

4.8 HYDROLOGY AND WATER QUALITY

This section of the Revised Draft Environmental Impact Report (EIR) evaluates the potential impacts to hydrology and water quality conditions from implementation of the modified Dana Point Harbor Hotels Project (Modified Project) in comparison to existing conditions.

The analysis of the Modified Project in this section is based in part on the *Revised Preliminary Water Quality Management Plan, Dana Point Harbor Revitalization – Hotels* (Revised pWQMP) (Tait and Associates, Inc. 2024) (Appendix J to this Revised Draft EIR) and the *EIR Update Geotechnical Memorandum, Dana Point Harbor Hotels* (Supplemental Geotechnical Letter) (GMU 2024) (Appendix F to this Revised Draft EIR), which upholds the findings of the Preliminary Geotechnical Investigation prepared for the Original Project, also included in Appendix F. Therefore, the evaluation of the Modified Project in this section is also based in part on the Preliminary Geotechnical Investigation prepared for the Original Project.

4.8.1 Scoping Process

4.8.1.1 Original Project Scoping

The City of Dana Point (City) received eight comment letters during the public review period of the Initial Study/Notice of Preparation (IS/NOP). For copies of the IS/NOP comment letters, refer to Appendix A of this Revised Draft EIR. No comment letters included comments related to Hydrology and Water Quality.

4.8.1.2 Modified Project Scoping

A Supplemental NOP for the Modified Project was circulated for public review from July 19, 2024, through August 19, 2024.

Copies of the Supplemental NOP and comment letters received in response to the Supplemental NOP are included within Appendix A of this Revised Draft EIR. One comment letter included comments related to hydrology and water quality.

The letter from Mitchell M. Tsai received on August 12, 2024, expressed concern regarding stormwater from the project site draining to Dana Point Harbor, and recommended the analysis of potential impacts and the consideration of stormwater management alternatives. The letter also recommended that the Revised Draft EIR analyze potential flooding risks to the project site associated with sea level rise.

4.8.2 Existing Environmental Setting

The Modified Project would be located on the same site as the Original Project; therefore, the existing environmental setting as described below is derived from that discussed in the 2021 Draft EIR.

4.8.2.1 Watersheds

The project site is located within the Dana Point Coastal Streams Watershed, which is comprised of relatively small coastal drainage areas. The Dana Point Coastal Streams Watershed covers

approximately 6 square miles and includes portions of the cities of Dana Point, Laguna Niguel, Laguna Beach, and includes County of Orange (County) property. The project site is within City of Dana Point boundaries but is under the jurisdiction of the County relative to the review and issuance of the final Water Quality Management Plan, and associated demolition, grading, and construction-related permits.

The San Diego Regional Water Quality Control Board (RWQCB) regulates water quality within the Dana Point Coastal Streams Watershed. For planning purposes, the San Diego RWQCB uses a watershed classification system that divides watersheds into hydrologic units (HUs), hydrologic areas (HAs), and hydrologic subareas (HSAs). As designated by the San Diego RWQCB, the project site is located within the San Juan HU, the Laguna HA, and the Dana Point HSA.¹

4.8.2.2 Drainage

The majority of the project site currently sheet flows to the south to two drainage outlets located south of the project site. There is one existing grated inlet located north of the site, which is connected via an existing storm drain pipe to one of the two drainage outlets south of the project site. Both drainage outlets discharge directly to Dana Point Harbor. Dana Point Harbor is an Environmentally Sensitive Area (ESA), which includes federal Clean Water Act (CWA) Section 303(d) impaired water bodies. Dana Point Harbor is considered an ESA because it is listed as impaired on the most recent California 303(d) List of Water Quality Limited Segments (303[d] list) as discussed further below. The City also identifies Dana Point Harbor as an ESA.²

4.8.2.3 Surface Water Quality

Dana Point Harbor, the project site's receiving waterbody, is listed on the most recent 303(d) list (at the time the Revised pWQMP was prepared) as impaired for copper, toxicity, zinc, indicator bacteria, and dissolved oxygen.

4.8.2.4 Groundwater

The project site lies within the southerly portion of the San Juan Valley Groundwater Basin. The San Juan Valley Groundwater Basin underlies the San Juan Valley and several tributary valleys in southern Orange County. The basin is bounded on the west by the Pacific Ocean and otherwise by tertiary semi-permeable marine deposits.

For management purposes, groundwater basins are designated in the San Diego RWQCB's Basin Plan using the same HUs, HAs, and HSAs as surface waters.

Groundwater recharge in the San Juan Valley Groundwater Basin comes from surface flow in San Juan Creek, Oso Creek, and Arroyo Trabuco and precipitation to the valley floor. Additional recharge

¹ City of Dana Point et al. 2013. Dana Point Coastal Streams Watershed Workplan.

² City of Dana Point. 2006. Environmentally Sensitive Areas (ESAs) in Dana Point. Website: <https://www.danapoint.org/home/showdocument?id=3199> (accessed September 12, 2024).

comes from springs that flow directly from Hot Spring Canyon into San Juan Creek. Groundwater in the basin flows southwest toward the Pacific Ocean.³

As discussed in the Preliminary Geotechnical Investigation prepared for the project, groundwater is expected to occur approximately 6 to 20 feet (ft) below ground surface (bgs) beneath the project site, and approximately 6.5 ft bgs at the seawall. The Preliminary Geotechnical Investigation also found that historical high groundwater level occurred at 5 ft bgs.

4.8.2.5 Groundwater Quality

Groundwater in the San Juan Valley Groundwater Basin near the coast typically has a calcium-sodium sulfate or sulfate-chloride character. In general, total dissolved solids (TDS) content is higher in the range of 2,000 milligrams per liter (mg/L) near the coast.⁴

4.8.2.6 Flooding

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06059C0504K (March 21, 2019), the project site is located within Zone X, Area of Minimal Flood Hazard. In addition, according to the California Department of Water Resources (DWR) Division of Safety of Dams (DSOD) Dam Breach Inundation Maps, the project site is not located within a dam inundation zone.⁵ The potential for the project site to be adversely impacted by earthquake-induced coastal seiches is considered to be high due to the presence of the Dana Point Harbor adjacent to the project site. Additionally, according to the Dana Point Quadrangle/San Juan Capistrano Quadrangle Tsunami Inundation Map, the project site is located in a tsunami inundation area.⁶

4.8.3 Regulatory Setting

This section includes applicable federal, State, regional, and local regulations. As the Modified Project would be located on the same site as the Original Project and would result in the development of the same types of uses on the project site, the following regulatory setting is derived from that discussed in the 2021 Draft EIR. While the Original Project was evaluated under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit under Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ, this has since been superseded by Order No. 2022-0057-DWQ, NPDES No. CAS000002. As such, the following analysis discusses the Modified Project relative to Order No. 2022-0057-DWQ, NPDES No. CAS000002.

³ California Department of Water Resources (DWR). 2004. California's Groundwater Bulletin 118: Hydrologic Region South Coast San Juan Valley Groundwater Basin. February 27.

⁴ Ibid.

⁵ California Department of Water Resources Division of Safety of Dams (DWR DSOD). 2015. Dam Breach Inundation Map Web Publisher. Website: <https://fmds.water.ca.gov/maps/damim/> (accessed September 12, 2024).

⁶ California Emergency Management Agency et al. 2009. Tsunami Inundation Map for Emergency Planning, Dana Point Quadrangle/San Juan Capistrano Quadrangle. March 15.

4.8.3.1 Federal Regulations

Clean Water Act. In 1972, the Federal Water Pollution Control Act (now referred to as the Clean Water Act [CWA]) was amended to require that the discharge of pollutants into waters of the United States from any point source be effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, the CWA was again amended to require that the United States Environmental Protection Agency (USEPA) establish regulations for the permitting of stormwater discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The regulations require that Municipal Separate Storm Sewer System (MS4) discharges to surface waters be regulated by an NPDES permit.

The CWA requires states to adopt water quality standards for water bodies and have those standards approved by the USEPA. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, and fishing), along with water quality criteria necessary to support those uses. Water quality criteria are set concentrations or levels of constituents (e.g., lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use. Because California had not established a complete list of acceptable water quality criteria for toxic pollutants, the USEPA Region 9 (Pacific Southwest) established numeric water quality criteria for toxic constituents in the form of the California Toxics Rule (CTR).

When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired. Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a “factor of safety” included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body.

Direct discharges of pollutants into waters of the United States are not allowed except in accordance with the NPDES program established in Section 402 of the CWA.

Clean Water Act, Section 303, List of Impaired Water Bodies. Since the preparation of the 2021 Draft EIR, the SWRCB has prepared a more up-to-date (2020–2022) list of impaired water bodies in California in compliance with Section 303(d) of the CWA. The SWRCB approved the 2020–2022 California Integrated Report (CWA Section 303(d) List/305(b) Report) on February 6, 2024. This list is current as of the preparation of the Revised pWQMP (Appendix J to this Revised Draft EIR) and this Revised Draft EIR.

The 303(d) list includes a priority schedule for the development of TMDL implementation for each contaminant impacting the water body. Dana Point Harbor, the project's receiving waterbody, is impaired for copper, toxicity, zinc, indicator bacteria, and dissolved oxygen.⁷

National Flood Insurance Act. Congress acted to reduce the costs of disaster relief by passing the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these pieces of legislation was to reduce the need for large, publicly funded flood control structures and disaster relief efforts by restricting development in floodplains. FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in a floodplain. FEMA issues FIRMs of communities participating in the NFIP. These maps delineate flood hazard zones in the community. The City of Dana Point manages local stormdrain facilities, and the Orange County Flood Control District (OCFCD) is responsible for regional flood control planning within Orange County.

4.8.3.2 State Regulations

Porter-Cologne Water Quality Control Act of 1970. The federal CWA places the primary responsibility for the control of water pollution and planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs.

California's primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and the nine RWQCBs broad powers to protect water quality and is the primary vehicle for the implementation of California's responsibility under the federal CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface water and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

Each RWQCB must formulate and adopt a water quality plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste. The City, including the project site, is within the jurisdictional boundaries of the San Diego RWQCB (Region 9).

California Toxics Rule. As stated previously, because California had not established a complete list of acceptable water quality criteria for toxic pollutants, USEPA Region 9 established numeric water quality criteria for toxic constituents in the form of the CTR. The CTR provides water quality criteria for certain potentially toxic compounds for inland surface waters, enclosed bays, estuaries, and

⁷ State Water Resources Control Board (SWRCB). 2024. 2024 California Integrated Report: Surface Water Quality Assessments to Comply with Clean Water Act Sections 303(d) and 305(b). March 13. Website: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2023_2024state_ir_reports/2024-integrated-report-final-staff-report.pdf (accessed September 12, 2024).

waters designated for human health or aquatic life uses. The CTR is often used by the RWQCBs when establishing water quality objectives and TMDLs. Although the CTR criteria do not apply directly to discharges of stormwater runoff, they are utilized as benchmarks for toxics in urban runoff. The CTR is used as a benchmark to evaluate the potential ecological impacts of stormwater runoff to receiving waters. The CTR establishes acute and chronic surface water quality standards for certain water bodies. Acute criteria provide benchmarks for the highest permissible concentration below which aquatic life can be exposed for short periods of time without deleterious effects. Chronic criteria provide benchmarks for an extended period of time (i.e., 4 days or more) without deleterious effects. The acute CTR criteria have a shorter relevant averaging period (less than 4 days) and provide a more appropriate benchmark for comparison for stormwater flows.

CTR criteria apply to the receiving water body and are calculated based on the probable hardness values of the receiving waters. At higher hardness values for receiving waters, certain constituents (including copper, lead, and zinc) are more likely to be complexed (bound with) components in the water column. This in turn reduces the bioavailability and resulting potential toxicity of these metals.

General Construction Activity Storm Water Permit. The *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*, Order No. 2022-0057-DWQ, NPDES No. CAS000002 (Construction General Permit), adopted by the SWRCB, regulates construction activity that includes clearing, grading, and excavation resulting in soil disturbance of at least 1 acre of total land area. The Construction General Permit authorizes the discharge of stormwater to surface waters from construction activities.

The Construction General Permit requires that all developers of land where construction activities will occur over more than 1 acre do the following:

- Complete a Risk Assessment to determine pollution prevention requirements pursuant to the three risk levels established in the General Permit;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States;
- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) that will reduce pollution in stormwater discharges to the Best Available Technology/Economically Achievable/Best Conventional Pollutant Control Technology standards;
- Perform inspections, with a Qualified SWPPP Practitioner (QSP) and Trained Delegate (as appropriate), and maintenance of all BMPs;
- Conduct Non-visible Pollutant Monitoring as required;
- Conduct stormwater sampling, if required based on risk level; and
- Comply with R9-2015-0013 – Groundwater Extraction Discharges when dewatering is required.

To obtain coverage under the Construction General Permit, a project applicant must electronically file all permit registration documents with the SWRCB prior to the start of construction. Permit registration documents must include a:

- Notice of Intent (NOI),
- Risk Assessment,
- Site map,
- Site-Specific SWPPP, prepared by Qualified SWPPP Developer (QSD),
- Annual fee, and
- Signed certification statement.

Typical BMPs contained in SWPPPs are designed to minimize erosion during construction, stabilize construction areas, control sediment, and control pollutants from construction materials. The SWPPP must also include a discussion of the program to inspect and maintain all BMPs.

Sustainable Groundwater Management Act. The Sustainable Groundwater Management Act (SGMA) of 2014 is a comprehensive three-bill package that Governor Jerry Brown signed into California state law in September 2014. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention if necessary to protect the resource. The plan is intended to ensure a reliable groundwater supply for California for years to come.

The SGMA requires governments and water agencies of high- and medium-priority basins to halt overdrafts of groundwater basins. Specifically, SGMA requires the formation of local Groundwater Sustainability Agencies (GSAs), which are required to adopt Groundwater Sustainability Plans (GSPs), or an approved alternative to a GSP, to manage the sustainability of groundwater basins in California. The project site is located within the San Juan Valley Groundwater Basin, which is identified by the California Department of Water Resources as a very low priority basin;⁸ therefore, development of a GSP is not required.

4.8.3.3 Regional Regulations

Water Quality Control Plans (Basin Plans). The San Diego RWQCB has adopted a Basin Plan for its region of responsibility that delineates water resource area boundaries based on hydrological features. For the purposes of achieving and maintaining water quality protection, specific beneficial uses have been identified for each of the surface waters and groundwater management zones described in the Basin Plan. Once beneficial uses are designated, appropriate water quality objectives can be established, and programs that maintain or enhance water quality can be implemented to ensure the protection of beneficial uses.

The existing beneficial uses for Dana Point Harbor, as designated by the San Diego RWQCB in its Basin Plan, are listed below.

⁸ California Department of Water Resources (DWR). 2020. SGMA Basin Prioritization Dashboard, Groundwater Basins 2020. Website: <https://gis.water.ca.gov/app/bp-dashboard/final/> (accessed September 12, 2024).

- **Industrial Service Supply (IND):** Uses of water for industrial activities that do not depend primarily on water quality, including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.
- **Navigation (NAV):** Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.
- **Contact Water Recreation (REC1):** Uses of water for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.
- **Non-contact Water Recreation (REC2):** Uses of water for recreational activities involving proximity to water but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities.
- **Commercial and Sport Fishing (COMM):** Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.
- **Wildlife Habitat (WILD):** Uses of water that support terrestrial ecosystems, including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, and invertebrates), or wildlife water and food sources.
- **Rare, Threatened, or Endangered Species (RARE):** Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.
- **Marine Habitat (MAR):** Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals and shorebirds).
- **Migration of Aquatic Organisms (MIGR):** Uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.
- **Spawning, Reproduction, and/or Early Development (SPWN):** Uses of water that support high quality habitats suitable for reproduction, early development and sustenance of marine fish and/or cold freshwater fish.
- **Shellfish Harvesting (SHELL):** Uses of water that support habitats suitable for the collection of filter feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sport purposes.

The existing beneficial use for groundwater for the Dana Point HSA is Agricultural Supply (AGR). The Dana Point HSA is exempt from the Municipal and Domestic Supply (MUN) beneficial use for groundwater.

Basin Plans also establish implementation programs to achieve water quality objectives to protect beneficial uses and require monitoring to evaluate the effectiveness of the programs. These objectives must comply with the State antidegradation policy (State Board Resolution No. 68-16), which is designed to maintain high-quality waters while allowing some flexibility if beneficial uses are not unreasonably affected.

Basin Plans have established narrative and numeric water quality objectives for inland surface waters, enclosed bays and estuaries, coastal lagoons, and groundwater. If water quality objectives are exceeded, the RWQCBs can use their regulatory authority to require municipalities to reduce pollutant loads to the affected receiving waters. Relevant surface water quality objectives for all inland surface waters, enclosed bays and estuaries, coastal lagoons, and groundwater under the jurisdiction of the San Diego RWQCB that are applicable to the receiving waters for the project site are shown in Table 4.8.A, below.

In addition to the water quality objectives applicable to all surface waters, bays and estuaries, and groundwater, the San Diego RWQCB has designated site-specific water quality objectives for specific waters under its jurisdiction. The site-specific water quality objectives for the Laguna HA are:

- TDS = 1,000 mg/L
- Chloride = 400 mg/L
- Sulfate = 500 mg/L
- Percent Sodium = 60
- Iron = 0.3 mg/L
- Manganese = 0.05 mg/L
- Methylene Blue Active Substances = 0.5 mg/L
- Boron = 0.75 mg/L
- Turbidity = 20 nephelometric turbidity units (NTU)
- Color = 20 units
- Fluoride = 1 mg/L

The site-specific groundwater quality objectives for the Dana Point HSA are:

- TDS = 1,200 mg/L
- Chloride = 400 mg/L
- Sulfate = 500 mg/L
- Percent Sodium = 60
- Nitrate = 45 mg/L
- Iron = 0.3 mg/L
- Manganese = 0.05 mg/L
- Methylene Blue Active Substances = 0.5 mg/L

Table 4.8.A: Water Quality Objectives

Constituent	Objective
Ammonia, Unionized	Discharge of wastes shall not cause concentrations of unionized ammonia to exceed 0.025 mg/L (as nitrogen [N]).
Bacteria, Fecal Coliform	In waters designated for REC1, the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a log mean of 200 organisms/100 mL, nor shall more than 10 percent of all samples collected during any 30-day period exceed 400 organisms/100 mL. In waters designated for REC2, the average fecal coliform concentrations for any 30-day period, shall not exceed 2,000 organisms per 100 mL nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 organisms per 100 mL.
Bacteria, Total Coliform	In waters designated for REC1, the most probable number of total coliform organisms in the upper 60 feet of the water column shall be less than 1,000 organisms per 100 mL (10 organisms per mL); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 organisms per 100 mL (10 per mL). In waters designated for SHELL, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 organisms per 100 mL nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 organisms per 100 mL for a five-tube decimal dilution test or 330 organisms per 100 mL when a three-tube decimal dilution test is used.
Biostimulatory Substances	<p>Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.</p> <p>Concentrations of nitrogen (N) and phosphorus (P), by themselves or in combination with other nutrients, shall be maintained at levels below those that stimulate algae and emergent plant growth. Threshold total P concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, or 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10 percent of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible, and changes are approved by the San Diego RWQCB. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and then upheld. If data are lacking, a ratio of N:P = 10:1 on a weight-to-weight basis shall be used.</p>
Color	<p>Waters shall be free of coloration that causes nuisance or adversely affects the water for beneficial uses.</p> <p>The natural color of fish, shellfish, or other resources in inland surface waters, coastal lagoons or bays and estuaries shall not be impaired.</p>
Floating Materials	Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses.
Oil and Grease	Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, or that cause nuisance or otherwise adversely affect beneficial uses.
Pesticides	No individual pesticide or combination of pesticides shall be present in the water column, sediments, or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels that will bioaccumulate in aquatic organisms to levels that are harmful to human health, wildlife, or aquatic organisms.
pH	Changes in normal ambient pH levels shall not exceed 0.2 unit in waters with designated MAR beneficial uses. In bays and estuaries, the pH shall not be depressed below 7.0 nor raised above 9.0.

Table 4.8.A: Water Quality Objectives

Constituent	Objective
Radioactivity	Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
Sediment	Waters shall not contain suspended or settleable solids in concentrations that cause nuisance or adversely affect beneficial uses.
Suspended and Settleable Solids	Waters shall not contain suspended and settleable solids in concentrations that cause nuisance or adversely affect beneficial uses.
Taste and Odor	Waters shall not contain taste- or odor-producing substances in concentrations that cause a nuisance or that adversely affect beneficial uses. The natural taste and odor of fish, shellfish, or other regional water resources used for human consumption shall not be impaired in inland surface waters and bays and estuaries.
Temperature	The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the San Diego RWQCB that such alteration in temperature does not adversely affect beneficial uses.
Toxicity	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms; analyses of species diversity, population density, and growth anomalies; bioassays of appropriate duration; or other appropriate methods as specified by the San Diego RWQCB.
Turbidity	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

Source: San Diego RWQCB, Water Quality Control Plan for the San Diego Basin (1994, with amendments effective on or before September 1, 2021).

mg/L = milligrams per liter
mL = milliliter
MAR = marine
N = nitrogen
P = phosphorus

pH = potential of hydrogen
REC1 = Contact Water Recreation
REC2 = Non-contact Water Recreation
RWQCB = Regional Water Quality Control Board
SHELL = shellfish harvesting

- Boron = 0.75 mg/L
- Turbidity = 5 NTU
- Color = 15 units
- Fluoride = 1 mg/L

Orange County National Pollutant Discharge Elimination System Permit. The County of Orange and the City are Permittees of the *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region* (San Diego Regional MS4 Permit), Order R9-2013-0001, NPDES No. CAS6010266, as amended by Order Nos. R9-2015-0001 and R9-2015-0100. The San Diego Regional MS4 Permit regulates discharges into the MS4 system in the cities and county areas within Orange County that are in the jurisdiction of the San Diego RWQCB. As discussed further below, the San Diego Regional MS4 Permit requires preparation of a Water Quality Management Plan (WQMP) and implementation of post-construction BMPs.

Drainage Area Management Program. The Drainage Area Management Plan (DAMP) was created by the County of Orange, the OCFCD, and incorporated cities (permittees), and includes specific

water pollutant requirements of the Orange County Stormwater Program. The DAMP is the principal guidance and compliance document for the countywide implementation of the Stormwater Program. It is the foundation for the permittees to implement model programs designed to prevent pollutants from entering receiving waters to the maximum extent practicable.

Model Water Quality Management Plan. The *Model Water Quality Management Plan (Model WQMP) for South Orange County* (County of Orange 2017a) was developed to aid Orange County, the OCFCD, the cities in Orange County (permittees), and developers in Orange County to address post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects that qualify as Priority Development Projects.⁹

Technical Guidance Document. The County of Orange developed the *Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs) in South Orange County* (County of Orange 2018) in cooperation with the incorporated cities of South Orange County to aid agency staff and project proponents with addressing post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects in Orange County. The TGD serves as a technical guidance to complete the WQMP for the Modified Project.¹⁰

Hydromodification Plan. Pursuant to the requirements of the San Diego Regional MS4 Permit, the County prepared the *South Orange County Hydromodification Management Plan (HMP)* (County of Orange 2017b). All priority development projects that do not meet the exemption criteria are required to comply with hydromodification criteria in the HMP. The goal of hydromodification control is to integrate hydrologic controls into a proposed project so that post-project runoff discharge rates and durations do not exceed predevelopment (naturally occurring) discharge rates and durations.¹¹

Orange County Construction Runoff Guidance Manual. The *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers* (County of Orange et al. 2012) presents the requirements related to construction from the DAMP. The goal of this Guidance Manual is to control pollutant discharges from construction sites. As such, it helps applicants with building and grading permits to understand the water quality requirements during the construction phase of development projects.¹²

Groundwater Dewatering Permit. On June 24, 2015, the San Diego RWQCB issued the *General Waste Discharge Requirements for Discharges from Groundwater Extraction Discharges to Surface Waters within the San Diego Region* (Order No. R9-2015-0013, NPDES No. CAG919003) (Groundwater Discharge Permit). This permit regulates construction dewatering and discharges of

⁹ County of Orange. 2017a. *Model Water Quality Management Plan for South Orange County*. September 28.

¹⁰ County of Orange. 2018. *Technical Guidance Document for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs) in South Orange County*. December 21.

¹¹ County of Orange. 2017b. *South Orange County Hydromodification Management Plan*. September 28.

¹² County of Orange. 2012. *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers*. December.

groundwater to surface waters during excavation. This permit specifies the discharge prohibitions, receiving water limitations, monitoring and reporting program requirements, and general compliance determination criteria for groundwater dewatering during construction activities. Dischargers are required to collect and analyze representative groundwater samples for all constituents listed in the Groundwater Discharge Permit. Based on the results, dischargers would be required to provide treatment for any toxic compounds detected above the applicable screening levels. To obtain coverage under the Groundwater Discharge Permit, each permittee must submit a Notice of Intent to begin the application process.

County of Orange Municipal Code. Similar to the City of Dana Point, the County of Orange has adopted the California Building Code, 2022 Edition, for the purpose of prescribing regulations for the erection, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of all buildings and structures. The operative date of this ordinance is January 1, 2023. Municipal Code Section 7-1-836 also requires erosion control plans to be prepared in accordance with Subarticle 13 of the Grading Manual and submitted to the County Building Office for approval.

4.8.3.4 Local Regulations

Municipal Code. Title 8 of the City Municipal Code regulates building and construction activities within the City. Title 15 of the City Municipal Code contains water quality regulations for stormwater discharges within the City.

- **Section 8.01.380** of the Municipal Code requires an effective erosion control system shall be employed to control erosion and provide safety for development projects.
- **Section 8.01.390** of the Municipal Code requires erosion control plans prepared in accordance with sub- article 13 of the City's Grading Manual, and any applicable storm water permit issued to the City and the permittee shall be submitted to the Director for approval by September 1st each year for all projects under grading permits.
- **Section 8.01.400** of the Municipal Code specifies erosion control and water quality control procedures and required maintenance for erosion control system devices.
- **Section 15.10.060** of the Municipal Code specifies development requirements for control of surface runoff from projects.
- **Section 15.10.070** of the Municipal Code specifies BMP implementation and compliance, and requirements for site monitoring and inspections.
- **Section 15.10.080** of the Municipal Code specifies regulations regarding enforcement of the City's water quality and stormwater discharge regulations.
- **Section 15.10.090** of the Municipal Code specifies stormwater runoff discharge permit procedures.

Dana Point Harbor Revitalization Plan and District Regulations. The Dana Point Harbor Revitalization Plan and District Regulations (DPHRP&DR) establish land use policies and development standards for upgrades to the visitor serving and marina services areas of Dana Point Harbor. The Dana Point Harbor Revitalization Plan (DPHRP) was developed to promote Coastal Act compliance by enhancing public access opportunities, providing updated visitor serving commercial and marine recreational amenities, providing water quality improvements and promoting coastal resource preservation throughout the Harbor. Specifically, Chapter 7.3, Water Quality, and Chapter 7.6, Total Maximum Daily Loads (TMDLs), of the DPHRP include policies relevant to water quality improvements within the Harbor:

Policy 7.3.1-2: Promote pollution prevention and elimination methods that minimize the introduction of pollutants into coastal waters and the generation of polluted runoff and nuisance flows.

Policy 7.3.1-3: Development shall not result in the degradation of the water quality of coastal surface waters, including the ocean, coastal streams or wetlands and of groundwater basins. To the maximum extent feasible, ensure that pollution from urban runoff not be discharged or deposited such that it adversely impacts groundwater, the ocean, coastal streams or wetlands.

Policy 7.3.1-4: Development shall be designed to minimize to the maximum extent feasible, the introduction of pollutants that may result in significant impacts to surface waters, groundwater or coastal waters. In order to meet these requirements, applicants shall prepare a post-development phase drainage and pollutant runoff control plan that incorporates a Best Management Practice (BMP) or the combination of BMPs best suited to reduce pollutant loading to the maximum extent feasible. BMPs may include site design, source control and treatment control BMPs.

Policy 7.3.1-6: New development shall minimize where feasible the development footprint and directly connected impervious surfaces as well as the creation of and increases in impervious surfaces.

Policy 7.3.1-7: New development shall protect the absorption, purification and retention functions of natural systems that exist on the site. Where feasible, drainage plans shall be designed to complement and utilize existing drainage patterns and systems, conveying drainage from the developed areas of the site in a non-erosive manner. Disturbed or degraded natural drainage systems should be restored, where feasible.

Policy 7.3.1-10: Commercial development shall incorporate BMPs designed to minimize or avoid the runoff of pollutants from structures, landscaping, parking and loading areas

Policy 7.3.1-13: Permits for new development shall be conditioned to require on-going maintenance where maintenance is necessary for effective operation of required BMPs.

Policy 7.3.1-14: New development shall include construction phase erosion control and polluted runoff control plans. For example, such plans may include controls on timing of grading, BMPs

for storage and disposal of construction materials or design specifications of sedimentation basins.

Policy 7.3.1-15: New development that requires a grading/erosion control plan shall include landscaping and re-vegetation of graded or disturbed areas.

Policy 7.3.1-16: The use of efficient irrigation practices and native or non-invasive and drought-tolerant plants to minimize the need for fertilizer, pesticides, herbicides and excessive irrigation practices shall be required for all areas. The use of rodenticides containing any anticoagulant compounds (including, but not limited to, Warfarin, Brodifacoum, Bromadiolone or Diphacinone) is prohibited.

Policy 7.3.1-17: All structural BMPs shall be inspected on an annual basis and cleaned and/or repaired as necessary, ensuring proper function in accordance with the Model Maintenance Procedures of the County's Local Implementation Plan (LIP).

Policy 7.6.1-1: Coordinate with the appropriate Regional Water Quality Control Board, the County of Orange and other agencies and organizations in the implementation of the National Pollutant Discharge Elimination System Permits (NPDES) regulations to minimize adverse impacts on the quality of coastal waters. (Coastal Act Section 30231)

Policy 7.6.1-2: OC Dana Point Harbor shall obtain coverage under the NPDES Statewide Stormwater Permit for General Construction Activities from the State Water Resources Control Board. Evidence of receipt of permit approval must be presented prior to issuance of a Grading Permit.

Policy 7.6.1-3: As required for obtaining any Grading or Building Permits, OC Dana Point Harbor shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for review on request.

Policy 7.6.1-4: As required for obtaining any Grading or Building Permit, OC Dana Point Harbor shall prepare an Erosion and Sediment Control Plan (ESCP) to demonstrate compliance with local and state water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris and stockpiles of soil, aggregates, soil amendment, etc. shall be properly covered, stored and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion or dispersion. The ESCP shall also describe how the applicant will ensure that all Best Management Practices (BMPs) will be maintained during construction of any future public rights-of-way. A copy of the current ESCP shall be kept at the project site and be available for County review on request.

Policy 7.6.1-5: As required for obtaining any Grading or Building Permit (whichever comes first), OC Dana Point Harbor shall prepare a Water Quality Management Plan (WQMP) and/or a project-specific amendment specifically identifying Best Management Practices (BMPs) that will be used on-site to minimize the volume, velocity and pollutant load of runoff, including measures to prevent, eliminate and/or otherwise effectively address dry weather nuisance flow. The WQMP shall follow the model WQMP prepared by the County of Orange Flood Control District, July 1, 2003, or the most recent version available. This WQMP or amendment thereto shall also demonstrate conformance with the policies and provisions governing Water Quality and Hydrology identified in Chapter 2 of the Dana Point Harbor Revitalization Plan, Chapter 7, Dana Point Harbor Revitalization Plan Coastal Resource Protection, City of Dana Point – OC Dana Point Harbor, Page I-7.25 of I-7.26 Resource Protection section, including applicable provisions from the Project Design Features and Requirements section. The WQMP should include one or more of the following:

- Discuss regional water quality and/or watershed programs (if available for the Harbor);
- Address and include Site Design BMPs such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or “zero discharge” areas and conserving natural areas;
- Include any applicable Source Control BMPs and where necessary Treatment Control BMPs, as defined in the DAMP; and
- Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary.

Policy 7.6.1-6: As required for obtaining any Grading or Building Permits (whichever comes first), OC Dana Point Harbor shall include in the WQMP the following additional Priority Project information:

- Include post-construction Structural Treatment Control BMP(s) as defined in the DAMP; and
- Include a conceptual Operation and Maintenance (O&M) Plan that: (1) describes the long-term operation and maintenance requirements for the post-construction Treatment Control BMP(s); (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced Treatment Control BMP(s); and (3) describes the proposed mechanism for funding the long-term operation and maintenance of the referenced Treatment Control BMP(s).

Policy 7.6.1-7: As required for obtaining a Certificate of Use and Occupancy, OC Dana Point Harbor shall confirm compliance with the WQMP, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the applicable WQMP for the project have been implemented, constructed and installed in conformance with the approved plans and specifications;

- Demonstrate that OC Dana Point Harbor has complied with all non-structural BMPs described in the WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP; and
- Demonstrate that copies of the projects approved WQMP (with attached O&M Plan) are available for each of the incoming occupants.

The Dana Point Harbor District Regulations (DPHDR) are intended to govern the Dana Point Harbor Revitalization Plan as well as continued operations and maintenance of the Harbor facilities in accordance with Section 30514 of the California Coastal Act. The DPHDR identify Special Provisions that contain specific requirements applicable to hydrology and water quality:

8. Erosion and Sediment Control Plans

Erosion and Sediment Control Plans for all projects within Dana Point Harbor requiring a Grading Permit shall identify site specific measures for the control of siltation, sedimentation and other pollutants per the Orange County Grading and Excavation Code. Such a plan shall be approved prior to construction and include instructions for storm events, normal and emergency procedures, as well as procedures following storm events. Standard erosion control measures shall be installed for all projects as required according to County standards. The following erosion control measures shall be incorporated into all project grading plans, as required during construction by the County of Orange and the Regional Water Quality Control Board (San Diego Region) during the rainy season (October 1 to April 30):

- a) Sandbags shall be placed across streets and around construction sites where necessary, depending upon size of catchment and sediment yield.
- b) Erosion control at the sediment sources shall be emphasized during construction.
- c) Tracking controls, such as rumble strips and gravel strips will be used when possible to minimize dirt being tracked into and out of construction sites.
- d) Harbor basin inlets shall be protected by placing sediment barriers such as a wire mesh and gravel filter to intercept debris and soil runoff.
- e) A stand-by work crew shall be available for emergency work during the rainy season. Necessary materials shall be available on site and shall be stockpiled at convenient locations to facilitate rapid construction of temporary erosion control devices when rain is imminent.
- f) Removable protective erosion control devices shall be put in place at the end of each working day when the five (5) day rain probability forecast exceeds 40 percent (40%).
- g) All erosion control measures shall be implemented in conformance with the requirements of the Grading and Excavation Code of the County of Orange. All construction shall be

conducted with provisions for the control of sand, dust and debris originating at the construction site. Appropriate areas shall be contained with berms, desilting basins or similar structures to prevent runoff during construction operations.

- h) Prior to issuance of building permits, landscape and erosion and sediment control plans shall include provisions for temporary mulching, seeding, landscaping, permanent erosion and sediment control or other suitable stabilization measures in order to protect exposed areas during and after construction.

9. Water Quality Management Plan

In compliance with the National Pollutant Discharge Elimination System, water quality Best Management Practices (BMPs) will be designed to remove pollutants to an acceptable level prior to outletting drainage into the waterways in accordance with the policies and requirements contained in the Dana Point Harbor Revitalization Plan and District Regulations Chapter 7.0, *Coastal Resource Protection*. Proposed Low Impact Development (LID) BMPs (specifically, biotreatment BMPs) include biofiltration basins, biofiltration planter boxes, and Modular Wetland Systems, as described in the approved Conceptual Water Quality Management Plan for Dana Point Harbor. The WQMP shall also establish responsibilities and timeframes for the construction and long-term maintenance of all new storm water and pollution control management systems. All storm drain systems shall be designed to also comply with the requirements of the County of Orange Local Drainage Manual, 2nd Edition (2020),¹³ the Drainage Area Master Plan, and the OC Dana Point Harbor Clean Marinas Program (2015).¹⁴

4.8.4 Methodology

Project impacts to hydrology and water quality are evaluated based on the Modified Project's adherence to local, regional, State, and federal standards; the proposed land uses and project design; changes in pre- and post-development stormwater flows; and proposed BMPs for control of surface runoff and reduction of pollutants in stormwater runoff.

4.8.5 Thresholds of Significance

The thresholds for hydrology and water quality impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines*. The Modified Project may be deemed to have a significant impact with respect to hydrology and water quality if it would:

Threshold 4.8.1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;

¹³ County of Orange Environmental Management Agency. 2020. *Orange County Local Drainage Manual, 2nd Edition*. December. Website: http://cams.ocgov.com/Web_Publisher_SAM/Agenda05_25_2021_files/images/O01421-000205A.PDF (accessed September 12, 2024).

¹⁴ County of Orange OC Dana Point Harbor. 2015. Clean Marinas Program. Website: <http://prg.ocpublicworks.com/DocmgmtInternet/Download.aspx?id=1221> (accessed September 12, 2024).

- Threshold 4.8.2:** Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Threshold 4.8.3:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
- Threshold 4.8.3(i):** Result in substantial erosion or siltation on- or off-site;
 - Threshold 4.8.3(ii):** Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - Threshold 4.8.3(iii):** 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; or
 - Threshold 4.8.3(iv):** Impede or redirect flood flows.
- Threshold 4.8.4:** In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- Threshold 4.8.5:** Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The Initial Study prepared for the Original Project in September 2020, included as Appendix B to this Revised Draft EIR, substantiated that impacts associated with Thresholds 4.8.2 and 4.8.3(i) through 4.8.3(iii) would be less than significant under the Original Project. Regarding Threshold 4.8.2, as groundwater from the San Juan Valley Groundwater Basin within the vicinity of the project site contained substantial amounts of nitrate and salts due to seawater intrusion, groundwater within the San Juan Valley Groundwater Basin was not relied upon for water supplies to serve the Original Project. In addition, although grading activities for the Original Project had the potential to require groundwater dewatering, any groundwater dewatering required during construction would comply with the requirements of the Groundwater Discharge Permit. Lastly, although the Original Project was anticipated to decrease the amount of impervious surface area on the project site, the groundwater elevation was determined to be too shallow for infiltration.

In response to Thresholds 4.8.3(i) through 4.8.3(iii), as the development of the project site would reduce impervious surface area, would not result in an increase in stormwater runoff, and would incorporate operational BMPs, the Original Project was determined to not result in substantial erosion or siltation on- or off-site or flooding on- or off-site, and would not exceed the capacity of the existing stormwater drainage system or provide substantial additional sources of polluted runoff.

The Modified Project would be located on the same site as the Original Project and, similar to the Original Project, would incorporate applicable BMPs, reduce the proportion of impervious surface

area within the project site from existing conditions, and comply with the requirements of the Groundwater Discharge Permit. Therefore, the conclusions of the Initial Study prepared for the Original Project remain the same for the Modified Project, and Thresholds 4.8.2 and 4.8.3(i) through 4.8.3(iii) will not be addressed in the following analysis.

4.8.6 Project Impacts

Threshold 4.8.1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact.

Construction. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. As stated in the Revised pWQMP prepared for the Modified Project, during construction, approximately 10 acres of soil would be disturbed (which includes off-site landscaping improvements east of Casitas Place and adjacent to and within the median on Dana Point Harbor Drive, in addition to off-site proposed sidewalk and landscaping improvements east of Island Way). During soil-disturbing construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via stormwater runoff into receiving waters (i.e., Dana Point Harbor, and ultimately the Pacific Ocean). Sediment from increased soil erosion and chemicals from spills and leaks have the potential to be discharged to downstream receiving waters during storm events, which can affect water quality and impair beneficial uses.

Because construction of the Modified Project would disturb greater than 1 acre of soil, it is subject to the requirements of the Construction General Permit, as specified in Standard Condition (SC) 4.8-1 (SC 4.8-1). As also specified in SC 4.8-1, a SWPPP would be prepared, and construction BMPs detailed in the SWPPP would be implemented during construction, in compliance with the requirements of the Construction General Permit. In addition, as specified in Standard Condition 4.8-2 (SC 4.8-2), the DPHRP&DR and the County's Municipal Code require that an Erosion Control Plan be prepared during construction and submitted to the County for approval. The SWPPP and Erosion Control Plan would detail the BMPs to be implemented during construction of the Modified Project. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site, and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. Compliance with the requirements of the Construction General Permit, the DPHRP, and the County Municipal Code, including incorporation of construction BMPs to target and reduce pollutants of concern in stormwater runoff, would ensure that construction impacts of the Modified Project related to waste discharge requirements, water quality standards, and degradation of water quality would be less than significant.

As discussed in the Preliminary Geotechnical Investigation prepared for the Original Project, which remains applicable for the Modified Project per the findings of the Supplemental Geotechnical Letter (Appendix F to this Revised Draft EIR), groundwater is expected to occur approximately 6 to 20 ft bgs beneath the project site. The Preliminary Geotechnical Investigation also found that historical high groundwater levels occurred at 5 ft bgs. As stated previously, the Modified Project would include grading activities on the project site. Construction grading activities may extend to the depth at which groundwater would occur. As such, grading activities may require groundwater dewatering. In the event that groundwater or perched groundwater is encountered during construction and groundwater dewatering is necessary, disposal of dewatered groundwater can introduce total dissolved solids and other constituents to surface waters. Groundwater would be discharged to either the sanitary sewer system or stormdrain system. If discharged to the sanitary sewer system, a permit from the South Coast Water District (SCWD) would be required, as specified in Standard Condition 4.8-3 (SC 4.8-3), to ensure that there is sufficient capacity available to accommodate the discharge to prevent sanitary sewer overflow, which can result in a discharge of pollutants to surface waters. If groundwater is discharged to the storm drain system, coverage under the San Diego RWQCB's NPDES Permit *General Waste Discharge Requirements for Discharges from Groundwater Extraction Discharges to Surface Waters within the San Diego Region* (Order No. R9-2015-0013, NPDES No. CAG919003) (Groundwater Discharge Permit) would be required, as also specified in SC 4.8-3. The Groundwater Discharge Permit would require testing and treatment (as necessary) of groundwater encountered during groundwater dewatering prior to release to surface waters to ensure that discharges do not exceed water quality limits specified in the permit. Compliance with the requirements of the Groundwater Discharge Permit, as specified in SC 4.8-3, would ensure impacts of the Modified Project related to waste discharge requirements, water quality standards, and surface water quality would be less than significant during dewatering activities, and no mitigation is required.

Although groundwater dewatering may be required, dewatered groundwater would be discharged to either the sanitary sewer system or the storm drain system, which discharges to Dana Point Harbor, rather than back into groundwater and therefore would not introduce pollutants to groundwater. Infiltration of stormwater has the potential to affect groundwater quality in areas of shallow groundwater. However, according to the Revised pWQMP prepared for the Modified Project, the soils on-site are not favorable for infiltration. Therefore, it is not expected that any stormwater would infiltrate during construction. Therefore, construction activities associated with the Modified Project would not substantially degrade groundwater quality.

Operation. According to the Revised pWQMP prepared for the Modified Project, based on the existing impairments and water quality condition of the receiving waters for runoff from the project site (Dana Point Harbor and the Pacific Ocean), the primary pollutants of concern from long-term operations of the Modified Project include heavy metals, bacteria, virus, pathogens, and toxic organic compounds. The Revised pWQMP was prepared for the Modified Project for compliance with the *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region* (Order R9-2013-0001, NPDES No. CAS6010266, as amended by Nos. R9-2015-0001 and R9-2015-0100) (San Diego Regional MS4 Permit). WQMPs specify the BMPs that would be implemented to capture, treat, and reduce pollutants of concern in

stormwater runoff. The Revised pWQMP prepared for the Modified Project specifies the Source Control, Site Design, and Low Impact Development (LID) BMPs (specifically, biotreatment BMPs) proposed for the Modified Project. Source Control BMPs are preventative measures that are implemented to prevent the introduction of pollutants into stormwater. Site Design BMPs are stormwater management strategies that emphasize conservation and use of existing site features to reduce the amount of runoff and pollutant loading generated from a project site. LID BMPs mimic a project site's natural hydrology by using design measures that capture, filter, store, evaporate, detain, and infiltrate runoff rather than allowing runoff to flow directly to piped or impervious storm drains. The Revised pWQMP will be refined during final design based on the final site plans, as specified in Standard Condition 4.8-4 (SC 4.8-4). The proposed BMPs are detailed below.

As detailed in the Revised pWQMP prepared for the Modified Project, proposed Site Design BMPs would include: minimizing impervious area; preserving existing drainage patterns and timing of concentration; disconnecting impervious areas; revegetating disturbed areas; minimizing soil compaction; full trash capture units; and water efficient landscaping with native or drought tolerant species.

Proposed non-structural Source Control BMPs would include: education for property owners tenants, and occupants; activity restrictions; common area landscape management; BMP maintenance; Title 22 California Code of Regulations (CCR) compliance; spill contingency plan; underground storage tank compliance; hazardous materials disclosure compliance; uniform fire code implementation; common area litter control; employee training; common area catch basin inspections; and street sweeping private streets and parking lots.

Proposed structural Source Control BMPs include: storm drain system stenciling and signage; design and construction of trash and waste storage areas to reduce pollution introduction; use of efficient irrigation systems and landscape design; water conservation; use of smart controllers; and wash water control for food preparation areas.

Proposed LID BMPs (specifically, biotreatment BMPs) include biofiltration basins and Modular Wetland Systems. As proposed, the project includes six (6) biofiltration basins, ten (10) Modular Wetland Systems (MWS), and two (2) StormSafe Filter Treatment Control in areas that are tidally influenced, where biofiltration is technically infeasible.

The proposed BMPs would target and reduce pollutants of concern from runoff from the project site in compliance with SC 4.8-4). Compliance with the requirements of the San Diego Regional MS4 Permit, including incorporation of operational BMPs to target pollutants of concern, would ensure that impacts related to waste discharge requirements, water quality standards, and degradation of water quality during operation of the Modified Project would be less than significant.

As discussed previously, infiltration of stormwater could have the potential to affect groundwater quality in areas of shallow groundwater. However, according to the Revised pWQMP prepared for the proposed project, the soils on the project site are not favorable for infiltration. Regardless, the Modified Project would be required to implement operational BMPs which would treat stormwater before it could reach groundwater. Therefore, it is not expected that any stormwater would

infiltrate during operation. Consequently, operation of the Modified Project would not substantially degrade groundwater quality.

In conclusion, compliance with SC 4.8-1 through SC 4.8-4 would ensure that impacts related to the violation of any water quality standards or waste discharge requirements, and degradation of surface water or groundwater quality during construction and operation of the Modified Project, as with the Original Project, would be less than significant, and no mitigation is required.

Threshold 4.8.3(iv): Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: Impede or redirect flood flows?

No Impact. According to the FEMA FIRM No. 06059C0504K (effective March 21, 2019), the project site is located within Zone X, Area of Minimal Flood Hazard. Because the Modified Project would not place improvements or structures directly within a 100-year floodplain, the Modified Project would not impede or redirect flood flows. Therefore, as with the Original Project, no impact would occur related to impeding or redirecting of flood flows under the Modified Project, and no mitigation is required.

Threshold 4.8.4: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact.

Flood Hazard. As discussed in Threshold 4.8.3(iv), the project site is not located within a 100-year flood hazard area. In addition, the Modified Project would not place structures within a 100-year floodplain. Furthermore, according to the California Department of Water Resources, Division of Safety of Dams (DWR DSOD) Dam Breach Inundation Maps, the project site is not located within a dam inundation zone.¹⁵

In addition, Anchor QEA, LLC, prepared a memorandum addressing the potential coastal hazards that could affect the Modified Project (Coastal Hazards Memorandum, February 2025). The Coastal Hazards Memorandum is included in Appendix H to this Revised Draft EIR, and concluded that the lower podium level of Dana House Hotel when accounting for sea level rise in conjunction with the 100-year wave run-up elevation in the intermediate-high scenario for 2100 could result in the inundation of the unoccupied parking garage. The Coastal Hazards Memorandum further explained that the lowest occupied floor in the Dana House Hotel lower podium might experience inundation near 2085; however, the Ocean Protection Council's updated State of California Sea Level Rise Guidance for the intermediate-high scenario explains there is a 0.1 percent probability that sea level rise would exceed 4.5 feet by the analysis horizon year of 2100. It should be noted that the podium level of Dana House Hotel consists mainly of a parking garage and enclosed, non-habitable back of the house functions (storage, laundry, employee lounge, etc.) and separately accessed non-

¹⁵ DWR DSOD. 2015. Dam Breach Inundation Map Web Publisher. Website: <https://fmds.water.ca.gov/maps/damim/> (accessed September 12, 2024).

habitable boater service facilities, and does not contain any guest rooms. As such, no overnight hotel accommodations in either Dana House Hotel or Surf Lodge would be subject to these inundation areas, even in this speculative condition occurring approximately 72 years beyond project opening. Further, to reduce the risk of flooding in the parking garage and basement of the Dana House, a multitude of perimeter trench drains, and area floor drains directed to sump pumps, are included in the Modified Project design. The basement of Dana House Hotel would be designed with special flood-proof doors and window systems and constructed of concrete masonry units. In addition, prior to 2055 (the earliest time that sea level rise could overtop the bulkhead), reevaluation of resilience measures will be undertaken based on the data that will be available at that future date. Lastly, additional GHG reduction strategies implemented at the State, national, and international levels could reduce future sea level rise, especially for the year 2100 scenario. As such, given the speculative nature of these conditions and protective measures incorporated to the design of the Modified Project, the Modified Project would not present a substantial risk of pollutant release due to inundation. Therefore, the project site is not subject to substantial pollutant release resulting from inundation from flooding during a storm event, dam failure, or future sea level rise, and no mitigation is required.

Tsunami. Tsunamis are ocean waves generated by tectonic displacement of the seafloor associated with shallow earthquakes, seafloor landslides, rock falls, and exploding volcanic islands. Tsunamis can have wave lengths of up to 120 miles and travel as fast as 500 miles per hour (mph) across hundreds of miles of deep ocean. Upon reaching shallow coastal waters, the waves can reach up to 50 ft in height, causing great devastation to near-shore structures. The project site is located on the Pacific Ocean shoreline, and is located in a tsunami inundation area.¹⁶ Therefore, it should be anticipated that the project site may be subject to inundation by a tsunami. As stated in Section 4.7, Hazards and Hazardous Materials, potentially hazardous substances such as petroleum based fuels, lubricants, pesticides, and similar materials would be used during construction. Potentially hazardous materials associated with the proposed hotel uses and from routine project maintenance may also be used during operation of the Modified Project. However, the Modified Project would not substantially increase the use of hazardous materials from the existing condition, and the amount of these substances present during construction and operation is limited and would be used in compliance with existing standards and regulations. Therefore, in the unlikely event of inundation from tsunami, the Modified Project would not increase the risk of release of pollutants, and a less than significant impact would occur. No mitigation is required.

Seiche Zones. Seiching occurs when seismic ground shaking induces standing waves (seiches) inside water retention facilities (e.g., reservoirs and lakes). Such waves can cause retention structures to fail and flood downstream properties. The potential for the project site to be adversely impacted by earthquake-induced coastal seiches is considered to be high due to the presence of the Dana Point Harbor adjacent to the site. However, as previously discussed, the amount of hazardous substances present during construction and operation of the Modified Project is limited and would be used in compliance with existing standards and regulations. Therefore, in the unlikely event of inundation from seiche, the Modified Project, consistent with the Original Project, would not increase the risk of release of pollutants, and a less than significant impact would occur. No mitigation is required.

¹⁶ California Emergency Management Agency et al. 2009. Tsunami Inundation Map for Emergency Planning, Dana Point Quadrangle/San Juan Capistrano Quadrangle. March 15.

Threshold 4.8.5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. As previously stated, the project site is within the jurisdiction of the San Diego RWQCB. The San Diego RWQCB has adopted a Water Quality Control Plan (i.e., Basin Plan) (September 1994, with amendments effective on or before September 1, 2021), which designates beneficial uses for all surface and groundwater within its jurisdiction and established the water quality objectives and standards necessary to protect those beneficial uses. As summarized below, the Modified Project would comply with the applicable NPDES permits and would implement construction and post-construction BMPs to reduce pollutants of concern in stormwater runoff.

As discussed in Threshold 4.8.1, during construction activities associated with the Modified Project, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via stormwater runoff into receiving waters. As specified in SC 4.8-1, the Modified Project would be required to comply with the requirements set forth by the Construction General Permit, which requires preparation of a SWPPP and implementation of construction BMPs to control stormwater runoff and discharge of pollutants. Additionally, as also specified in SC 4.8-2, an Erosion Control Plan would be prepared during construction, in compliance with the DPHRP&DR and the County's Municipal Code. The SWPPP and Erosion Control Plan would detail the BMPs to be implemented during construction. In addition, groundwater dewatering may be required during construction of the Modified Project. If groundwater dewatering is necessary, groundwater would be discharged to either the sanitary sewer or storm drain system. Groundwater that is discharged to surface waters can introduce total dissolved solids, nitrates, and other constituents to surface waters. If discharged to the sanitary sewer system, a permit from the SCWD would be required, as specified in SC 4.8-3. If groundwater is discharged to the storm drain system, coverage under the Groundwater Discharge Permit would be required, as also specified in SC 4.8-3.

As discussed in Threshold 4.8.1, the primary pollutants of concern during operations of the Modified Project include heavy metals, bacteria, virus, pathogens, and toxic organic compounds. As discussed in SC 4.8-4, a final WQMP will be prepared for the Modified Project in compliance with the San Diego Regional MS4 Permit. The final WQMP will detail the Site Design, LID, Source Control, Biofiltration and/or Treatment Control BMPs that would be implemented to treat stormwater runoff and reduce impacts to water quality during operation. The proposed BMPs would capture and treat stormwater runoff and reduce pollutants of concern in stormwater runoff.

The Modified Project would comply with the applicable NPDES permits, which would require preparing a SWPPP, specifying regulations for groundwater dewatering, requiring preparation of a final WQMP, and including implementation of construction and post-construction BMPs to reduce pollutants of concern in stormwater runoff. As such, the Modified Project would not result in water quality impacts that would conflict with the San Diego RWQCB's Basin Plan. With implementation of SC 4.8-1 through SC 4.8-4, impacts related to conflict with a water quality control plan would be less than significant, and no mitigation is required.

The Sustainable Groundwater Management Act (SGMA) was enacted in September 2014. SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. Specifically, SGMA requires the formation of local Groundwater Sustainability Agencies (GSAs), which are required to adopt Groundwater Sustainability Plans (GSPs), or an approved alternative to a GSP, to manage the sustainability of groundwater basins in California. The project site is located within the San Juan Valley Groundwater Basin, which is identified by the Department of Water Resources as a very low priority basin; therefore, development of a GSP is not required. Because there is not an adopted GSP applicable to the groundwater basin underlying the project site, the Modified Project would not conflict with or obstruct the implementation of a sustainable groundwater management plan. Regardless, as discussed in Threshold 4.8.1, although groundwater dewatering could occur, dewatered groundwater would be discharged to the sanitary sewer or storm drain system and not back into groundwater and would therefore not introduce pollutants to groundwater. Groundwater dewatering would be temporary, and dewatering of the groundwater table would not be required. Additionally, because the soils on site are not favorable for infiltration, it is not likely infiltration would occur during construction or operation. Regardless, any potential decrease in infiltration would be minimal in comparison to the size of the San Juan Valley Groundwater Basin, which has a capacity of 41,375 acre-feet (af) of water per year.¹⁷ Therefore, the Modified Project does not have the potential to impact groundwater quality, interfere with groundwater recharge, or decrease groundwater supplies. For the reasons outlined above and with implementation of SC 4.8-1 through SC 4.8-4, a less than significant impact would occur under the Modified Project related to conflict with or obstruction implementation of water quality control plans or sustainable groundwater management plans, and no mitigation is required.

4.8.7 Level of Significance Prior to Mitigation

Construction and operational impacts of the Modified Project related to hydrology and water quality would be less than significant. No mitigation measures are required.

4.8.8 Standard Conditions and Mitigation Measures

Standard Condition 4.8-1 Construction General Permit. Prior to commencement of construction activities, the Project Applicant shall obtain coverage under the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit)*, Order No. 2022-0057-DWQ, NPDES No. CAS000002, or any other subsequent permit. This shall include submission of Permit Registration Documents (PRDs), including permit application fees, a Notice of Intent (NOI), a risk assessment, a site plan, a Stormwater Pollution Prevention Plan (SWPPP), a signed certification statement, and any other compliance-related documents required by the permit, to the State Water Resources Control Board (SWRCB) via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a Waste

¹⁷ Wildermuth Environmental Inc. 2015. *Analysis of Storage in the San Juan Groundwater Basin*. November 18, 2015.

Discharge Identification Number (WDID) is obtained for the project from the SMARTS and provided to the Director of the County of Orange (County) Public Works, or designee, to demonstrate that coverage under the Construction General Permit has been obtained. Project construction shall comply with all applicable requirements specified in the Construction General Permit, including but not limited to, preparation of a SWPPP and implementation of construction site Best Management Practices (BMPs) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level identified for the project. The SWPPP shall identify the sources of pollutants that may affect the quality of stormwater and shall include BMPs (e.g., Sediment Control, Erosion Control, and Good Housekeeping BMPs) to control the pollutants in stormwater runoff. Construction Site BMPs shall also conform to the requirements specified in the latest edition of the Orange County Stormwater Program *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers* (County of Orange et al. 2012) to control and minimize the impacts of construction and construction-related activities, materials, and pollutants on the watershed. Upon completion of construction activities and stabilization of the project site, a Notice of Termination shall be submitted via SMARTS.

Standard Condition 4.8-2

Erosion Control Plan. In compliance with the Dana Point Harbor Revitalization Plan and District Regulations and the requirements of Title 7 (Land Use and Building Regulations), Article 8 (Orange County Grading and Excavation Code), Subarticle 13 (Erosion Control), of the Codified Ordinances of the County of Orange, the Project Applicant shall submit a grading plan and erosion control plan to the County Permit Center for review and approval prior to issuance of a grading permit.

Standard Condition 4.8-3

Groundwater Discharge Permit. If groundwater dewatering is required during construction or excavation activities and the dewatered groundwater is discharged to the sanitary sewer system, the Project Applicant shall obtain a discharge permit from the South Coast Water District (SCWD). If the dewatered groundwater is discharged to the stormdrain system, the Project Applicant shall obtain coverage under the San Diego Regional Water Quality Control Board's (RWQCB) *General Waste Discharge Requirements for Discharges from Groundwater Extraction Discharges to Surface Waters within the San Diego Region* (Order No. R9-2015-0013, NPDES No. CAG919003), or any other subsequent permit, and provide evidence of coverage to the Director of the County of Orange (County) Public Works, or designee. This shall include submission of a Notice of

Intent (NOI) for coverage under the permit to the San Diego RWQCB at least 60 days prior to the start of excavation activities and anticipated discharge of dewatered groundwater to surface waters. Groundwater dewatering activities shall comply with all applicable provisions in the permit, including water sampling, analysis, treatment (if required), and reporting of dewatering-related discharges. Upon completion of groundwater dewatering activities, a Notice of Termination shall be submitted to the San Diego RWQCB.

Standard Condition 4.8-4

Water Quality Management Plan. Prior to issuance of building permits, the Project Applicant shall submit a Final Water Quality Management Plan (WQMP) to the Director of the County Public Works Department, or designee, for review and approval in compliance with the *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds within the San Diego Region* (San Diego Regional MS4 Permit), Order R9-2013-0001, NPDES No. CAS6010266, as amended by Nos. R9-2015-0001 and R9-2015-0100, or any other subsequent permit. The Final WQMP shall be prepared consistent with the requirements of the *Model Water Quality Management Plan (Model WQMP) for South Orange County* (County of Orange 2017a) and the *Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs)* (County of Orange 2018), or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project site. The Director of the County Public Works, or designee, shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design.

4.8.9 Level of Significance after Mitigation

The Modified Project would not result in significant impacts related to hydrology and water quality, and no mitigation is required.

4.8.10 Cumulative Impacts

Cumulative development in the area that drains to Dana Point Harbor is a continuation of the existing urban pattern of development that has already resulted in extensive modifications to watercourses in the area. The area's watercourses have been channelized and drainage systems have been put into place to respond to the past urbanization that has occurred in this area. For the cumulative analysis related to hydrology and water quality, the cumulative projects being considered include the related projects, which all discharge to the same receiving waters as the project site (i.e., the Dana Point Harbor). Each of these related projects could potentially increase the volume of stormwater runoff and contribute to pollutant loading in stormwater runoff reaching

both the County storm drain system and the Dana Point Harbor, thereby resulting in cumulative impacts to hydrology and surface water quality. Stormwater runoff from Related Projects 2, 5, 6, 14, and 16, as shown in Table 4.A and Figure 4.1, in Chapter 4.0, all drain to Dana Point Harbor. Please refer to Table 4.A and Figure 4.1, in Chapter 4.0, for the descriptions and locations of these related projects.

New development and redevelopment can result in increased stormwater runoff and increased urban pollutants in stormwater runoff from each of the related project sites. Each related project must include BMPs to reduce impacts to water quality and hydrology in compliance with local ordinances and plans adopted to comply with requirements of the various NPDES permits. Specifically, the related projects that disturb 1 acre or more of soil must comply with the requirements of the Construction General Permit and the San Diego Regional MS4 Permit. The preparation and approval of a SWPPP (for construction) and a WQMP (for operation) would be required for each related project to determine appropriate BMPs to minimize water quality impacts. In addition, the preparation and approval of a hydrology report would be required to determine the hydrologic control required to minimize increases in runoff from each site, so they do not exceed existing runoff volumes or result in hydromodification impacts. In addition, cities review all development projects on a case-by-case basis to ensure that sufficient local and regional drainage capacity is available.

Each related project must consider impaired receiving waters and TMDLs for receiving waters. The TMDL program is designed to identify all constituents that adversely affect the beneficial uses of water bodies and then identify appropriate reductions in pollutant loads or concentrations from all sources so that the receiving waters can maintain/attain the beneficial uses in the Basin Plan. Thus, by complying with TMDLs, a project's contribution to overall water quality improvement in the Dana Point Harbor in the context of the regulatory program is designed to account for cumulative impacts.

New development and redevelopment may also require groundwater dewatering. Groundwater would be discharged to either the sanitary sewer system or stormdrain system. If discharged to the sanitary sewer system, a permit from the SCWD would be required to ensure that there is sufficient capacity available to accommodate the discharge to prevent sanitary sewer overflow, which can result in a discharge of pollutants to surface waters. If groundwater is discharged to the storm drain system, coverage under the San Diego RWQCB's Groundwater Discharge Permit would be required. If coverage under the Groundwater Discharge Permit is required, each project would be evaluated individually to ensure that sufficient local and regional drainage capacity is available. Additionally, if located within the San Juan Valley Groundwater Basin, each project would be separately evaluated to determine its potential impacts to the Basin, and would assess impacts of groundwater infiltration, interference with groundwater recharge, or a decrease groundwater supplies.

Regional programs and BMPs such as TMDL programs and the MS4 Permit Program have been designed under an assumption that Dana Point Harbor would continue its pattern of urbanization. The regional control measures contemplate the cumulative effects of proposed development. The Modified Project would be required to comply with the requirements of the Construction General Permit and the San Diego Regional MS4 Permit and implement construction and operational BMPs to reduce pollutants in stormwater runoff. Compliance with these regional programs and permits

constitutes compliance with programs intended to address cumulative water quality impacts. As stated above, each related project would be required to develop a SWPPP, a WQMP, and a hydrology report, and would be evaluated individually to determine appropriate BMPs and treatment measures to reduce impacts to surface water quality and hydrology.

In summary, because the Modified Project and other related projects would comply with applicable NPDES requirements and would include BMPs and drainage facilities to reduce the volume of stormwater runoff and pollutants of concern in stormwater runoff, the cumulative hydrology and water quality impacts of the Modified Project in combination with the related projects would be less than significant, consistent with the Original Project. Therefore, the Modified Project's incremental hydrology and water quality impacts would not be cumulatively considerable.