The exceptions would be enlarged road/rail grade separations and the embankment necessary to carry the north lead track over the SCE parcel access road, which would be elevated above the existing grade. Site grading would direct storm runoff to onsite storm drains designed for a 10-year event, which is the standard design capacity for the storm drain systems. Runoff associated with larger storm events (e.g., 50-year or 100-year events) could exceed the capacity of the onsite storm drain system, resulting in temporary sheet flow or ponding of water onsite, but that occurrence would be no more severe than under current conditions.

The enlarged grade separations would represent minor increases in topographic relief and would not be expected to alter site drainage substantially. The north lead track embankment would represent a new topographic feature that would alter site drainage on the northern portion of the SCIG facility. However, the embankment would not block any existing water course, and the storm drain system would be designed to accommodate the new surface runoff pattern.

Impact Determination

Based on the fact that operation of the proposed Project would not adversely affect surface water bodies, including the Dominguez Channel, water flows would not be substantially altered. In addition, the existing drainage pattern of the project site would not be substantially altered. Accordingly, impacts related to water currents and direction of flow would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Impact WR-4b: Operation of the proposed Project would not 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.

The proposed Project is subject to the requirements and operational procedures outlined in the Industrial Storm Water Permit (SWRCB Water Quality Order 97-03-DWQ/NPDES General Permit CAS000001) including pollutant handling and stormwater monitoring and sampling. Additionally, the proposed Project is subject to both GCASP and Municipal Stormwater and related SUSMP requirements. The SCIG facility would include permeable surfaces to reduce runoff, which could offset the increase in impermeable surfaces associated with development of the relocation sites. Any additional runoff resulting from the proposed Project would be managed in accordance with the BMPs outlined in Impact WR-1b, such as (but not limited to) oil/water separators, catch basin inserts, media filtration, and extended detention basins. These BMPs would minimize the discharge of pollutants into stormwater runoff. With the incorporation of permeable surfaces into the
design and the implementation of BMPs, site runoff would not increase as a result of the proposed Project, water pollutants would not exceed regulatory standards, and the existing storm drain system serving the Project sites would be able to accommodate design flows. With incorporation of these required design measures, the proposed Project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to or provide substantial additional sources of polluted runoff.

As described in Impact WR-3b, runoff associated with larger storm events (e.g., 50-year or 100-year events) could exceed the capacity of the onsite storm drain system, resulting in temporary sheet flow or ponding of water onsite, but that occurrence would be no more severe than under current conditions.

**Impact Determination**

With implementation of the measures required under existing regulations or included as part of the proposed Project (as described above), the impacts would be less than significant.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

Less than significant impact.

**Impact WR 5b: Operation of the proposed Project would not place within a 100-year floodplain structures which would impede or redirect flood flows or have the potential to harm people or damage property.**

As described in Impact WR-5a, the Project Site and relocation areas, with the exception of the Dominguez Channel railroad bridge, are located outside the 100-year floodplain. Accordingly, Project-related structures on the railyard, relocation, and lead track areas of the Project site would not be placed within the 100-year floodplain.

The Dominguez Channel rail bridge would not represent a new structure, but rather a minor modification of an existing structure. The modified structure would not be expected to alter the flow of the Dominguez Channel because the pilings and abutments would be oriented parallel to the shoreline, which is straight and is hardened with riprap, in the same alignment as the existing abutments. Furthermore, hydrodynamic modeling and design refinements in support of the US Army Corps of Engineers, Regional Water Quality Control Board, and Department of Fish and Game permits, as well as conditions of those permits, would ensure that stream flow would be unimpeded by the modified structure.

Ongoing and future climate change has the potential to alter the potential for flooding at the site by altering sea level and the frequency and severity of storms. Because climate change in the context of CEQA is linked to greenhouse gas emissions, this issue is addressed in Section 3.6, Greenhouse Gases

**Impact Determination**

Because the landside features of the proposed Project are not located within the 100-year floodplain, Project operations would not involve structures within the 100-year
floodplain, and no impact to the 100-year floodplain would result from the proposed Project. The reconstructed Dominguez Channel railroad bridge would not impede or redirect flood flows, and therefore would have a less than significant impact on the 100-year floodplain and flood flows.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

Less than significant impact.

### Impact WR-6b: Operation of the proposed Project would not expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, which would be deleterious to humans, based on regulatory standards established by the lead agency for the site.

Soils and groundwater at the Project site and relocation areas have been affected by hazardous substances and petroleum products as a result of past industrial uses (see Section 3.7 for more detail on known site contamination). Soil contamination represents a threat to groundwater and surface water resources because contaminated soil can enter surface runoff and contamination from soil can migrate down into the groundwater.

Soil contamination in areas that would be occupied by Project features would be remediated during construction (see Impact WR-6a, Section 2.4.3.2, and Section 3.7). During operation of the proposed Project, no activities would be conducted that would expose soils containing toxic substances or petroleum hydrocarbons at concentrations exceeding regulatory standards because no excavations would occur. Operation of the proposed Project would take place in an area that would be largely paved, which effectively would serve as an impermeable surface barrier above any soil contamination that remained in place after construction.

**Impact Determination**

Soil remediation during construction and the placement of an impermeable layer (paving) over the Project site would prevent exposure of contaminated soils during operation of the proposed Project. Accordingly, operation of the proposed Project would have less than significant impacts related to exposure of contaminated soils.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

Less than significant impact.

### Impact WR-7b: Operation of the proposed Project would not cause changes in the rate or direction of movement of existing groundwater contaminants, expansion of the area affected by contaminants, or increased level of groundwater contamination, which would increase risk of harm to humans.

Soil and groundwater at the Project site and relocation areas have been affected by hazardous substances and petroleum products as a result of past industrial uses.
Operation of the proposed Project would take place in an area that would be largely paved, which effectively would serve as an impermeable surface barrier above any soil or groundwater contamination. Any additional runoff resulting from the proposed Project would be treated and mitigated onsite and would not permeate the soil or enter the groundwater. In addition, the controls described in Impact WR-1b would limit the possibility of site contaminants entering the groundwater, and no subsurface operations would take place. Consequently, the proposed Project is not expected to change the rate, direction, or extent of existing groundwater contamination.

**Impact Determination**

With implementation of the measures required under existing regulations or included as part of the proposed Project (as described above), the Project’s impacts on the rate, direction of movement, extent, or magnitude of groundwater contamination would be less than significant.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

Less than significant impact.

### 3.12.4.4 Summary of Impact Determinations

A summary of the impact determination for Water Resources is shown in Table 3.12-4. Significant impacts to groundwater and surface water resources from construction of the proposed Project were identified. Under Impact WR-1a, construction could create discharges to the Dominguez Channel as a result of spills, leaks, and erosion, despite the implementation of standard construction BMPs. These discharges would represent a significant impact. Construction impacts WR 2a through WR-4a, as well as WR-6a and WR-7a, were determined to be less than significant, and under Impact WR-5a there would be no impact. All operational impacts (WR-1b through WR-7b) were determined to be less than significant.

### 3.12.4.5 Mitigation Monitoring

Mitigation monitoring is required for MM WR-1. In addition, the lease requirements for Site Remediation and Contamination Contingency Plan are included for tracking and reporting purposes.
**Table 3.12-4. Impact Determinations for the Proposed Project.**

<table>
<thead>
<tr>
<th>Environmental Impacts</th>
<th>Impact Determination</th>
<th>Mitigation Measures</th>
<th>Residual Impacts After Mitigation</th>
</tr>
</thead>
</table>
| **WR-1a:** Construction could create discharges that cause pollution, contamination, or a nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permits or Water Quality Control Plan for the receiving water body. | Significant impact | MM WR-1: The following measures shall be implemented during the reconstruction of the Dominguez Channel Railroad Bridge  
No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to erosion or could flow into the channel. Construction materials shall not be stored in contact with the soil.  
Floating booms shall be used to assist in containing debris discharged into Dominguez Channel, and any debris discharged shall be removed as soon as possible but no later than the end of each day.  
A silt curtain shall be utilized to help control turbidity during reconstruction of the Dominguez Channel Bridge. BNSF shall limit, to the greatest extent possible the suspension of benthic sediments into the water column.  
Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery or construction equipment or power tools into the Dominguez Channel. Such measures include deployed oil booms and a silt curtain around the proposed construction zone at all times to minimize the spread of any accidental fuel spills, turbid construction-related water discharge, and debris; training construction workers on emergency spill notification procedures; proper storage of fuels and lubricants; and provisions for on-site spill response kits. | Less than significant |
<p>| <strong>WR-2a:</strong> Construction would not accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled onsite | Less than significant impact | Mitigation not required | Less than significant impact |</p>
<table>
<thead>
<tr>
<th>Environmental Impacts</th>
<th>Impact Determination</th>
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</tr>
</thead>
<tbody>
<tr>
<td>WR-3a: Construction would not substantially alter the existing drainage pattern of the site or area in a manner which would produce a substantial change in the current or direction of water flow.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td>WR-4a: Construction would not 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.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td>WR-5a: Construction would not place within a 100-year floodplain structures which would impede or redirect flood flows or have the potential to harm people or damage property.</td>
<td>No impact</td>
<td>Mitigation not required</td>
<td>No impact</td>
</tr>
<tr>
<td>WR-6a: Construction could expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, but would not be deleterious to humans, based on regulatory standards established by the lead agency for the site.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td>WR-7a: Construction would not cause changes in the rate or direction of movement of existing groundwater contaminants, expansion of the area affected by contaminants, or increased level of groundwater contamination, which would increase risk of harm to humans.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td>WR-1b: Operation would not create discharges that cause pollution, contamination, or a nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permits or Water Quality</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td>Environmental Impacts</td>
<td>Impact Determination</td>
<td>Mitigation Measures</td>
<td>Residual Impacts After Mitigation</td>
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<tr>
<td>Control Plan for the receiving water body.</td>
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<tr>
<td><strong>WR-2b:</strong> Operation would not accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled onsite.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td><strong>WR-3b:</strong> Operation would not substantially alter the existing drainage pattern of the site or area in a manner which would produce a substantial change in the current or direction of water flow.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td><strong>WR-4b:</strong> Operation would not 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.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td><strong>WR-5b:</strong> Operation would not place within a 100-year floodplain structures which would impede or redirect flood flows or have the potential to harm people or damage property.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td><strong>WR-6b:</strong> Operation would not expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, which would be deleterious to humans, based on regulatory standards established by the lead agency for the site.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
<tr>
<td><strong>WR-7b:</strong> Operation would not cause changes in the rate or direction of movement of existing groundwater contaminants, expansion of the area affected by contaminants, or increased level of groundwater contamination, which would increase risk of harm to humans.</td>
<td>Less than significant impact</td>
<td>Mitigation not required</td>
<td>Less than significant impact</td>
</tr>
</tbody>
</table>
Table 3.12-5. Mitigation Monitoring for Water Resources.

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
<th>MM WR-1: The following measures shall be implemented during the reconstruction of the Dominguez Channel Railroad Bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to erosion or could flow into the channel. Construction materials shall not be stored in contact with the soil.</td>
</tr>
<tr>
<td></td>
<td>Floating booms shall be used to assist in containing debris discharged into Dominguez Channel, and any debris discharged shall be removed as soon as possible but no later than the end of each day.</td>
</tr>
<tr>
<td></td>
<td>A silt curtain shall be utilized to help control turbidity during reconstruction of the Dominguez Channel Bridge. BNSF shall limit, to the greatest extent possible the suspension of benthic sediments into the water column.</td>
</tr>
<tr>
<td></td>
<td>Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery or construction equipment or power tools into the Dominguez Channel. Such measures include deployed oil booms and a silt curtain around the proposed construction zone at all times to minimize the spread of any accidental fuel spills, turbid construction-related water discharge, and debris; training construction workers on emergency spill notification procedures; proper storage of fuels and lubricants; and provisions for on-site spill response kits.</td>
</tr>
<tr>
<td>Timing</td>
<td>During the Project Construction period (2013-2015)</td>
</tr>
<tr>
<td>Methodology</td>
<td>MM WR-1 will be required in the contract specifications for construction. LAHD will monitor implementation of mitigation measures during construction.</td>
</tr>
<tr>
<td>Responsible Parties</td>
<td>BNSF construction contractor(s) for SCIG and construction contractor(s) for Relocated Tenants will be responsible for implementing the mitigation measures in the contract specifications reviewed and approved by LAHD Environmental Management Division.</td>
</tr>
<tr>
<td>Residual Impacts</td>
<td>Less than significant</td>
</tr>
</tbody>
</table>
WR-6a: Construction could expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, but would not be deleterious to humans, based on regulatory standards established by the lead agency for the site.

| Lease Measures | Site Remediation Lease Measure. Unless otherwise directed by the lead regulatory agency for any given site, the Tenant shall remediate all contaminated media within proposed Project boundaries that are encountered and managed during demolition and grading activities. Any discolored and/or odorous soil encountered during excavation shall be handled and disposed in compliance with local, state, and federal regulations, as described in Section 3.12.3, and as directed by the Los Angeles Fire Department, DTSC, and/or RWQCB. Excavated contaminated soil shall not be placed in another location on-site; it must be properly disposed of off-site. All imported soil to be used as backfill in excavated areas should be sampled to ensure that the soil is free of contamination. Current Los Angeles Harbor Department import soil guidance documents must be followed and all import soil must meet criteria as defined in those documents. Unless otherwise authorized by the lead regulatory agency for any given site, areas of soil contamination shall be remediated prior to, or in conjunction with, project demolition, grading, and construction. Existing groundwater contamination encountered during the excavation within the boundary of the proposed Project shall continue to be monitored and remediated, simultaneous and/or subsequent to site redevelopment, in accordance with direction provided by the RWQCB or lead regulatory agency. Contamination Contingency Plan Lease Measure. The following contingency plan shall be implemented by the Tenant to address previously unknown contamination during demolition, grading, and construction:

a. All excavation and filling operations within the boundaries of the construction area shall be observed for the presence of free petroleum products, chemicals, or otherwise chemically impacted soil (CIS). Deeply discolored soil, suspected contaminated soil, or soil registering greater than 50 ppmv when measured with a photoionization detector (PID) or organic vapor analyzer (OVA) shall be segregated from clean soil. In the event unexpected suspected chemically impacted material (soil or water) is encountered during construction, the contractor shall notify the Los Angeles Harbor Department's Chief Harbor Engineer and Director of Environmental Management (EMD). Harbor Department EMD personnel shall confirm the presence of the suspect material and direct the contractor to remove, stockpile or contain, and characterize the suspect material(s). Continued work at a contaminated site shall require the approval of the Chief Harbor Engineer.

b. A photoionization detector (or other similar devices) shall be present during grading and excavation of suspected chemically impacted soil.

c. Excavation of VOC-impacted soil (defined as soil which registers a concentration of 50 ppm or greater of Volatile Organic Compounds as measured before suppression materials have been applied and at a distance of no more than three inches from the surface of the excavated soil...
with an organic vapor analyzer calibrated with hexane) will require the Tenant to obtain and comply with a South Coast Air Quality Management District Rule 1166 permit.

d. The remedial option(s) selected shall be dependent upon a number of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, cost, etc.) and shall be determined on a site-specific basis. Both off-site and on-site remedial options shall be evaluated.

e. The extent of removal actions shall be determined on a site-specific basis. At a minimum, the chemically impacted area(s) within the boundaries of the construction area shall be remediated to the satisfaction of the lead regulatory agency for the site and/or to ensure protection of project workers. The Port Project Manager overseeing removal actions shall inform the contractor when the removal action is complete.

f. Copies of hazardous waste manifests or other documents indicating the amount, nature, and disposition of such materials shall be submitted to the Chief Harbor Engineer within 30 days of project completion.

g. In the event that contaminated soil is encountered, all on-site personnel handling or working in the vicinity of the contaminated material shall be trained in accordance with Occupational Safety and Health and Administration (OSHA) regulations for hazardous waste operations. These regulations are based on CFR 1910.120 (e) and 8 CCR 5192, which states that “general site workers” shall receive a minimum of 40 hours of classroom training and a minimum of three days of field training. This training provides precautions and protective measures to reduce or eliminate hazardous materials/waste hazards at the work place.

h. In cases where potential chemically impacted soil is encountered, a real-time aerosol monitor shall be placed on the prevailing downwind side of the impacted soil area to monitor for airborne particulate emissions during soil excavation and handling activities.

i. All excavations shall be filled with structurally suitable fill material which is free from contamination (i.e., meets the criteria in current LAHD import soil guidance documents).

<table>
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</tr>
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</table>
3.12.5 **Significant Unavoidable Impacts**

No significant unavoidable impacts associated with groundwater and surface water resources would occur during construction or operation of the proposed Project or any alternatives.