CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

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WASTE DISCHARGE REQUIREMENTS ORDER R8-2026-0042

ORDER INFORMATION

Status:	ADOPTED
Program:	Dredged or Fill Material Program
Discharger(s):	Irvine Ranch Water District
Project:	Santiago Creek Dam Improvement Project
County:	Orange County
CIWQS WDID:	302025-16
Prior Order(s):	(none)

CERTIFICATION

I, ERIC T. LINDBERG, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on October 23, 2026.

Eric Lindberg
Digitally signed by Eric Lindberg
Date: 2026.10.28 13:31:23 -07'00'
Water Boards

ERIC T. LINDBERG, PG CHG
Executive Officer

TABLE OF CONTENTS

Findings 1

Project Description and Discharge Characteristics 2

Basin Plan and Regulatory Considerations 11

California Environmental Quality Act and Public Participation 13

Requirements 14

A. Discharge Specifications 14

B. Discharge Prohibitions 15

C. Construction and Post-Construction Best Management Practices 15

D. Restoration and Compensatory Mitigation Requirements 17

E. Provisions 19

Attachment A—MAPS and PHOTOS 23

Attachment B—REPORTS and NOTIFICATIONS 40

Attachment C—SIGNATORY REQUIREMENTS 47

ATTACHMENT D – COMPLIANCE WITH 40 CODE OF FEDERAL REGULATIONS SECTION 121.7 (D) 48

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

ORDER R8-2026-0042

WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES OF DREDGED OR FILL MATERIALS TO WATERS OF THE STATE
SANTIAGO CREEK DAM IMPROVEMENT PROJECT
ORANGE COUNTY

FINDINGS

The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) hereby finds as follows:

1. This Order prescribes Waste Discharge Requirements (WDRs) and serves as a Clean Water Act section 401 Water Quality Certification (Certification) for the Santiago Creek Dam Improvement Project (Project) of Irvine Ranch Water District (IRWD; Discharger).

2. Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the operative Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) and all other pertinent water quality plans and policies. The Basin Plan includes water quality standards, which consist of existing and potential beneficial uses of waters of the State, water quality objectives to protect those uses, and the state and federal antidegradation policies.

3. The Santa Ana Water Board has the authority to regulate the discharge of dredged and fill materials by prescribing WDRs pursuant to California Water Code section 13263. The Santa Ana Water Board has determined that WDRs are necessary to adequately address the Project's potential impact on the beneficial uses of waters of the State (WOTS).

4. This Order regulates the discharge of fill material to WOTS, including waters of the United States (WOTUS). As a result of the discharge of fill material to WOTUS, this Order also serves as a Clean Water Act section 401 Water Quality Certification for federal permitting of the Project by the U.S. Army Corps of Engineers (USACE) under an individual permit (USACE No.SPL-2025-00969).

5. The USACE is preparing a Clean Water Act Section 404(b)(1) guidelines evaluation for the Discharger's request for authorization to impact WOTUS. The evaluation will determine if the federal action for the Project has the potential to cause significant environmental effects.

6. On December 16, 2025, the Discharger (IRWD) submitted an Application for Discharges of Dredged or Fill Material to Waters of the State (Application) for the Project, which was assigned Santa Ana Water Board WDID No. 302025-16.

7. The Application was deemed complete on July 21, 2026.

8. This Order is issued in compliance with the State Water Resources Control Board's (State Water Board) *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Dredge or Fill Procedures), as revised on April 6, 2021.

Project Description and Discharge Characteristics

9. The Project's purpose is to rehabilitate, replace, and modify the Santiago Creek Dam outlet tower, spillway facilities, and dam embankment to meet current seismic and safety standards.

10. The Project is located within the unincorporated community of Silverado in Orange County, south of State Route (SR) 261, east of SR-241, and Santiago Canyon Road. The Project service area encompasses approximately 1,063.75 acres. The proposed dam improvement activities are located at the Santiago Creek Dam at the northwest end of Irvine Lake, encompassing approximately 62 acres (Latitude 33.786053°, Longitude -117.725269°). Maps and figures showing the Project location are found in Attachment A of this Order.

11. Irvine Lake is an untreated water reservoir that serves as a domestic and non-potable water supply for various cities in Orange County, including irrigation and a water source for the Baker Water Treatment Plant, which produces drinking water for an estimated 85,000 homes in Orange County.

12. The current maximum capacity of the reservoir is at the 795.9-foot elevation contour[1]. The water levels within Irvine Lake (2002 to 2020) fluctuate between approximately 736 feet and 795 feet[2].

13. At the request of the Division of Safety of Dams, the Discharger initiated seismic assessments of the existing outlet tower, dam embankment, and multi-phase spillway conditions.

14. The assessment found that the existing outlet tower, dam embankment, and multi-phase spillway are either seismically unstable or do not meet current design

[1] In accordance with the North American Vertical Datum of 1988 (NAVD 88).
[2] There is a one-foot difference between the original construction datum and the NAVD 88.

standards. Therefore, replacement and rehabilitation of these structures are necessary to meet safety standards.

15. The Project site is largely surrounded by undeveloped open space and contains a combination of steep slopes and rolling hills. The elevation ranges from approximately 657 to 996 feet above mean sea level. A network of approximately 15 drainages and smaller tributaries transverse the surrounding slopes and hills and contributes surface flows to Irvine Lake.

16. The following vegetation types occur on the Project site: sagebrush scrub, disturbed sagebrush scrub, sagebrush-coyote bush scrub, southern cactus scrub, disturbed southern cactus scrub, disturbed floodplain sage scrub, toyon-sumac chaparral, annual grassland, ruderal, riparian herb, southern willow scrub, mulefat scrub, disturbed mulefat scrub, southern sycamore riparian woodland, southern sycamore-coast live oak riparian woodland, southern black willow forest, disturbed southern black willow forest, southern black willow forest/riparian herb, coast live oak woodland, and western sycamore.

17. The Project site contains approximately 428.47 acres of WOTUS, consisting of 326.77 acres of non-wetland waters (open water, perennial, and intermittent) and 101.70 acres of wetlands, referenced herein as Irvine Lake, Santiago Creek, and “Drainage 1”.

18. The Project site contains approximately 670.11 acres of WOTS, which encompasses the 428.47 acres of WOTUS described above.

19. Santa Ana Water Board staff determined that the boundaries of Irvine Lake, Santiago Creek, and “Drainage 1” extend beyond federal jurisdiction of WOTUS based on observed hydrological indicators and designated beneficial uses. The extended boundaries for these features represent 222.19 acres of WOTS outside of federal jurisdiction.

20. In addition, “Drainages 2-15” represent a total of 19.45 acres of WOTS outside of federal jurisdiction.

21. The Project site has a total of 241.64 acres of WOTS outside of federal jurisdiction. A summary of the Project’s onsite WOTUS and WOTS is found in Table 1 and described in detail below.

Table 1: Summary of Waters of the United States and Waters of the State

Feature	WOTUS wetland (acres)	WOTUS non-wetland (acres)	WOTS wetland (acres)	WOTS non-wetland (acres)
Irvine Lake	94.58	312.96	95.06	518.56
Santiago Creek	7.12	13.80	7.12	29.89
Drainage 1	-	0.01	-	0.03
Drainage 2	-	-	-	0.07
Drainage 3	-	-	-	0.17
Drainage 4	-	-	-	0.09
Drainage 5	-	-	-	0.36
Drainage 6	-	-	-	0.15
Drainage 7	-	-	-	0.15
Drainage 8	-	-	-	0.04
Drainage 9	-	-	-	1.24
Drainage 10	-	-	-	0.25
Drainage 11	-	-	-	0.32
Drainage 12	-	-	-	13.52
Drainage 13	-	-	-	0.11
Drainage 14	-	-	-	0.42
Drainage 15	-	-	-	2.56
Total	**101.70**	**326.77**	**102.18**	**567.93**

22. Irvine Lake is an untreated water reservoir that supplies as a domestic and non-potable water supply to Orange County and was created by impounding Santiago Creek. Irvine Lake is characterized by steep slopes on the western and northern portions and gentle rolling slopes to the southeast and east. The sources of water for Irvine Lake are surface flows from Santiago Creek, local stormwater runoff during rainfall events, and imported water purchased from the Metropolitan Water District.

23. “Drainage 1” is located on the northwestern portion of the Project site, outside of Irvine Lake. This drainage conveys relatively permanent flows from the west side of Santiago Creek through a pipe culvert beneath an access road. Surface flows within “Drainage 1” travel northeast to northwest. “Drainage 1” extends approximately 0.01 acres and is dominated by woody vegetation less than 20 feet (six meters) tall. Surface water is present for brief periods during the growing season.

24. “Drainage 2” is located in the northeast portion of the Project site, outside of Irvine Lake, and consists of approximately 0.07 acres. “Drainage 2” serves as an outlet for Irvine Lake to release water in the northeast portion through a cone valve into Santiago Creek in the northwest. “Drainage 2” is considered ephemeral and dominated by sagebrush scrub and sumac chaparral.

25. “Drainage 3” is a concrete and riprap-lined ephemeral channel located in the northwestern portion of the Project site between two steep hillsides. Surface flows originate from the rolling hills to the west of Santiago Creek Dam and ultimately discharge into Santiago Creek. “Drainage 3” consists of approximately 0.17 acres and is characterized by sage scrub vegetation on both hillside slopes.

26. “Drainages 4, 7, and 8” are ephemeral drainages that flow from the eastern hills of the Project site and discharge either into Santiago Creek or Irvine Lake. The drainages are characterized by a sandy channel bed dominated by sagebrush scrub vegetation.

27. “Drainages 5, 11, and 12” are ephemeral drainages with sandy streambed sediment. “Drainage 5” flows from the eastern hills and discharges into the northern portion of Irvine Lake. “Drainage 11” is located between two rolling hills, flowing northeast to southwest and discharges into non-wetland habitat west of Haul Road. “Drainage 12” flows southeast to northwest towards the wetland habitat of Irvine Lake, east of Haul Road. These drainages are dominated by southern sycamore riparian woodland/southern coast live oak riparian forest habitat.

28. “Drainage 6” is an ephemeral drainage located between two steep slopes on the northeastern side of Irvine Lake and discharges into non-wetland waters within Irvine Lake. This drainage is dominated by sagebrush scrub and coast live oak woodland vegetation.

29. “Drainage 9” is an earthen channel that flows northeast to southwest toward the lower portion of Irvine Lake, located west of Haul Road. “Drainage 9” is classified as ephemeral and dominated by sagebrush scrub and southern black willow habitat.

30. “Drainage 10” is located between two gently rolling hills on the east side of Haul Road. “Drainage 10” is an ephemeral channel and flows from northeast to southwest, discharging into the lower portion of Irvine Lake on the east side of Haul Road. The dominant vegetation consists of sagebrush scrub and southern sycamore riparian woodland/southern coast live oak riparian forest.

31. “Drainage 13 and 14” are located northeast of Santiago Canyon Road, on the lower southeast portion of Irvine Lake. “Drainage 13” is a narrow, earthen ephemeral drainage east of Haul Road between two gently sloping banks. This earthen channel flows southwest to northeast and discharges into “Drainage 12”. “Drainage 14” is located west of Haul Road; surface flows originate offsite from a concrete culvert to the northeast, which discharge into the lower portion of the wetland habitat in Irvine Lake. “Drainage 14” is a wide earthen channel between two gentle slopes. Both drainages are dominated by ruderal vegetation.

32. The proposed Project improvement activities include the following:

    a. Demolition of the existing outlet tower and construction of a new inclined outlet structure along the perimeter of Irvine Lake, including an approximately 54-inch inclined steel pipe to serve as the conveyance pipe for water from Irvine Lake. A series of steel riser pipes extending vertically from the inclined 54-inch steel pipe will serve as intakes. Each riser will include an intake fish screen to prevent debris, silt, and aquatic life from entering the pipe.

    b. The inlet/outlet configuration to incorporate the new structure, including new valves and fittings. At the downstream toe of Santiago Creek Dam, a new fitting will be installed to bifurcate water flows either towards the Irvine Lake Pipeline or the emergency outlet pipeline.

    c. Increasing the Irvine Lake Pipeline from 36 inches to 54 inches to match the pipeline from the inclined inlet/outlet structure and increase capacity to improve the system’s hydraulics.

    d. Demolition and replacement of the existing spillway with a new side-channel spillway.

    e. Construction of a stilling basin at the end of the new spillway, including a concrete and riprap apron.

    f. Removal of the upper portion of the dam on the downstream side of the embankment, construction of a filter drain system, and encapsulation of the filter drain system with pervious embankment shell material.

g. Construction of a new access road and ramp to provide vehicle access to the new inlet/outlet structure.

h. Construction of a new dam control building to house the valve system at the end of the existing dam crest.

i. Widening of the dam crest from 10 feet to approximately 35 to 45 feet. Increasing the dam crest elevation approximately one foot to improve access and safety. These embankment improvements will require excavations along the toe of the dam to key in the earthwork improvements to the face of the dam.

j. Raising the dam crest approximately one foot on the upstream side of the dam, effectively raising the elevation from 811.9 feet to approximately 812.9 feet under Division of Safety of Dams freeboard requirements during a probable maximum flood event.

k. Raising the spillway by six feet to 797.9 feet, two feet higher than the existing maximum water storage elevation of 795.5 feet, will allow impoundment of water up to the 797.9-foot elevation contour year-round and store approximately 1,300-acre-feet of additional water (NAVD 88).

l. Demolition of existing structures, including the vertical outlet tower and portions of 60-inch outlet conduit, significant portions of the existing spillway chute and walls, spillway bridge and piers, portions of the upstream dam embankment concrete facing, storage buildings, outlet works control building and valve vault, outlet works energy dissipator vault, portions of the Irvine Lake Pipeline, catwalk and stairs assembly across Santiago Creek.

m. Relocation of the existing Southern California Edison overhead power lines and power poles outside the construction limits.

33. The long-term and short-term temporary impacts to WOTUS and WOTS will result from the creation of borrow sites to provide soil for the construction of a diversion berm near the downstream portion of Irvine Lake to maintain a dry construction area. In addition, these impacts are associated with construction access and equipment staging. Additional temporary impacts on vegetation will result from the creation of borrow sites.

34. Long-term temporary impacts represent a duration greater than three years, while short-term temporary impacts represent a duration of less than three years.

35. The Project construction is anticipated to result in a maximum of 162.24 acres of temporary impacts to WOTUS and WOTS. Temporary impacts are summarized in Table 2 below.

36. Of the total 162.24 acres of temporary impacts, 122.57 acres are considered long-term temporary impacts, while 39.66 acres are considered short-term temporary impacts to wetland and non-wetland waters. Long-term and short-term temporary impacts are summarized in Table 3 below.

37. The short-term temporary impacts are associated with soil removal at the borrow site along the central portion of Irvine Lake, and the long-term temporary impacts are associated with soil removal at borrow sites in the center of Irvine Lake and at the eastern end.

Table 2: Total Temporary Impacts to Waters of the United States and Waters of the State

Feature	WOTUS Wetland (acres)	WOTUS Non-Wetland (acres)	WOTS Wetland (acres)	WOTS Non-Wetland (acres)
Irvine Lake	29.35	104.85	29.56	131.76
Santiago Creek	-	0.6	-	0.88
Drainage 2	-	-	-	0.01
Drainage 3	-	-	-	0.03
Total	**29.35**	**105.45**	**29.56**	**132.68**

Table 3: Short-Term and Long-Term Temporary Impacts

	Feature	Non-wetland	Wetland	Total
Temporary Long-Term Impacts (acres)	Irvine Lake	118.71	2.95	-
	Santiago Creek	0.88	-	-
	Drainage 1	0.01	-	-
	Drainage 2	-	-	-
	Drainage 3	0.03	-	-
	Total	**119.63**	**2.95**	**122.57**
Temporary Short-Term Impacts (acres)	**Feature**	**Non-wetland**	**Wetland**	**Total**
	Irvine Lake	4.36	35.3	-
	Santiago Creek	-	-	-
	Drainage 1	-	-	-
	Drainage 2	-	-	-
	Drainage 3	-	-	-
	Total	**4.36**	**35.3**	**39.66**

38. The Project will result in the permanent physical loss or modification of 3.22 acres of non-wetland WOTUS and WOTS. A summary of the Project's permanent impacts is found in Table 3 below.

39. The permanent impacts will result from structural alterations and construction of the spillway structures of Santiago Dam. In addition, permanent impacts are associated with the replacement of pervious surfaces for the clearing, grading, grubbing, and construction of structural alterations to Santiago Dam.

40. A total of 1.68 acres (303.99 linear feet) of permanent impacts to Irvine Lake are associated with the demolition of the existing outlet structure and the construction of a new inlet/outlet structure, isolation vault, and increase of the Mechanically Stabilized Earth wall top dam crest.

41. A total of 1.39 acres (534.40 linear feet) of permanent impacts to Santiago Creek are associated with the construction of the stilling basin, bifurcation valve vault, emergency outlet basin, and emergency outlet valve.

42. A total of 0.07 acres (102.53 linear feet) of permanent impacts is associated with the replacement of natural surfaces in "Drainage 2" that allow water to infiltrate the

surface with impervious surfaces to construct a dam control building, emergency outlet pipeline, and a portion of the stilling basin.

43. In addition, a total of 0.08 acres (90.89 linear feet) of permanent impacts is associated with the concrete stream diversion of “Drainage 3” around the stilling basin.

44. Once Irvine Lake is dewatered, the Project construction involves the removal and transport of approximately 800,000 cubic yards (CY) of soil from onsite borrow pits located within the limits of Irvine Lake to serve as material for the dam embankment and diversion berm.

45. In addition, the Project includes importing approximately 200,000 CY of material and exporting approximately 315,000 CY of material over the approximately four-year construction period.

46. The imported material will be utilized for the filter drain improvements associated with the Santiago Dam improvements. The exported material will consist of construction and demolition waste that cannot be reincorporated back into the Santiago Dam.

47. The construction and demolition waste export material will be disposed of at a landfill or other appropriate facility.

48. Additionally, approximately 155,270 CY of material is anticipated to be removed from excavation for the spillway structure, stilling basin, and new inlet/outlet structure. These amounts may change upon final design; however, the overall Project footprint will remain unchanged.

49. Potential indirect impacts associated with the Project include increased inundation, construction noise, decreased groundwater availability, increased dust, introduction of invasive plant species, night lighting, increased wildfire risk from construction equipment, and increased human activity during construction.

50. Irvine Lake is expected to be dewatered for approximately five years. During the winter storm season, water is anticipated to pond along the southeast side of the temporary diversion berm. During severe storm events, water levels may submerge the temporary diversion berm, resulting in additional ponding behind Santiago Creek Dam, which is anticipated to allow partial groundwater to recharge prior to pumping water out to facilitate construction and protect equipment.

51. After completion of the Project, the water levels of Irvine Lake will expand the inundation areas and may indirectly impact existing vegetation within the affected area. However, following construction, Irvine Lake would rarely be maintained at its maximum operating level. As a result, the associated increase in inundation and its potential effects on adjacent vegetation are expected to occur infrequently.

52. The Discharger has proposed to restore all long- and short-term temporary impacts to Irvine Lake vegetated borrow sites, Santiago Creek, “Drainage 1” and “Drainage 3” to pre-existing Project conditions.

53. Temporarily impacted vegetation will be restored in-kind within the original location. Restoration activities include soil decompaction, non-native vegetation removal, seeding, and monitoring. The restoration sites will be monitored and maintained for a minimum of five years.

54. To offset 3.22 acres of permanent impacts, the Discharger proposes permittee-responsible mitigation by restoring and enhancing 5.88 acres of onsite riparian vegetation communities located southwest of the Santiago Creek Dam at the downstream end of Limestone Canyon Creek, which flows toward Irvine Lake from the southeast. The compensatory mitigation activities include removal of invasive vegetation, planting native vegetation, weed control, use of a temporary irrigation system, monitoring for pest, and trash removal. The compensatory mitigation site will be monitored and maintained for a minimum of five years.

55. The compensatory mitigation site is separated by the Blue Diamond Haul Road, which will create upstream and downstream mitigation areas.

Table 4: Permanent Impacts to Non-Wetland Waters of the United States and Waters of the State

Feature	WOTUS Permanent Impacts (acres)	WOTS Permanent Impact (acres)
Irvine Lake	0.45	1.68
Santiago Creek	0.99	1.39
Drainage 2	0	0.07
Drainage 3	0	0.08
Total	**1.44**	**3.22**

Basin Plan and Regulatory Considerations

56. The Project will impact one waterbody impoundment (Irvine Lake), two perennial drainages (Santiago Creek and “Drainage 1”), and two ephemeral drainages (“Drainage 2” and “Drainage 3”), which are tributaries to Santiago Creek.

57. Irvine Lake has the following designated beneficial uses (existing or potential): Municipal and Domestic Supply, Agricultural Supply, Water Contact Recreation,

Non-contact Water Recreation, Warm Freshwater Habitat, Cold Freshwater Habitat, Wildlife Habitat, Rare, Threatened or Endangered Species.

58. Santiago Creek has the following designated beneficial uses (existing or potential): Municipal and Domestic Supply, Groundwater Recharge, Water Contact Recreation, Non-contact Water Recreation, Warm Freshwater Habitat, and Wildlife Habitat.

59. This Order is adopted per Water Code section 13263, subdivision (a), which provides that the Santa Ana Water Board may, after any necessary hearing, prescribe requirements (WDRs) as to the nature of any proposed discharge with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The WDRs are required to implement any relevant water quality control plans that have been adopted and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.

60. This Order is further issued in part pursuant to CWA section 401 (33 U.S.C § 1341). Specifically, this Order certifies that any discharge from the referenced Project will comply with the applicable provisions of CWA section 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards), as long as all of the conditions in this Order are met.

61. This Order is also adopted pursuant to Water Code section 13267, subdivision (b)(1) which authorizes the Santa Ana Water Board to require technical and monitoring program reports, submitted under penalty of perjury, from persons discharging or proposing to discharge waste within the Santa Ana Region, in connection with the issuance of WDRs. This Order incorporates requirements for water quality monitoring and Project reporting, which are necessary to ensure that the discharge of dredged and fill material complies with WDRs and is protective of the water quality. In accordance with Water Code section 13267, the burden, including costs, of generating these reports bears a reasonable relationship to the need for the report and the benefits to be obtained from them. Monitoring and reporting requirements related to discharges to WOTUS are also authorized under Water Code section 13383.

62. The Santa Ana Water Board has considered the federal and state antidegradation policies (State Water Board Resolution 68-16 and 40 C.F.R § 131.12) and finds that the discharge permitted under this Order is consistent with those policies. Filling wetlands, riparian areas, headwaters, and other waters causes partial or complete loss of the beneficial uses provided by those waters. This Order requires that impacts to WOTS be mitigated through avoidance and minimization to the maximum extent practicable and that unavoidable loss of beneficial uses is offset

with compensatory mitigation, including the restoration (reestablishment or rehabilitation) and enhancement of other WOTS. The mitigation requirements in this Order comply with the State Water Board's Dredge and Fill Procedures and the United States Environmental Protection Agency's Clean Water Act section 404(b)(1) Guidelines.

63. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and California Code of Regulations, title 23, section 2050 et seq. Additionally, the Santa Ana Water Board reserves the right to suspend, cancel, or modify and reissue this Order, after providing notice to the Discharger, if the Santa Ana Water Board determines that the Project fails to comply with any of the conditions of this Order; or when necessary to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) or federal Clean Water Act section 303 (33 U.S.C § 1313).

64. The provisions of this Order are severable and, if any provision of this Order or the application of any provisions of this Order to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

65. A request for modification, revocation and re-issuance, or termination of this Order or a notification of planned changes or anticipated noncompliance does not stay any requirements of this Order.

66. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the Discharger from liabilities under federal, state, or local laws, nor guarantee the Discharger a capacity right in the receiving waters.

California Environmental Quality Act and Public Participation

67. On November 11, 2025, the Irvine Ranch Water District, as the lead agency under the California Environmental Protection Act (CEQA; Public Resources Code, § 21000 et seq.) certified an Environmental Impact Report (EIR) for the Project (State Clearinghouse 2023050097). On November 12, 2025, the lead agency filed a Notice of Determination with the Orange County Clerk.

68. The Santa Ana Water Board is a responsible agency under CEQA for the purposes of issuing this Order. As a responsible agency, the Santa Ana Water Board is "responsible for considering only the effects of those activities involved in a project which it is required by law to carry out or approve." (*Id* § 21002.1, subd. (d).)

69. In approving this Order, the Santa Ana Water Board has considered the EIR certified by the Irvine Ranch Water District with subsequent information provided by

the Discharger. More specifically, the Santa Ana Water Board considered those sections of the EIR pertaining to impacts to water quality. The Santa Ana Water Board finds that compliance with the mitigation measures of the EIR and conditions in this Order will reduce potentially adverse impacts to water quality to a less than significant level and protect beneficial uses of receiving waters.

70. The Santa Ana Water Board has notified the Discharger and other interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity for public hearing to submit comments. There are no known tribal and/or disadvantaged communities in the vicinity of the Project site.

71. The Santa Ana Water Board, in a public meeting, heard and considered all comments pertaining to the WDRs for the discharge.

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, together with Clean Water Act section 401 and Water Code section 13383, that the Discharger shall comply with the following:

A. Discharge Specifications

1. Activities associated with the Project shall not cause or threaten to cause a condition of nuisance, contamination or pollution as defined in Water Code section 13050.

2. The groundwater in the vicinity of the Project shall not be degraded resulting from the Project activities or placement of fill materials for the Project.

3. The Discharger shall, as applicable, obtain coverage under and comply with the State Water Board’s NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2022-0057-DWQ, as amended by Order 2012-0006-DWQ; NPDES No. CAS000002) and any subsequent amendments (Construction General Permit). If the Project construction activities do not require coverage under the Construction General Permit, the Discharger shall develop and implement a runoff management plan or equivalent construction best management practices (BMP) plan, to prevent the discharge of sediment and other pollutants during construction activities.

4. The Discharger shall comply with the local regulations associated with the Santa Ana Water Board's municipal stormwater permit issued to Orange County and co-permittees under NPDES No. CAS618030 and WDRs Order R8-2009-0030 as amended by Order R8-2010-0062, and subsequent iterations thereof.

5. If construction dewatering discharges, including temporary stream diversions, are necessary to carry out the Project, the Discharger shall enroll and comply

with the Santa Ana Water Board Order R8-2020-0006, General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality.

6. Discharges of fill materials shall be limited to the placement of clean fill and "inert waste," as defined in California Code of Regulations, title 27, section 20230.

B. Discharge Prohibitions

1. Except as expressly authorized in another WDRs order, waste shall not be discharged in a manner or location other than as described in the Application referenced in 6 or the findings herein.

2. Permanent and temporary impacts to WOTUS and WOTS from the Project shall not exceed quantities identified in Findings 35 and 39.

3. The direct discharge of wastes, including rubbish, refuse, bark, sawdust, or any other solid or liquid wastes, into water channels, surface waters, or any place where they would contact or be eventually transported to surface waters, including floodplains, is prohibited.

4. The discharge of oil or other floating materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.

5. The discharge of silt, sand, clay, or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.

6. Discharges to surface waters of wastes or pollutants that are not authorized by this Order or regulated by a separate permit are prohibited.

C. Construction and Post-Construction Best Management Practices

1. The Discharger shall implement good site management (i.e., housekeeping) measures and construction best management practices (BMPs). At a minimum the Discharger shall implement the following good housekeeping measures and BMPs:

    a. Prior to the start of construction activities, the Discharger shall delineate the work area with brightly colored fencing or other methods to ensure temporary and permanent impacts to WOTUS and WOTS do not exceed the limits authorized in this Order.

    b. Vehicle/equipment storage and maintenance shall consist of the following:

i. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage.

ii. Stationary equipment (e.g., motors, pumps, generators, etc.) shall be positioned over drip pans or other types of containment.

iii. In the event of a leak, clean leaks immediately and dispose of leaked materials properly in accordance with the law.

iv. Motorized equipment shall be fueled, maintained, and stored in designated areas with BMPs installed.

v. Motorized equipment shall not be maintained or parked near any stream crossing or channel in such a manner that petroleum products or other pollutants might enter these areas under any flow conditions.

vi. Vehicles and equipment shall not be driven or operated in WOTUS and WOTS, except as necessary to complete the proposed Project.

c. If construction must occur during the winter months, all vehicles used for construction-related activities must have the ability to be readily mobilized and relocated outside of WOTUS and WOTS no later than 24 hours prior to a precipitation event.

d. All stockpiles outside of Irvine Lake shall be placed outside of drainage areas or other surface waters and protected in such a manner to prevent materials from entering WOTUS and WOTS.

e. Design, install, and maintain effective sediment controls to minimize discharge of pollutants. For example, erosion control or sedimentation prevention methods of fiber rolls, sand or gravel bags, rice mats, straw wattles, or similar measures.

f. Stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the Project site.

g. Implement BMPs to control the off-site tracking of sediment, loose construction, and landscape materials.

h. The disturbed areas shall be revegetated with native vegetation to the greatest extent possible.

i. Proper use and disposal of oil, gasoline, diesel fuel, antifreeze, and other toxic substances.

D. Restoration and Compensatory Mitigation Requirements

1. The Discharger shall restore 39.66 acres of short-term temporary impacts to WOTUS and WOTS to pre-Project conditions and contours at a 1:1 restoration-to-impact ratio.

2. The Discharger shall restore all long-term temporary impacts at a minimum of 124.40 acres. The restoration shall consist of the following acreage:

    a. 4.90 acres of disturbed vegetation and 9.42 acres of non-native/ unvegetated habitat shall be restored with higher-quality native habitat at a 1:1 restoration-to-impact ratio.

    b. 1.83 acres of native vegetation shall be restored at a 2:1 restoration-to-impact ratio to account for temporal losses.

    c. 106.42 acres of open water shall be restored to pre-Project contours upon refilling of Irvine Lake.

3. The Discharger shall provide compensatory mitigation for the authorized permanent impacts to 3.22 acres of WOTUS and WOTS through the restoration and enhancement of 5.88 acres of riparian habitat.

4. The restoration and enhancement activities shall include the removal of invasive and non-native vegetation.

5. The performance standards used to evaluate the success of the riparian habitat (excluding mulefat scrub) compensatory mitigation site shall include less than or equal to 5 percent of non-native vegetation and 90 percent of native vegetation coverage. Vegetation species diversity shall meet a minimum of eight species, and four plant layers.

6. The mulefat scrub habitat temporarily disturbed in the borrow site areas shall utilize the following performance standards to evaluate success: less than or equal to 5 percent of non-native vegetation, and 90 percent of native vegetation coverage. Vegetation species diversity shall meet a minimum of four vegetation species, and the different vegetation species shall have a target of at least two different plant layers within this area.

7. The Discharger has submitted a draft Habitat Mitigation and Monitoring Plan (HMMP) as a part of the Application. The Discharger shall provide a final HMMP for review and approval by the Santa Ana Water Board staff at least 60 days before Project commencement.

8. The final HMMP shall include all compensatory mitigation plan elements as outlined in the Dredge and Fill Procedures, Subpart J – Compensatory Mitigation for Losses of Aquatic Resources, including the following:

    a. **Workplan:** Detailed written specifications and work descriptions for the compensatory mitigation, including, but not limited to, the responsible parties; ownership status; funding mechanism; geographic boundaries; construction methods, timing, and sequence; source(s) of water, existing functions and values; methods for establishing the desired plant community; plans to control invasive plant species; and erosion control measures.

    b. **Maintenance:** A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.

    c. **Performance Standards:** Ecologically based standards that will be used to determine whether compensatory mitigation is achieving its objectives; rationale for performance standards; acreage to be enhanced; types of habitats to be enhanced; and functions and values.

    d. **Monitoring:** A description of parameters to be monitored to determine if the compensatory mitigation is on track to meet performance standards and if adaptive management is needed.

    e. **Adaptive Management:** A management strategy to address unforeseen changes in site conditions or other components of compensatory mitigation including the party or parties responsible for implanting adaptive management measures.

    f. **Site Protection and Long-term Management:** Provide sufficient site protection, such as conservation easement or restrictive covenant. Identify the party responsible for ownership and all long-term management of the compensatory mitigation site.

9. The compensatory mitigation activities shall occur concurrently with the Project's ground disturbing activities and shall begin in the Fall of 2027. The compensatory mitigation commencements timeline may be extended with advance approval from Santa Ana Water Board staff.

10. The Discharger is responsible for management of the compensatory mitigation site in perpetuity. However, the Discharger may transfer the compensatory mitigation requirements associated with long-term management when the following conditions have been met:

    a. Performance standards are met.

b. A transfer agreement to a third party has been approved by the Santa Ana Water Board.

   i. A transfer agreement shall be submitted by an authorized representative of the third party (transferee) for acceptance by the Santa Ana Water Board. This agreement shall demonstrate acceptance and understanding of the responsibility to comply with and fully satisfy the required compensatory mitigation and long-term management conditions. Failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the Santa Ana Water Board under Water Code section 13385, subdivision (a).

   ii. Notification of transfer of responsibilities meeting the above conditions must be provided to the Santa Ana Water Board. A draft transfer agreement is due to the Santa Ana Water Board no less than 30 days prior to the transfer of the mitigation responsibility. A final transfer agreement is due to the Santa Ana Water Board within 30 days of the completion of the transfer.

c. An approved non-wasting endowment, trust, or other appropriate financial instrument has been provided by the Discharger to the third party for long-term management of the compensatory mitigation site.

d. A conservation easement, deed restriction, or other appropriate restrictive covenant for the mitigation site has been recorded and approved by the Santa Ana Water Board staff.

E. Provisions

1. The Discharger shall maintain a copy of this Order at the Project site so that it is always available to site operating personnel. Key operating personnel shall be familiar with the Order's content.

2. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health and the environment.

3. This Order is not transferable to any person without written approval by the Santa Ana Water Board's Executive Officer. Prior to any change in ownership, the Discharger shall notify the Santa Ana Water Board's Executive Officer in writing at least 30 days in advance. The notice shall include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement shall contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The

Santa Ana Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.

4. The reporting period is from January 1st to December 31st. The Discharger shall submit an annual report by January 31st for the previous reporting period if the Order's effective date is at least 90 days withing the reporting period. Annual reporting shall continue until a *Notice of Project Complete Letter* is issued to the Discharger. The contents of the annual report shall include a construction summary, Project status and schedule (including ground disturbance, site clearing and grubbing, and site construction), and the implementation status of BMPs during the active discharge period. If the Project has not started, the Discharger shall provide an estimated start date and reasons for any expected delays.

5. The Discharger shall submit a *Commencement of Construction Report* at least seven days prior to start of initial groundbreaking activities.

6. The Discharger shall submit a *Request for Notice of Completion of Discharges Letter* following completion of active Project construction activities, including any required restoration and Discharger-responsible mitigation. This request shall be submitted to Santa Ana Water Board staff within 30 days following the completion of all Project construction activities. Upon acceptance of the request, Santa Ana Water Board staff will issue to the Discharger a *Notice of Completion of Discharges Letter*, which will end the active discharge period and, if appropriate, associated annual fees.

7. The Discharger shall submit a *Request for Notice of Project Complete Letter* when construction and any required post-construction monitoring is complete and no further Project activities will occur. This request shall be submitted to Santa Ana Water Board staff within 30 days following the completion of all Project activities. Upon approval of the request, Santa Ana Water Board staff will issue to the Discharger a *Notice of Project Complete Letter* and prepare a draft order terminating this Order for approval by the Santa Ana Water Board. The *Notice of Project Complete Letter* will end the post-discharge monitoring period, and either the expiration or Board approval of the termination of this Order will end the associated annual fees.

8. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended during for any unresolved enforcement action or litigation regarding this discharge or when requested by the Santa Ana Water Board.

9. The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Santa Ana Water Board office and the Office of Emergency Services within twenty-four (24) hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the Santa Ana Water Board's office voicemail. A written report shall also be provided within five business days of the time when the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. All other forms of noncompliance shall be reported with the Discharger's next scheduled Monitoring Report, or earlier if requested by the Executive Officer.

10. Before initiating a new discharge or making a material change in the character, location, or volume of an existing discharge, the Discharger shall report all pertinent information in writing to the Santa Ana Water Board, and if required by the Santa Ana Water Board, obtain revised requirements before any modifications are implemented.

11. The Discharger shall allow the Santa Ana Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law to:

    a. Enter premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this Order;

    b. Access and copy any records that are kept under the requirements of this Order;

    c. Inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

    d. Photograph, film, sample, or monitor for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code.

12. If the Project is not completed within five years of adoption of this Order, the Discharger shall submit a Project status report. The Project status report shall be filed no later than 180 days before the fifth anniversary of the Order's

adoption date.[3] Coverage under this Order is subject to termination pursuant to Finding 64 for failure to comply with this provision.

LIST OF ATTACHMENTS

ATTACHMENT A—MAPS AND PHOTOS
ATTACHMENT B—REPORTS AND NOTIFICATIONS
ATTACHMENT C—SIGNATORY REQUIREMENTS
ATTACHMENT D—COMPLIANCE WITH CODE OF FEDERAL REGULATION

ENFORCEMENT

The Santa Ana Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code sections 13300 and 13308, or referral to the California Attorney General for recovery of judicial civil liability.

ADMINISTRATIVE REVIEW

Any person aggrieved by this Santa Ana Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. To be timely, the petition must be received by the State Water Board by 5:00 pm on the 30th day after the date of this Order; if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the State Water Board website (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will also be provided upon request.

[3] Based on Santa Ana Water Board staff's review and discussion of the report, a new dredge and fill application in accordance with California Code of Regulations, title 23, division 3, chapter 9 may be required to maintain the activity coverage beyond five years. The application, with filing fee, will be discussed between the Discharger and Santa Ana Water Board staff regarding any need for additional information and changes in fees prior to the issuance of new WDRs.

ATTACHMENT A—MAPS AND PHOTOS



Figure 1: Project Location and Local Vicinity



Figure 2: Permanent Impacts and Dam Improvement Boundary

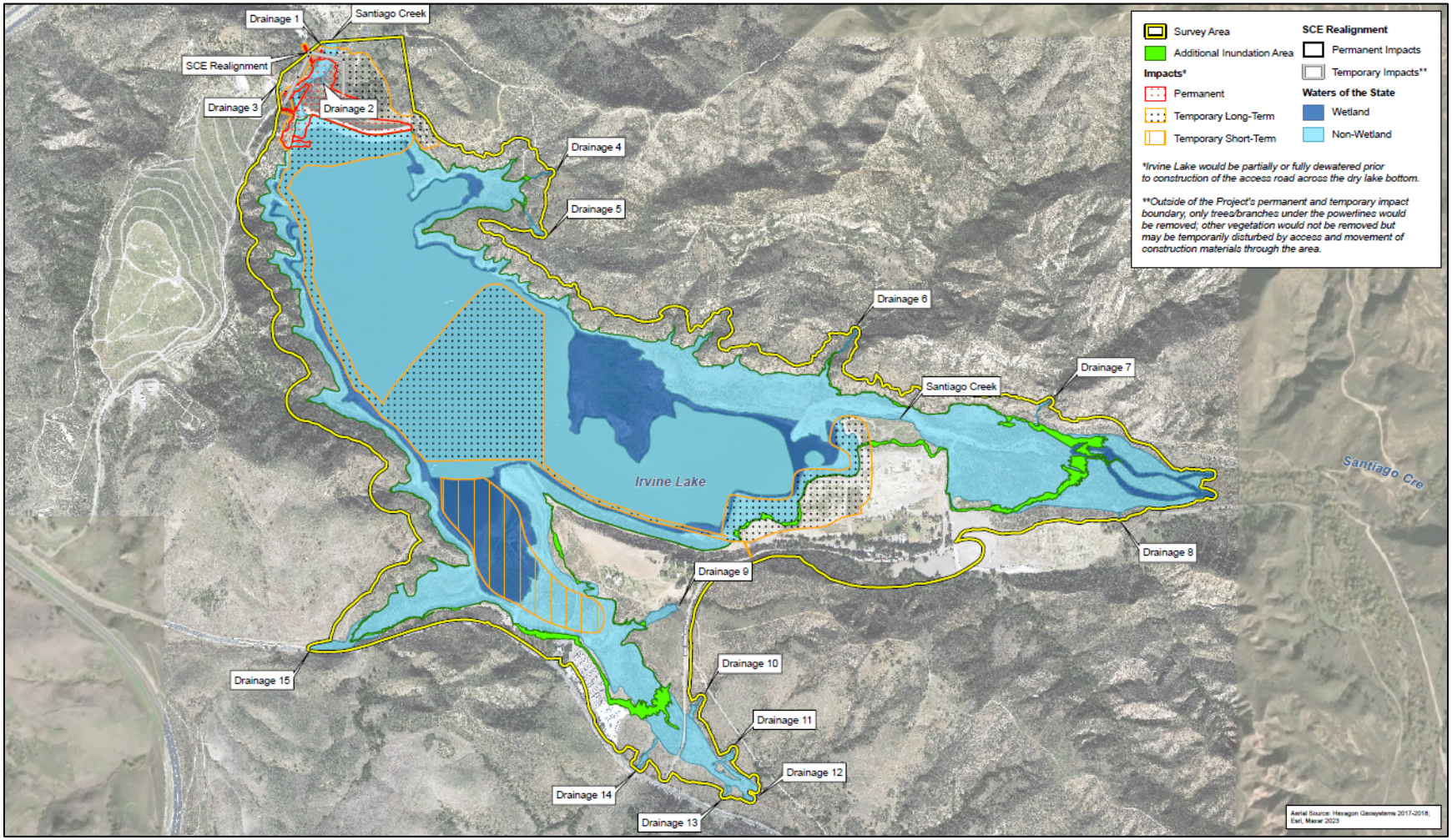


Figure 3: Jurisdictional Waters of the State and Impact Areas

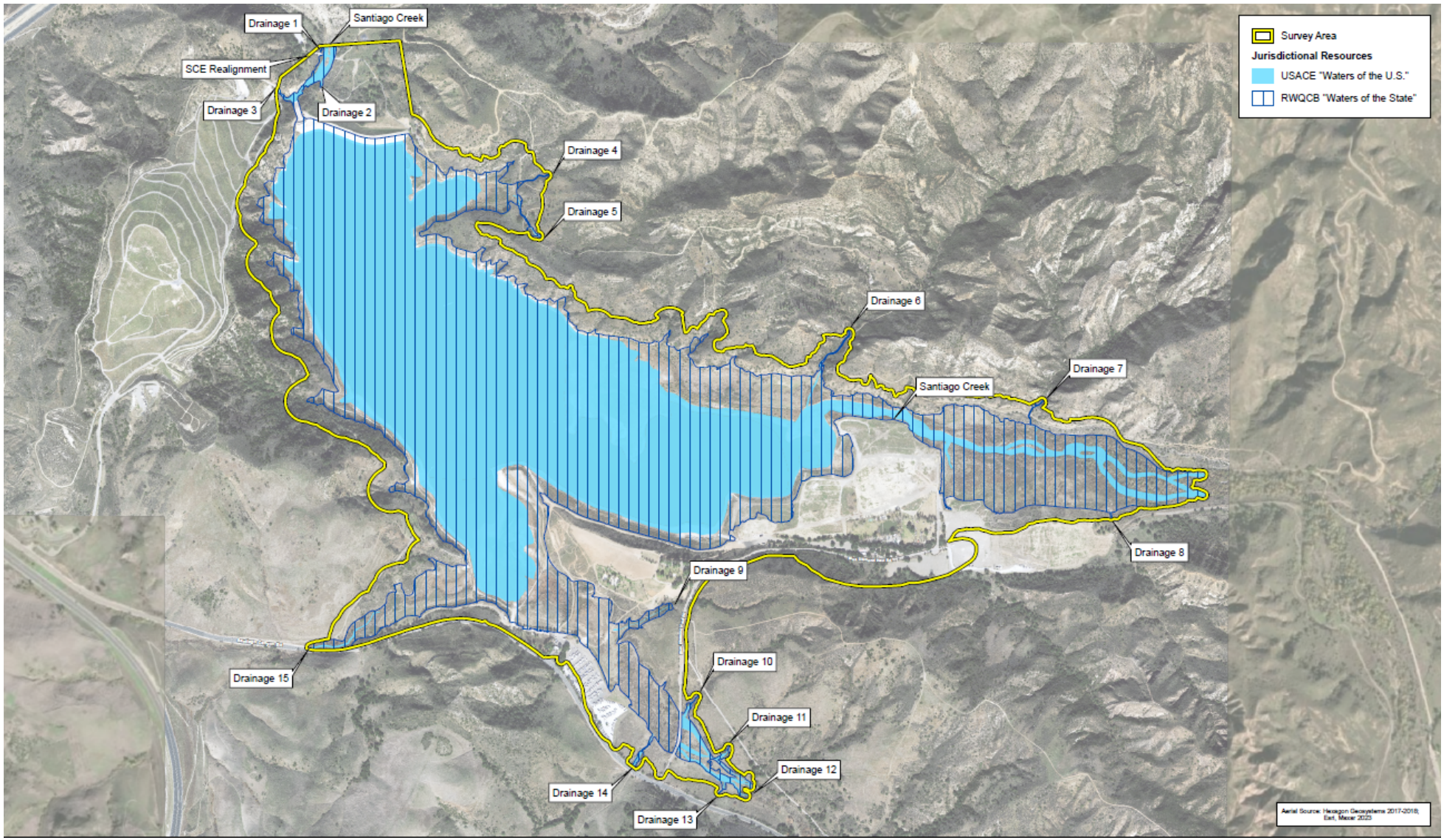


Figure 4: Jurisdictional Waters of the United States and Waters of the State

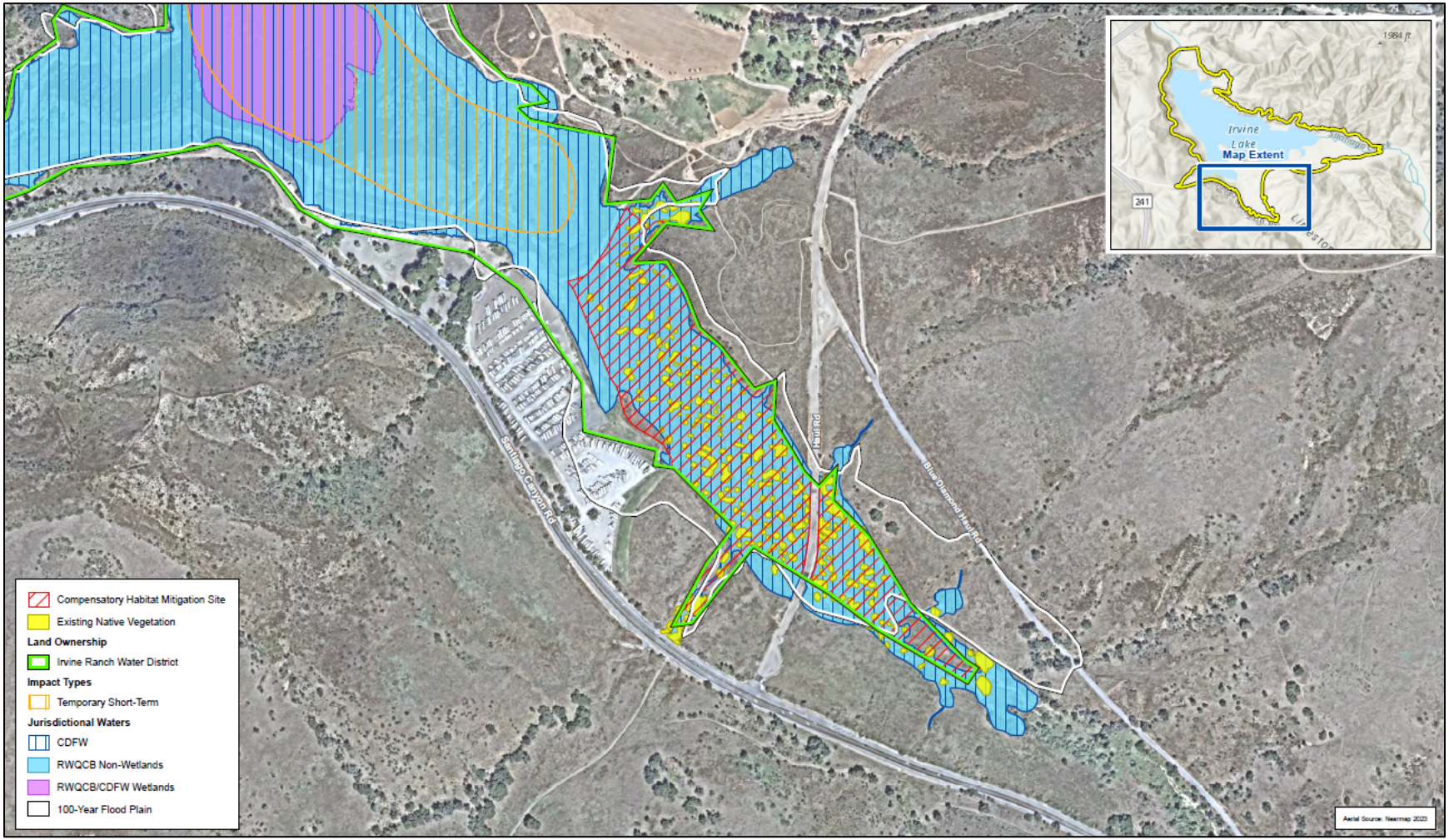


Figure 5: Proposed Compensatory Mitigation Area

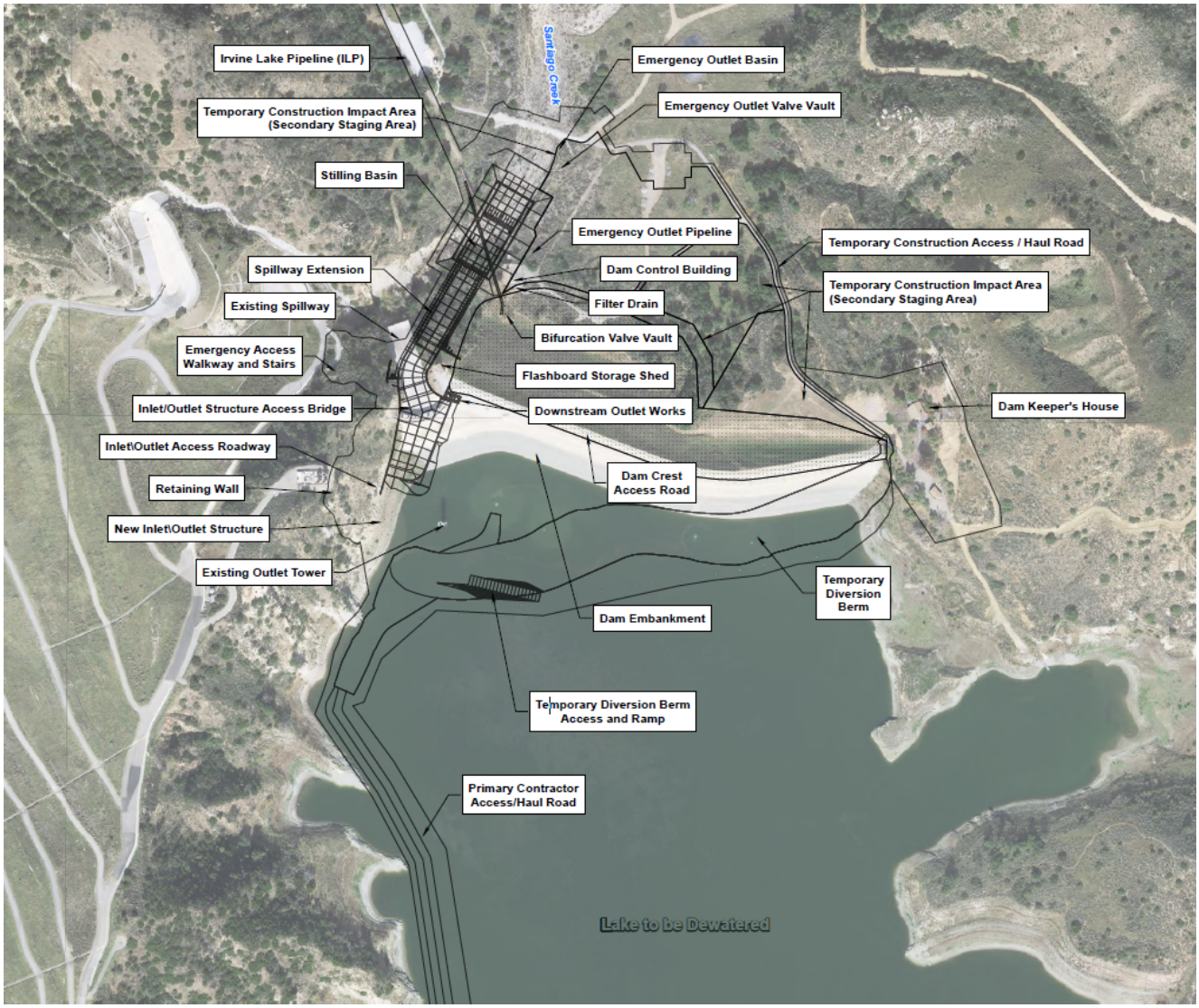


Figure 6: Santiago Dam Construction Features



Figure 7: Santiago Creek Dam and Irvine Lake.



Figure 8: Existing Irvine Dam spillway structure



Figure 9: Santiago Creek Dam embankment



Figure 10: Santiago Creek upstream of Irvine Lake



Figure 11: Upstream of Santiago Creek discharging into Irvine Lake



Figure 12: Santiago Creek below the spillway channel



Figure 13: Santiago Creek at existing Irvine Lake pipeline



Figure 14: Pipe culvert leading into “Drainage 1”



Figure 15: "Drainage 3", concrete and riprap lined tributary to Santiago Creek



Figure 16: "Drainage 4" at access road



Figure 17: “Drainage 5”, northern portion of the Project site



Figure 18: "Drainage 6", southeastern portion of the Project site



Figure 19: "Drainage 7", eastern portion of the Project site



Figure 20: "Drainage 8", eastern portion of the Project site



Figure 21: "Drainage 9", southeastern portion of the Project site



Figure 22: "Drainage 10", southeastern portion of the Project site



Figure 23: "Drainage 11", southeastern portion of the Project site



Figure 24: "Drainage 12", southeastern portion of the Project site



Figure 25: "Drainage 13", southeastern portion of the Project site



Figure 26: "Drainage 14", southeastern portion of the Project site



Figure 27: Downstream end of "Drainage 15", southwestern portion of the Project site

ATTACHMENT B—REPORTS AND NOTIFICATIONS

Copies of this Form
To identify your Project, it is necessary to include a copy of the Project-specific Report and Notification Cover Sheet below with your report (see below). Please retain a copy for your records.

Report Submittal Instructions
1) Check the box on the *Report and Notification Cover Sheet* next to the report or notification you are submitting. a) **Part A** (Annual Report): Submitted annually from the anniversary of the Project effective date until a *Notice of Project Complete Letter* is issued. b) **Part B** (Project Status Notifications): Used to notify the Santa Ana Water Board of the status of the Project schedule that may affect Project billing. 2) Sign the *Report and Notification Cover Sheet* and attach all information requested for the Report Type. 3) Electronic Report Submittal Instructions: a) Submit signed *Report and Notification Cover Sheet* and required information via email to: RB8-401Reporting@waterboards.ca.gov b) Include in the subject line of the email: Order R8-2026-0042 and Report Type Name c) Additionally, electronically submit Annual Reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program website California Integrated Water Quality System Project (CIWQS) | California State Water Resources Control Board. The CIWQS website will provide additional information for report submittal in the event there will be a planned service interruption for electronic submittal.

ATTACHMENT B—REPORTS AND NOTIFICATIONS

Definition of Reporting Terms
1) **Active Discharge Period:** The active discharge period begins with the effective date of this Order and ends on the date that the Discharger receives a *Notice of Completion of Discharges Letter* or, if no post-construction monitoring is required, a *Notice of Project Complete Letter*. The Active Discharge Period includes all elements of the Project, including site construction and restoration, and any Discharger-responsible compensatory mitigation construction. 2) **Request for Notice of Completion of Discharges Letter:** This request by the Discharger to the Santa Ana Water Board staff pertains to projects that have post construction monitoring requirements (e.g., if site restoration were required to be monitored for five (5) years following construction). Santa Ana Water Board staff will review the request and send a *Completion of Discharges Letter* to the Discharger upon approval. This letter will initiate the post-discharge monitoring period and a change in fees from the annual active discharge fee to the annual post-discharge monitoring fee. 3) **Request for Notice of Project Complete Letter:** This request by the Discharger to the Santa Ana Water Board staff pertains to projects that either have completed post-construction monitoring and achieved performance standards or have no post-construction monitoring requirements and no further Project activities are planned. Santa Ana Water Board staff will review the request and send a *Project Complete Letter* to the Discharger upon approval. Termination of annual invoicing of fees will correspond with the expiration or termination by Board action of this Order.

Map/Photo Documentation Information
When submitting maps or photos, please use the following formats. **1. <u>Map Format Information:</u>** Preferred map formats of at least 1:24000 (1” = 2000’) detail (listed in order of preference): • **GIS shapefiles:** The shapefiles shall depict the boundaries of all Project areas and extent of aquatic resources impacted. Each shape should be attributed with the extent/type of aquatic resources impacted. Features and boundaries should be accurate to within 33 feet (10 meters). Identify datum/projection used and, if possible, provide map with a North American Datum of 1983 (NAD83) in the California Teale Albers projection in feet. • **Google KML files** saved from Google Maps: My Maps or Google Earth Pro. Maps shall show the boundaries of all Project areas and extent/type of aquatic resources impacted. Include URL(s) of maps. If this format is used, include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted. • **Other electronic format** (CAD or illustration format) provides a context for location (inclusion of landmarks, known structures, geographic coordinates, or USGS DRG or DOQQ). Maps shall show the boundaries of all Project areas and extent/type of aquatic resources impacted. If this format is used, include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted. **2. Photo-Documentation:** Include a unique identifier, date stamp, written description of photo details, and latitude/longitude (in decimal degrees) or map indicating location of photo. Successive photos should be taken from the same vantage point to compare pre/post-construction conditions.

ATTACHMENT B—REPORTS AND NOTIFICATIONS

Report and Notification Cover Sheet
Project: Santiago Creek Dam Improvement Project
Discharger: Irvine Ranch Water District
Order No.: R8-2026-0042
Order Effective Date: October 23, 2026

Report Type Submitted
☐ **Report Type 1: Annual Report**
☐ **Report Type 2: Commencement of Construction Report**
☐ **Report Type 3: Request for Notice of Completion Discharges Letter**
☐ **Report Type 4: Request for Notice of Project Complete Letter**
☐ **Report Type 5: Transfer of Property Ownership Report**

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

_____

STATEMENT OF AUTHORIZATION (include if authorization has changed since application was submitted)

I hereby authorize_____ to act in my behalf as my representative in the submittal of this report, and to furnish upon request supplemental information in support of this submittal.

_____

Report Type 1	**Annual Report**
Purpose:	Notify the Santa Ana Water Board staff of Project status during both the active discharge and post-discharge monitoring periods.
When to Submit:	The reporting period is from January 1st to December 31st. The Discharger shall submit an annual report each year no later than **January 31st** for the previous reporting period if the Order's effective date is at least 90 days within the reporting period. Annual reports shall continue until a *Notice of Project Complete Letter* is issued to the Discharger.
Report Contents:	**Part A:** 1. Project progress and schedule, including initial ground disturbance, site clearing and grubbing, road construction, site construction, and the implementation status of construction stormwater best management practices (BMPs). If construction has not started, provide estimated start date and reasons for delay. **Part B:** 1. Planned date of initiation of compensatory mitigation site installation. 2. If installation is in progress, a map of what has been completed to date. 3. If the compensatory mitigation site has been installed, provide a final map and information concerning attainment of performance standards contained in the compensatory mitigation plan.

Report Type 2	**Commencement of Construction**
Purpose:	Notify the Santa Ana Water Board staff prior to the start of construction.
When to Submit:	Must be received at least seven days prior to the start of initial ground disturbance activities.
Report Contents:	1. Date of commencement of construction. 2. Anticipated date when discharges to waters of the State will occur. 3. Project schedule milestones, including a schedule for onsite compensatory mitigation, if applicable.

Report Type 3	**Request for Notice of Completion of Discharge Letter**
Purpose:	Notify Santa Ana Water Board staff that post-construction monitoring is required and that active Project construction, including any mitigation and Discharger-responsible compensatory mitigation, is complete.
When to Submit:	Must be received by Santa Ana Water Board staff within 30 days following completion of all Project activities.
Report Contents:	1. Status of storm water Notice of Termination(s), if applicable. 2. Status of post-construction storm water BMP installation, if applicable. 3. Pre- and post-photo documentation of all Project activity sites where the discharge of dredge and/or fill/excavation was authorized. 4. Summary of deviation discharge quantities compared to initial authorized impacts to waters of the State, if applicable. 5. An updated monitoring schedule for restoration for temporary impacts and compensatory mitigation during the post-discharge monitoring period, if applicable.

Report Type 4	**Request for Notice of Project Complete Letter**
Purpose:	Notify Santa Ana Water Board staff that construction and/or any post-construction monitoring is complete, or is not required, and no further Project activity is planned.
When to Submit:	Must be received by Santa Ana Water Board staff within 30 days following completion of all Project activities.
Report Contents:	**Part A: Restoration for Temporary Impacts** 1. A report establishing that the performance standards have been met for Project site. 2. Pre- and post-photo documentation of all restoration sites. **Part B: Discharger-Responsible Compensatory Mitigation** 1. A report establishing that the performance standards outlined in the compensatory mitigation plan have been met.

Report Type 5	**Request for Notice of Project Complete Letter**
	2. Status on the implementation of the long-term maintenance and management plan and funding of endowment. 3. Pre- and post-photo documentation of all compensatory mitigation sites. 4. Final maps of all compensatory mitigation areas (including buffers).

Report Type 6	**Transfer of Property Ownership**
Purpose:	Notify Santa Ana Water staff of change in ownership of the Project or compensatory mitigation area.
When to Submit:	At least 30 working days prior to the transfer of ownership.
Report Contents:	1. A statement that the Discharger has provided the purchaser with a copy of this Order and that the purchaser understands and accepts: • the Order's requirements and the obligation to implement them or be subject to administrative and/or civil liability for failure to do so; and • responsibility for compliance with any long-term BMP or compensatory mitigation requirements in this Order. 2. A statement that the Discharger has informed the purchaser to submit a written request to the Santa Ana Water Board to be named as the Discharger in a revised order.

ATTACHMENT C—SIGNATORY REQUIREMENTS

All Documents Submitted in Compliance With this Order Shall Meet the Following Signatory Requirements

1. All applications, reports, or information submitted to the Santa Ana Water Board shall be signed and certified as follows:

    a. For a corporation, by a responsible corporate officer of at least the level of vice-president.

    b. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.

    c. For a municipality, or a State, federal, or other public agency, by either a principal executive officer or ranking elected official.

2. A duly authorized representative of a person designated in items 1.a through 1.c above may sign documents if:

    a. The authorization is made in writing by a person described in items 1.a through 1.c above.

    b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.

    c. The written authorization is submitted to the Santa Ana Water Board staff contact prior to submitting any documents listed in item 1 above.

3. Any person signing a document under this section shall make the following certification:

    “I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

ATTACHMENT D – COMPLIANCE WITH 40 CODE OF FEDERAL REGULATIONS SECTION 121.7 (D)

The purpose of Attachment D is to comply with 40 Code of Federal Regulations (CFR) section 121.7(d)(1), which requires an explanation of why a condition is necessary to assure that the authorized discharge will comply with water quality requirements and a citation to federal, state, or tribal law that authorizes the condition.

Attachment D includes citations to sources of authority that are applicable to all conditions. These sources are specifically identified where they are most relevant but are also generally applicable to the conditions below. These conditions are generally required to comply with the State Water Recourses Control Board's (State Water Board) *Statement of Policy with Respect to Maintaining High Quality of Waters in California* ("State Antidegradation Policy," State Water Board Resolution No. 68-16), which requires that any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters must "meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the State will be maintained."

All water quality control plans adopted by the nine Regional Water Quality Control Boards and State Water Board (Water Boards) incorporate the State Antidegradation Policy by reference. The State Antidegradation Policy is consistent with the federal Antidegradation Policy (40 CFR § 131.12), which requires "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." According to the U.S. Environmental Protection Agency (U.S. EPA), dischargers of dredged or fill material comply with the federal Antidegradation Policy by complying with U.S. EPA's section 404(b)(1) Guidelines. The State Water Board adopted a modified version of U.S. EPA's section 404(b)(1) Guidelines in the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (also referred to as State Supplemental Guidelines or the Dredged or Fill Procedures).

The State Water Board adopted the Dredged or Fill Procedures on April 2, 2019, which became effective on May 28, 2020. The Dredged or Fill Procedures were adopted pursuant to the State Water Board's authority under Water Code section 13140 (state policy for water quality control) and section 13170 (water quality control plan) and accordingly have regulatory authority. Consistent with Government Code section 11353, a clear and concise summary of the Dredged or Fill Procedures is available in California Code of Regulations, title 23, section 3013. Under the Dredged or Fill Procedures, the permitting authority may only approve a project if the demonstrations set forth in section

IV.B.1 have been made. The information required by section IV.A is necessary to ensure compliance with section IV.B.1. Additionally, California Code of Regulations, title 23, chapter 28 sets forth regulations pertaining to water quality certifications. Section 3856 of title 23 identifies information that must be included in water quality certification requests, including a description of steps that have or must be taken to avoid, minimize, and compensate for impacts to waters of the State.

In addition, the conditions within the Order are required pursuant to the Santa Ana Water Board's Water Quality Control Plan for the Santa Ana River Basin (Basin Plan), and where applicable, statewide water quality control plans and policies including but not limited to the following, which were adopted and are periodically revised pursuant to Water Code section 13240: Water Quality Control Plan for Ocean Waters of California (California Ocean Plan); Water Quality Control Plan for the Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan); Water Quality Control Plan for Enclosed Bays and Estuaries Sediment Quality Provisions; Inland Surface Waters, Enclosed Bays, and Estuaries (ISWEBE) Plan (including the Trash Provisions, Tribal Subsistence Beneficial uses and Mercury Provision, Bacteria Provisions and Variance Policy, etc.); State Antidegradation Policy; Cannabis Cultivation Policy; Water Quality Control Policy for the Enclosed Bays and Estuaries of California; Water Quality Control Policy for Addressing Impaired Waters; Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List; Policy for Regulation of Discharges of Municipal Solid Waste; Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program; Water Quality Control Policy for Recycled Water; Supplemental Environmental Projects Policy (SEP Policy); Sources of Drinking Water Policy; State implementation Policy (SIP); Water Quality Enforcement Policy; and of California Executive Order W-59-93 (Wetlands "No Net Loss" Policy).

The Basin Plan and applicable statewide plans and policies include water quality standards, which consist of existing and potential beneficial uses of waters of the State, water quality objectives to protect those uses, and the state and federal antidegradation policies. For instance, the Basin Plan, to ensure protection of beneficial uses, includes water quality objectives for oil and grease, pH, dissolved oxygen, temperature, toxic substances, solid, suspended, or settleable materials, floating material, turbidity, color, and taste and odor.

I. Discharger Specifications/Prohibitions

Authorization

Several conditions require that the discharge of waste only be as described in the Order. Authorization under this Order is granted based on the Application for

Discharges of Dredged or Fill Material to Waters of the State/United States (Application) information submitted. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Order.

Reporting and Notification Requirements

The technical reports submitted by the project proponent confirm that the best management practices (BMPs) required under this Order are sufficient to protect beneficial uses and water quality objectives. The technical report related to accidental discharges also ensure that corrective actions, if any, that are necessary to minimize the impact or clean up such discharges are taken as soon as possible. These monitoring and reporting conditions are authorized because the Santa Ana Water Board has the authority to investigate the quality of any waters of the State within its region under Water Code sections 13383 and 13267. The burden of preparing these reports, including costs, bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The anticipated costs are minimal as the reporting obligations require only visual monitoring, in-field measurements, and notification reporting.

Authorization under this Order is granted based on the application and supplemental technical information submitted by the project proponent, including the legally responsible party. Conditions regarding transfers are necessary to confirm whether the new owner wishes to assume legal responsibility for compliance with this Order. If not, the original discharger remains responsible for compliance with this Order. Confirmation is also necessary to determine whether liability for long-term BMP maintenance is accepted by another entity. If not, the original discharger remains responsible for compliance with the Order. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Order.

Water Quality Monitoring

General

Several conditions require compliance with the applicable water quality standards. This monitoring condition is authorized because the Santa Ana Water Board has the authority to investigate the quality of any waters of the State within its region under Water Code sections 13383 and 13267. The burden of monitoring, including costs, bears a reasonable relationship to the need for monitoring and the benefits to be obtained from the monitoring. The anticipated monitoring and reporting costs are minimally reasonable as only visual monitoring and in-field measurements are required.

In-Water Work or Diversions

Consistent with the Dredged or Fill Procedures, section IV.A.2.c, water quality monitoring plans are required for any in-water work, including temporary dewatering or diversions. These conditions are required to assure that 1) the discharge shall not adversely affect the beneficial uses of the receiving water or cause a condition of nuisance; 2) the discharge shall comply with all applicable water quality objectives; and 3) treatment and control of the discharge shall be implemented to assure that pollution and nuisance will not occur, and the highest water quality is maintained. A water quality monitoring plan is necessary to conform to water quality standards for oil and grease, dissolved oxygen, pH, turbidity, and temperature. The Santa Ana Water Board's Basin Plan and/or applicable statewide plans and policies contains provisions related to all these constituents.

The monitoring and reporting conditions specified in the Order are authorized because the Water Boards have the authority to investigate the quality of any waters of the State within its region under Water Code sections 13383 and 13267. The burden of preparing these reports, including costs, bears a reasonable relationship to the need for and benefits of the reports. The anticipated costs are minimal as the sampling requirements are either visual or only require a grab sample on a daily and/or weekly basis.

Post-Construction

The technical report(s) confirm that the BMPs required under this Order are sufficient to protect beneficial uses and water quality objectives. These monitoring and reporting conditions are authorized because the Water Boards have the authority to investigate the quality of any waters of the State within its region under Water Code sections 13383 and 13267. The burden of preparing these reports, including costs, bears a reasonable relationship to the need for and benefits of the reports. The anticipated costs are minimal as the reporting obligations require only visual monitoring, in-field measurements, and notification reporting.

Standard Conditions

Code of Regulations, title 23, chapter 28 sets forth regulations pertaining to water quality certifications for point source discharges to waters of the United States. These conditions were included to comply with section 3860 of title 23, which sets forth conditions that must be included in all water quality certifications.

General Compliance with Water Quality Standards

Several conditions require compliance with water quality standards. Permitted actions may not cause a violation of applicable water quality standards, including the water quality objectives and designated beneficial uses in the Santa Ana Water Board's Basin Plan and/or other applicable statewide plans and policies. The Basin Plan's water

quality standards consist of existing and potential beneficial uses of waters of the State, water quality objectives to protect those uses, and the state and federal antidegradation policies. The State Antidegradation Policy requires that the quality of existing high-quality water be maintained unless any change will be consistent with the maximum benefit to the people of the state, will not unreasonably affect present or anticipated future beneficial uses of such water, and will not result in water quality less than that prescribed in water quality control plans or policies. The State Antidegradation Policy further requires best practicable treatment or control of the discharge necessary to ensure that pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the state will be maintained.

Applicable beneficial uses (Basin Plan, Chapter 3, Tables 3-1 and 3-2) and water quality objectives (Basin Plan, Chapter 4, Table 4-1) to protect those uses include the designated beneficial uses and water quality objectives for color, floating materials, oil and grease, dissolved oxygen, pH, solid, suspended, and settleable material, taste and odor, temperature, toxic substances, and turbidity.

Best Management Practices (BMPs)

All the conditions related to BMPs are consistent with the Santa Ana Water Board's authority to establish "[w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area" pursuant to Water Code section 13241(c). The activities authorized under this Order have the potential to result in a discharge that exceeds water quality objectives and work in waters of the State must not cause an exceedance of water quality objectives. As required by Water Code section 13369, all applicable water quality control plans incentivize the use of BMPs to prevent prohibited discharges into waters of the State.

Dewatering

This condition is required to assure that: 1) the discharge shall not adversely affect the beneficial uses of the receiving water or cause a condition of nuisance; 2) the discharge complies with all applicable water quality objectives; and 3) treatment and control of the discharge is implemented to assure that pollution and nuisance will not occur and the highest water quality is maintained. If surface waters or ponded waters were not to be diverted appropriately from areas undergoing grading, construction, excavation, and/or vegetation removal, the waters could be susceptible to erosion and increased sediment loads, contamination and pollution from construction equipment, temperature fluctuations, etc. Dewatered areas must also be stabilized prior to a rainfall event to ensure that the discharge from the proposed Project will comply with water quality objectives established for surface waters.

Site Management

These conditions are necessary to prevent violation of state discharge prohibitions that protect water quality objectives. For instance, fuels and lubricants associated with the

use of mechanized equipment have the potential to result in toxic discharges to waters of the State in violation of water quality standards, including the floating material and toxic substances. Water Code section 13264 prohibits any discharge that is not specifically authorized in the Order.

Hazardous Materials

These conditions are required pursuant to the Basin Plan (toxic substances objective, pages 4-6, 4-20, and 4-26) and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP), which prohibit the discharge of substances in concentrations toxic to human, plant, animal, or aquatic life. Toxic compounds can impair the beneficial uses of cold freshwater habitat, estuarine habitat, marine habitat, preservation of rare and endangered species, fish migration, fish spawning, warm freshwater habitat, and wildlife habitat. Conditions related to toxic and hazardous materials are necessary to assure that discharges comply with any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code. Conditions related to concrete/cement are required, pursuant to the Basin Plan, to ensure that discharges to waters of the State do not adversely rise

In-Water Work

These conditions are required to assure that: 1) the discharge shall not adversely affect the beneficial uses of the receiving water or cause a condition of nuisance; 2) the discharge shall comply with all applicable water quality objectives; and 3) treatment and control of the discharge shall be implemented to assure that pollution and nuisance will not occur, and the highest water quality is maintained. Accordingly, these conditions require implementation of best practicable treatments and controls to prevent pollution and nuisance and to maintain water quality.

Sediment Control and Stabilization/Erosion Control

Conditions related to erosion and sediment control design requirements are required to sustain fluvial geomorphic equilibrium. Improperly designed and installed BMPs result in excess sediment, which impairs surface waters, adversely affects beneficial uses, and results in exceedance of water quality objectives.

Conditions on projects that result in hydromodification to a water of the state are necessary to ensure that the discharge from the project will comply with water quality objectives established for surface waters. Hydromodification is a general term that encompasses effects of projects on the natural hydrologic, geochemical, and physical functions of streams and wetlands that maintain or enhance water quality. Improper project design and installation of any project that result in hydromodification to a water of the state may trigger bank failure and channel incision, which result in excess sediment impacts to downstream beneficial uses.

Stormwater

Conditions related to stormwater management are required to comply with the Basin Plan. Post-rain erosion and sedimentation problems can contribute to significant degradation of the waters of the State; therefore, it is necessary to take corrective action to eliminate such discharges to avoid or minimize such degradation. Implementation of control measures and BMPs described in the condition will assure compliance with water quality objectives, including floating material, temperature, suspended and settleable material, and turbidity.

II. Compensatory Mitigation Requirements

Onsite Restoration for Temporary Impacts

Conditions related to restoration and/or mitigation of temporary impacts are required by the Dredged or Fill Procedures section IV. A.2(d) & B.4.

Compensatory Mitigation for Permanent Impacts

Conditions related to mitigation requirements are required by the Dredged or Fill Procedures, section IV.A.2.b. In addition, section IV.B.1.a of the Dredged or Fill Procedures requires that the Water Boards approve a project only after it has been determined that a sequence of actions has been taken to first avoid, then to minimize, and lastly compensate for adverse impacts that cannot be practicably avoided or minimized (see also State Supplemental Guidelines, § 230.10 [restrictions on discharge]; Cal. Code Regs., tit. 23, § 3856(h), which requires submittal of proposed mitigation and description of steps taken to avoid, minimize, or compensate). Accordingly, compensatory mitigation may be required for projects that would result in permanent impacts.

Conditions regarding compensatory mitigation are necessary to ensure compliance with the state and federal antidegradation policies. Compensatory mitigation conditions are consistent with Executive Order W-59-93, commonly referred to as California's "no net loss" policy for wetlands. Compensatory mitigation requirements are also authorized by Water Code section 13263, which imposes requirements that implement water quality control plans and takes into consideration the beneficial uses to be protected and the need to prevent nuisance.

The condition related to financial securities is necessary to ensure that the Discharger Permittee has sufficient funds to fulfill the compensatory mitigation required (Dredged or Fill Procedures, section IV.B.5.f).

III. Provisions

"A copy of this Order shall be available at the Project site(s) during construction…" This condition requires site personnel and agencies to be familiar with

the content of the Order and mandate availability of the document at the Project site. This condition is required to ensure that any authorized discharge will comply with the terms and conditions of the Order.

"This Order is not transferable to any person without written approval…"
"Before initiating a new discharge or making a material change in the character, location, or volume of an existing discharge…"
Authorization under this Order is granted based on the Application information submitted, including the legally responsible party. Conditions regarding transfers are necessary to confirmwhether the new owner wishes to assume legal responsibility for compliance with this Order. If not, the original discharger remains responsible for compliance with this Order. Confirmation is also necessary to determine whether liability for long-term BMP maintenance is accepted by another entity. If not, the original permittee remains responsible for compliance with the Order. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Order.

"This Order is subject to modification or revocation …"
These conditions are necessary to ensure that any discharge authorized will comply with water quality requirements. Water quality requirements include state regulatory requirements for point source discharges into waters of the United States. California Code of Regulations, title 23, chapter 28 sets forth regulations pertaining to water quality certifications for point source discharges to waters of the United States. These conditions were included to comply with section 3860 of title 23, which sets forth conditions that must be included in all water quality certifications.

Site Access

Conditions related to site access are authorized pursuant to the Water Boards' authority to investigate the quality of any waters of the State within its region under Water Code sections 13383 and 13267. Water Code section 13267(c) provides that "the regional board may inspect the facilities of any person to ascertain whether the purposes of this division are being metand waste discharge requirements are being complied with."

Reporting and Notification

The various monitoring and reporting requirements are necessary to confirm that the best management practices (BMPs) required under this Order are protecting beneficial uses and water quality objectives. The reports related to accidental discharges also ensure that corrective actions, if any, that are necessary to minimize the impact or clean up such discharges are taken as soon as possible. These monitoring and reporting conditions are authorized because the Santa Ana Water Board has the authority to investigate the quality of any waters ofthe State within its region under Water Code sections 13383 and 13267. The burden of preparing these reports, including costs, bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The anticipated costs are minimal as the reporting obligations

require only visual monitoring, in-field measurements, and notification reporting.

Signatory Requirements

Conditions related to signatory requirements are also authorized by Water Code sections 13383 and 13267, which requires any person discharging waste that could affect the quality of waters to provide to the Water Boards, under penalty of perjury, and any technical or monitoring program reports as required by the Water Boards. The signatory requirements are consistent with 40 CFR section 122.22.