STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for the

California Department of Water Resources 2021 Emergency Drought Salinity Barrier Project

Source: Sacramento – San Joaquin Delta

County: Contra Costa

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

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1.0 Introduction

The California Department of Water Resources (DWR) is proposing to implement the 2021 Emergency Drought Salinity Barrier Project (Project). The Project consists of installation of a temporary emergency drought salinity barrier across West False River in the Sacramento-San Joaquin Delta (Delta). The barrier will be constructed of embankment rock (riprap). The purpose of the Project is to control saltwater intrusion into the Central and south Delta and conserve water in upstream reservoirs for other uses. Pursuant to Clean Water Act section 401, the State Water Resources Control Board (State Water Board) has authority to consider whether a proposed activity involving a discharge to navigable waters complies with applicable water quality standards and other appropriate requirements of state law and to issue a water quality certification if those requirements will be met. The State Water Board concludes that, as conditioned herein, water quality certification may be issued.

During drought conditions, the release of water stored in upstream reservoirs may be insufficient to repel salinity moving upstream from San Francisco Bay. According to DWR's analyses, without the protection of the drought salinity barrier, saltwater intrusions could render Delta water unusable for agricultural needs, reduce habitat value for aquatic species, and affect roughly 25 million Californians who rely on the export of this water for personal use. Installation of the temporary rock barrier at West False River would limit salinity intrusion into the Central and south Delta and would potentially conserve water for a variety of uses system-wide.

On May 10, 2021, California Governor Gavin Newsom issued a Proclamation of State of Emergency (May 2021 Proclamation) due to drought conditions and directed DWR, among other things, to implement plans that address potential Delta salinity issues, including installation and removal of emergency drought salinity barriers as needed. The May 2021 Proclamation mandates that such emergency barriers be designed to conserve water for use later in the year to meet state and federal Endangered Species Act requirements, preserve to the extent possible water quality in the Delta, and retain water supply for human health and safety uses. The State Water Board and the California Department of Fish and Wildlife (CDFW) are also directed to immediately consider any necessary regulatory approvals needed to install emergency drought salinity barriers. Additionally, the May 2021 Proclamation suspends Water Code section 13247, which requires state agencies to comply with water quality control plans approved by the State Water Board, and suspends the California Environmental Quality Act (CEQA) for purpose of implementing actions such as the Project.

Installation and removal of the Project will require a permit from the United States Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act. DWR is seeking emergency authorization under USACE's Regional General Permit (RGP) 8 – Emergency Repair and Protection Activities.

2.0 Project Description

The Project will be located on West False River approximately 0.4 mile east of its confluence with the San Joaquin River, in Contra Costa County. The barrier will be constructed between Jersey and Bradford Islands, approximately 4.8 miles northeast of the City of Oakley, at the same site and in the same alignment as the emergency drought barrier installed in 2015 (See Figure 1). The approximately 800-foot-long rock barrier would be trapezoid-shaped, with an approximately 200-foot-wide base (in water) tapering to an approximately 12-foot-wide top (above water), set perpendicular to the channel (See Figure 2). The barrier would consist of approximately 84,000 cubic yards of well-graded embankment rock no larger than 18 inches in diameter, which would extend from the Jersey Island levee on the south side to the Bradford Island levee on the north side.

The Project is not designed to allow fish passage. While the drought salinity barrier is in place, fish could move through the adjacent San Joaquin River and other channels including Fisherman's Cut, East False River, and Dutch Slough.

Vessel traffic through West False River will be blocked at the Project site. However, alternative routes are available via the Lower San Joaquin River and the Stockton Deep Water Ship Channel in the San Joaquin River for navigation between Antioch and eastern Delta locations, or via Fisherman's Cut or East False River for navigation to south Delta destinations. DWR will install signs on each side of the barrier and float lines with orange ball floats across the width of the channel to deter boaters from approaching the barrier. Solar-powered warning buoys with flashing lights would be installed on the barrier crest to prevent nighttime accidents. DWR will post signs at upstream and downstream entrances to the waterway or other key locations, informing boaters of the restricted access. Navigation signage would comply with the requirements set forth by the United States Aids to Navigation System and the California Waterway Marker System, as appropriate. DWR will coordinate with U.S. Coast Guard District 11 and the California Department of Parks and Recreation, Division of Boating and Waterways, regarding procedures for safe vessel passage. DWR or its contractor will post a notice to mariners, which would include information on the location, date, and duration of channel closure, and would provide copies of the notice to marinas throughout the Delta.

DWR anticipates starting construction as soon as possible and completing installation of the barrier by no later than July 1, 2021. Removal of the barrier would be completed no later than November 30, 2021. Details on the barrier construction and removal can be found in Section 2.2 – Project Description of DWR's application for water quality certification.

3.0 Water Rights and Temporary Urgency Change Petition

In State Water Board Revised Decision 1641 (D-1641), the State Water Board amended the water right license and permits of DWR and the United States Bureau of Reclamation (Reclamation) for the State Water Project (SWP) and the Central Valley

Project (CVP) to require them to meet certain water quality objectives in the Water Quality Control Plan for the San Francisco Bay/Sacramento—San Joaquin Delta Estuary (Bay-Delta Plan) designed to protect fish and wildlife, municipal and industrial, and agricultural use in the San Francisco Bay/Sacramento San Joaquin Delta (Bay-Delta). Specifically, D-1641 places responsibility on DWR and Reclamation for the implementation of measures to ensure that specified water quality objectives in the Bay-Delta Plan, included in Tables 1, 2, and 3 of D-1641, are met, in addition to other requirements.

On May 17, 2021, DWR and Reclamation (collectively, Petitioners) filed a Temporary Urgency Change Petition (May 17 TUCP) with the State Water Board pursuant to Water Code section 1435 et seq. in order to address critically dry conditions in the Bay-Delta. The May 17 TUCP requests that the State Water Board temporarily change the Petitioners' permit and license terms for the SWP and CVP. Specifically, the May 17 TUCP requests temporary changes to conditions imposed pursuant to D-1641 that requires the Petitioners to meet specified flow and water quality objectives established in the Bay-Delta Plan. Unless renewed, the changes sought by a TUCP may remain in effect for 180 days. The Petitioners are expected to submit an additional TUCP later this summer that will propose changes during the fall and winter time period.

The May 17 TUCP seeks modifications to Petitioners' permit and license terms that apply from June through August 15 that, if approved, will: (1) change the minimum Net Delta Outflow Index (NDOI) in June and July from an average of 4,000 cubic feet per second (cfs) to an average of 3,000 cfs with a 14-day running average in June and a monthly average in July (7-day running average in July of no less than 2,000 cfs); (2) limit the combined maximum export rate in June and July to no greater than 1,500 cfs when Delta outflow is below 4,000 cfs, and allow the 1,500 cfs limit to be exceeded when the Petitioners are meeting Delta outflow requirements pursuant to D-1641 or for moving transfer water (after July 1); and (3) change the Western Delta agricultural salinity requirement compliance location on the Sacramento River at Emmaton to a compliance location at Threemile Slough on the Sacramento River from June through August 15. According to the Petitioners, these changes would allow management of reservoir releases on a pattern that conserves upstream storage for fish and wildlife protection and Delta salinity control while providing critical water supply needs.

4.0 Regulatory Authority

4.1 Water Quality Certification and Related Authorities

The federal Clean Water Act (33 U.S.C. §§ 1251-1388) was enacted "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." (33 U.S.C. § 1251(a).) The Clean Water Act relies significantly on state participation and support in light of "the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution" and "plan the development and use" of water resources. (33 U.S.C. § 1251(b).) Section 101 of the Clean Water Act (33 U.S.C. § 1251(g)) requires federal agencies to "co-operate with State and local agencies to develop

comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources."

Section 401 of the Clean Water Act (33 U.S.C. § 1341) requires any applicant for a federal license or permit that may result in a discharge into navigable waters to provide the licensing or permitting federal agency with certification that the project will comply with specified provisions of the Clean Water Act, including water quality standards promulgated pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313). Clean Water Act section 401 directs the agency responsible for certification to set effluent limitations and other conditions necessary to ensure compliance with the Clean Water Act and with "any other appropriate requirement of State law." (33 U.S.C. § 1341(d).) Section 401 further provides that water quality certification conditions shall become conditions of any federal license or permit for the project.

The State Water Board is the state agency responsible for Clean Water Act section 401 certification in California. (Wat. Code, § 13160.) The State Water Board has delegated authority to act on applications for water quality certification to the Executive Director of the State Water Board. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

Water Code section 13383 authorizes the State Water Board to "establish monitoring, inspection, entry, reporting, and recordkeeping requirements" and obtain "other information as may be reasonably required" for activities subject to certification under section 401 of the Clean Water Act. The State Water Board delegated this authority to the Deputy Director of the Division of Water Rights (Deputy Director) for certain activities subject to water quality certification, as provided for in State Water Board Resolution No. 2012-0029 (State Water Board 2012). In the *Redelegation of Authorities Pursuant to Resolution No. 2012-0029* memo issued by the Deputy Director on October 19, 2017, this authority is redelegated to the Assistant Deputy Directors of the Division of Water Rights (State Water Board 2017).

On May 14, 2021, DWR filed an application for water quality certification with the State Water Board under section 401 of the Clean Water Act, in connection with its application to the USACE, filed the same day, under section 404 of the Clean Water Act for an emergency authorization (RGP 8).

State Water Board staff provided public notice of the application for section 401 water quality certification pursuant to California Code of Regulations, title 23, section 3858, by posting notice of DWR's application and information describing the Project on the State Water Board's website on May 17, 2021. Notice was sent to interested persons through the State Water Board's email subscription list.

On May 19, 2021, State Water Board staff provided the Central Valley Regional Water Quality Control Board (Central Valley Regional Water Board) an opportunity to comment on the Project certification.

4.2 Water Quality Control Plans and Related Authorities

The nine California Regional Water Quality Control Boards (Regional Water Boards) have primary responsibility for the formulation and adoption of water quality control plans for their respective regions, subject to State Water Board and United States Environmental Protection Agency approval, as appropriate. (Wat. Code, § 13240 et seq.) The State Water Board may also adopt water quality control plans, which will supersede regional water quality control plans for the same waters to the extent of any conflict. (*Id.*, § 13170.)

For a specified area, water quality control plans designate the beneficial uses of water that are to be protected (such as municipal and industrial, agricultural, and fish and wildlife beneficial uses), water quality objectives for the reasonable protection of the beneficial uses and the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (Wat. Code, §§ 13241, 13050, subds. (h), (j).) The water quality control plans are consistent with state and federal antidegradation policies. The beneficial uses, together with the water quality objectives contained in the water quality control plans, and applicable anti-degradation requirements, constitute California's water quality standards for purposes of the Clean Water Act.

The State Water Board's water quality certification for the Project must ensure compliance with the water quality standards in the Central Valley Regional Water Board's Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin (SR/SJR Basin Plan) (Central Valley Regional Water Board, 2018) and the Bay-Delta Plan (State Water Board, 2018). The two plans were adopted and are periodically revised pursuant to Water Code section 13240.

4.2.1. Sacramento and San Joaquin Rivers Basin Plan

The Central Valley Regional Water Board's SR/SJR Basin Plan designates the beneficial uses of water to be protected along with the water quality objectives necessary to protect those uses. The beneficial uses include: municipal and domestic supply; agriculture irrigation and stock watering; municipal and domestic supply; industrial process and service supply; hydropower generation; canoeing and rafting, water contact and non-contact recreation; warm and cold freshwater habitat; warm and cold migration of aquatic organisms; warm and cold spawning habitat; wildlife habitat; and navigation. The SR/SJR Basin Plan identifies water quality objectives to protect these beneficial uses, including but not limited to: chemical constituents; color; dissolved oxygen; oil and grease; pH; salinity; sediment; settleable material; suspended material; temperature; toxicity; and turbidity.

4.2.2. Bay-Delta Plan

The Bay-Delta Plan establishes water quality objectives to protect beneficial uses of water in the Bay-Delta and tributary watersheds, including drinking water supply, irrigation supply, and fish and wildlife. The State Water Board adopts the Bay-Delta Plan pursuant to its authorities under the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) and the federal Clean Water Act (33 U.S.C. § 1313).

The State Water Board has historically developed the water quality control plan for the Bay-Delta for several reasons. The Bay-Delta is a critically important natural resource that is both the hub of California's water supply system and the most valuable estuary and wetlands system on the West Coast. Because diversions of water within and upstream of the Bay-Delta are a driver of water quality in the Bay-Delta watershed, much implementation of the Bay-Delta Plan relies on the combined water quality and water right authority of the State Water Board. In addition, the Bay-Delta falls within the boundaries of two Regional Water Boards. Having the State Water Board develop and adopt a water quality control plans that crosses Regional Water Boards' boundaries ensures a coordinated approach.

The beneficial uses in the Bay-Delta Plan are: municipal and domestic supply; industrial service supply; industrial process supply; agricultural supply; groundwater recharge; navigation; water contact recreation; non-contact water recreation; shellfish harvesting; commercial and sport fishing; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; estuarine habitat; wildlife habitat; and rare, threatened, or endangered species. The Bay-Delta Plan is complementary to the SR/SJR Basin Plan, providing reasonable protection for the beneficial uses that require control of salinity and water project operations (flows and diversions). The Bay-Delta Plan supersedes the SR/SJR Basin Plan to the extent there is any conflict.

4.3 Clean Water Act Section 303(d) Listing

The Delta waterways are listed as impaired under Clean Water Act section 303(d) for chlordane, dichlorodiphenyltrichloroethane, diazinon, dieldrin, mercury, polychlorinated biphenyls, and unknown toxicity. Section 303(d) requires total maximum daily loads (TMDLs) to be developed for impaired waterbodies. TMDLs are control programs that define the maximum amount of a pollutant that a waterbody can receive without exceeding water quality standards and establish waste load allocations and load allocations for point and nonpoint sources of pollution, respectively.

4.4 Construction General Permit

Construction and Land Disturbance Activities (Construction General Permit)¹ is required for discharges of pollutants associated with construction activities that disturb one or more acres of soil or activities that disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility. Coverage is required pursuant to Clean Water Act sections 301

¹ Water Quality Order No. 2009-0009-DWQ NPDES No. CAS000002, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. Available online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html Last accessed: May 19, 2021.

and 402 which prohibit certain discharges of stormwater containing pollutants except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. (33 U.S.C. §§ 1311, 1342(p); 40 C.F.R. pts. 122, 123, and 124.)

4.5 Statewide Mercury Provisions

On May 2, 2017, the State Water Board adopted Resolution No. 2017-0027, which approved Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions². Resolution No. 2017-0027 provides a consistent regulatory approach throughout the state by setting mercury limits to protect the beneficial uses associated with the consumption of fish by both people and wildlife. The State Water Board also established three new beneficial use definitions (tribal traditional culture, tribal subsistence fishing, and subsistence fishing) for use by the State Water Board and Regional Water Boards. The State Water Board also approved one narrative and four numeric mercury objectives to apply to inland surface waters, enclosed bays, and estuaries of the state that have any of the following beneficial use definitions: commercial and sport fishing, tribal traditional culture, tribal subsistence fishing, wildlife habitat, marine habitat, preservation of rare and endangered species. warm freshwater habitat, cold freshwater habitat, estuarine habitat, or inland saline water habitat, with the exception of waterbodies or waterbody segments with site-specific mercury objectives. These provisions will be implemented through NPDES permits, certifications, waste discharge requirements, and waivers of waste discharge requirements.

4.6 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State

On April 2, 2019, the State Water Board adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Dredge or Fill Procedures)³, which became effective on May 28, 2020. The Dredge or Fill Procedures provide the Water Boards' definition of wetland, wetland delineation procedures, and procedures for submitting applications for activities that could result in discharges of dredged or fill material to waters of the state. The Dredge or Fill Procedures ensure that State Water Board regulatory activities will result in no net loss of wetland quantity, quality, or permanence, compliant with the *California Wetlands Conservation Policy*, Executive Order W-59-93. DWR may implement section IV of the Dredge or Fill Procedures when conducting dredge or fill activities that may impact waters of the state, including wetlands.

https://www.waterboards.ca.gov/water_issues/programs/mercury/. Last accessed on May 19, 2021.

² The provisions are available online at:

³ The Dredge or Fill Procedures are available online at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf. Last accessed on May 19, 2021.

4.7 Aquatic Weed Control General Permit

The Statewide National Pollutant Discharge Elimination System Permit for Residual Aquatic Pesticide Discharges to Waters of the United States from Algae and Aquatic Weed Control Applications (Aquatic Weed Control General Permit)⁴ applies to projects that require aquatic weed management activities. The Aquatic Weed Control General Permit sets forth detailed management practices to protect water quality from pesticide and herbicide use associated with aquatic weed control.

5.0 California Environmental Quality Act

CEQA applies to discretionary projects that may cause a direct or indirect physical change in the environment. (Pub. Resources Code, § 21000 et seq.). When proposing to undertake or approve a discretionary project, state agencies must comply with the procedural and substantive requirements of CEQA. Ordinarily, the State Water Board must comply with any applicable requirements of CEQA prior to issuance of a water quality certification. Governor Newsom's May 2021 Proclamation suspends CEQA and regulations adopted pursuant to CEQA for purposes of carrying out various directives, including this Project. The State Water Board will file a Notice of Exemption with the State Clearinghouse within five days of issuing this certification.

6.0 Rationale for Water Quality Certification Conditions

6.1 Overview

Section 6.0 of the certification provides an explanation of why the conditions in Section 8.0 are necessary to assure that any discharge authorized under the certification will comply with water quality requirements, and, as necessary, includes a citation to federal, state, or tribal law that authorizes the condition. Section 4.0 also sets forth citations to applicable regulatory authority. The explanation and citations should be evaluated in the context of the water quality certification as a whole, but the water quality certification conditions are set forth only in Section 8.0.

Pursuant to Clean Water Act section 401 and California Code of Regulations, title 23, section 3859, subdivision (a), the State Water Board, when issuing water quality certifications, may set forth conditions to ensure compliance with applicable water quality standards and other appropriate requirements of state law. Under California Water Code section 13160, the State Water Board is authorized to issue water quality certifications under the Clean Water Act and has delegated this authority to the Executive Director. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

As explained in Section 4.0, the conditions in the certification are generally required pursuant to the Central Valley Regional Water Board's SR/SJR Basin Plan and the

Water Quality Order No. 2013-0002-DWQ and NPDES No. CAG990005, as amended by Order No. 2014-0078-DWQ, Order No. 2015-0029-DWQ, Order No. 2016-0073-EXEC, and any amendments thereto. Available online at: https://www.waterboards.ca.gov/water_issues/programs/npdes/pesticides/weed_contr ol.html. Last accessed: May 19, 2021. State Water Board's Bay-Delta Plan. These plans are adopted and periodically revised pursuant to Water Code section 13240. Water quality control plans 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 SR/SJR Basin Plan includes water quality objectives for chemical constituents, oil and grease, pH, sediment, suspended material, toxicity and turbidity, which ensure protection of beneficial uses.

The State Water Board's Antidegradation Policy, "Statement of Policy with Respect to Maintaining High Quality Waters in California," Resolution No. 68-16, 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 Antidegradation Policy further requires best practicable treatment or control of the discharge necessary to assure 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. The state Antidegradation Policy incorporates the federal Antidegradation Policy (40 C.F.R. section 131.12 (a)(1)), which requires "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."

The Dredge or Fill Procedures, adopted pursuant to Water Code sections 13140 and 13170, authorize approval of dredge or fill projects subject to satisfaction of specified requirements.

California Code of Regulations, title 23, sections 3830 et seq. set forth state regulations pertaining to water quality certifications. In particular, section 3856 sets forth information that must be included in water quality certification requests, and section 3860 sets forth standard conditions that shall be included in all water quality certification actions.

Water Code sections 13267 and 13383 authorize the Regional Water Boards and State Water Board to establish monitoring and reporting requirements for persons discharging or proposing to discharge waste. Moreover, this water quality certification ensures continued monitoring, reporting, and assessment of water quality for discharges that may impact Delta quality, including waterways listed as impaired under Clean Water Act section 303(d). Data from this water quality certification and other monitoring efforts are used to inform existing control programs in the Delta.

Authorization under the water quality certification is granted based on the application submitted. An applicant is required to detail the scope of project impacts in a complete application pursuant to California Code of Regulations, title 23, section 3856, subdivision (h). Pursuant to Water Code section 13260, subdivision (c), each person discharging waste, or proposing to discharge waste shall file a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge. Pursuant to Water Code section 13264, subdivision (a), a permittee is

prohibited from initiating the discharge of new wastes, or making material changes to the character, volume, and timing of waste discharges authorized herein without filing a report required by Water Code section 13260 or its equivalent for certification actions under California Code of Regulations, title 23, section 3856. (See also State Water Board Water Quality Order No. 2003-0017-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification.)

The conditions in this water quality certification were developed to ensure compliance with water quality standards and water quality requirements established under the Porter-Cologne Water Quality Control Act, the federal Clean Water Act, including requirements in the SR/SJR Basin Plan and Bay-Delta Plan, and other appropriate requirements of state law. The conditions are necessary to protect the beneficial uses of water identified in the water quality control plans, prevent degradation of water quality, and ensure compliance with state and federal water quality requirements.⁵

When preparing this certification, State Water Board staff reviewed and considered the: (1) SR/SJR Basin Plan; (2) Bay-Delta Plan; (3) DWR's May 14, 2021 water quality certification application and supplemental information; (4) DWR's May 14, 2021 application to the USACE for a Clean Water Act section 404 RGP 8 (emergency activities); (5) DWR's 2021 Emergency Drought Salinity Barrier – Monitoring Plan; (6) existing water quality conditions; (7) Project-related controllable factors; (8) May 2021 Proclamation; and (9) other information in the record.

6.2 Rationale for Condition 1: Monitoring, Analysis, and Reporting

Water quality monitoring, analysis, and reporting conditions are required to confirm that requirements of this water quality certification are sufficient to protect beneficial uses and to comply with water quality objectives to protect those uses under the SR/SJR Basin Plan, Bay-Delta Plan, and other appropriate requirements of state law. These monitoring requirements are consistent with the Water Boards' authority to investigate the quality of any waters of the state and require necessary monitoring and reporting pursuant to Water Code sections 13267 and 13383.

The Project involves rock fill and excavation of the barrier, operation of construction equipment, and staging areas. These activities have the potential to violate the SR/SJR Basin Plan and Bay-Delta Plan water quality objectives or otherwise fail to comply with appropriate requirements of state law. Condition 1 requires DWR to comply with applicable objectives and implement its water quality monitoring program, as modified by this certification, to prevent water quality objective violations and impacts to beneficial uses. As discussed in Section 3.0, DWR's obligations under its water right to meet water quality requirements may be modified through the temporary urgency change petition (TUCP) process. Condition 1 requires compliance with Project-related water quality requirements as they may be modified through the TUCP process. The

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⁵ Designated beneficial uses for surface waters in the Project area are described in Section 4.2 of this water quality certification and in the applicable water quality control plans.

modifications and additions to DWR's water quality monitoring program included in this water quality certification further ensure that the Project will not substantially impact water quality.

Turbidity and Settleable Matter. Fill and excavation, and other in-water or wateradjacent work may increase turbidity and sediment above levels protective of beneficial uses. Beneficial uses in the Delta that would be most impacted by increased turbidity levels include cold freshwater habitat, cold migration of aquatic organisms, and wildlife habitat. Turbidity affects fish by impairing vision and altering feeding behavior, predator avoidance, and behavioral interaction with other fish. The SR/SJR Basin Plan prescribes numeric turbidity limits based on natural turbidity levels. The SR/SJR Basin Plan allows appropriate averaging periods to be applied when determining compliance with the turbidity limits, provided that beneficial uses will be protected. Condition 1 requires compliance with the SR/SJR Basin Plan's turbidity and settleable matter limits averaged over 24 hours during in-water and water-adjacent work.

Flow, Temperature, and Salinity. Operation of the temporary rock barrier across West False River could impact flow, temperature, and salinity of Delta waters. Condition 1 requires monitoring those water quality parameters to ensure beneficial uses in the Delta are protected.

Ecological Effects. Previous studies have characterized the effect of the emergency drought barrier installed in 2015 on the Delta ecosystem (Kimmerer et al., 2019). The synthesis was based on retrospective analyses that had to rely on reference conditions that were not always suitable for identifying the barrier's effects. The authors recommended that any study to evaluate the effects of a future barrier should include adequate replication to ensure that suitable reference conditions are available to distinguish the variability between the barrier impacts and other sources of variability. Topics evaluated in the study included movement of water and particles, zooplankton, submerged aquatic vegetation, water quality, nutrients and phytoplankton, and bivalves.

Despite synthesis limitations (i.e., retrospective analyses), the authors were able to conclude that the observed effects of the barrier were as expected (i.e., hydrodynamics, submerged aquatic vegetation, and bivalves) or smaller than expected (i.e., nutrients, phytoplankton, and zooplankton). Overall, the synthesis found evidence of reduced tidal currents and exchange of salts between the west and Central Delta, altered patterns of salinity, increased distribution and abundance of submerged aquatic vegetation, increased penetration of *Potamocorbula* (very small saltwater clams) into the Delta, increased grazing by bivalves, and increased bivalve recruitment near the Sacramento and San Joaquin rivers confluence. The effects were found to be localized (e.g., around False River and Franks Tract) rather than at the entire northern estuary scale. While most effects were likely short-term, the study found evidence that the barrier may have lasting impacts to submerged aquatic vegetation and bivalves.

The synthesis recommended that any future research for barrier impacts should focus on the most likely effects (e.g., circulation patterns, submerged aquatic vegetation, and bivalves) and topics that could have important consequences like cyanobacterial

blooms. The collection and synthesis of such information is necessary to understand how installation, operation, and removal of the barrier affects parameters (e.g., vegetation growth, circulation, and flow) that directly impact water quality (e.g., cyanobacteria, salinity) and beneficial uses. This monitoring, synthesis, and associated reporting will provide information on the Project's protection of beneficial uses, including, but not limited to: warm and cold freshwater habitat; warm and cold migration of aquatic organisms; wildlife habitat; cold freshwater habitat; and migration of aquatic organisms.

6.3 Rationale for Condition 2: Project Activities

As described in Section 6.1, this water quality certification is granted based on the application and supporting information submitted in accordance with the State Water Board's regulations and subject to requirements of the Porter-Cologne Water Quality Control Act. Condition 2 requires DWR to implement the Project as described in its certification application and as modified by this water quality certification. Any changes to the Project description after water quality certification issuance could impact the findings, conclusions, and conditions of the water quality certification and may necessitate the filing of a new application. Condition 2 requires DWR comply with the Construction General Permit, described in Section 4.4, to ensure that construction-related Project activities do not impact water quality and beneficial uses. This condition will ensure that DWR meets water quality objectives and avoids unreasonable impacts to beneficial uses.

DWR has identified the need for compensatory mitigation for the Project. The Project will result in the loss of approximately three acres of fish habitat. Condition 2 regarding compensatory mitigation for impacts ensures physical loss and ecological degradation of waters of the state are adequately mitigated. The condition is necessary to ensure compliance with state and federal anti-degradation policies and applicable requirements of state law. Condition 2 requires DWR to develop and implement a plan for compensatory mitigation.

In addition, as explained above, in in D-1641, the State Water Board imposed requirements on DWR and Reclamation to meet certain water quality objectives in the Bay-Delta Plan. The Petitioners have filed a TUCP to temporarily amend D-1641's requirements to meet certain water quality objectives. If the TUCP is approved, DWR will be required to comply with the terms of the TUCP order, including as it may be extended or amended, which may include compliance with applicable state water quality requirements as they are in effect during the drought emergency. Condition 2 requires Project activities to comply with all applicable water quality requirements in connection with the May 17 TUCP, as it may be extended or amended, including those related to controlling saltwater intrusion in the Delta.

6.4 Rationale for Condition 3: Erosion and Sedimentation Control Measures

Project activities have the potential to cause increased erosion and sedimentation in the Project area. Erosion and sedimentation problems can contribute to significant degradation of the waters of the state; therefore, it is necessary to implement actions to limit or eliminate such discharges in order to avoid or minimize such degradation.

Implementation of control measures and best management practices will assure compliance with water quality objectives and protect beneficial uses identified in the SR/SJR Basin Plan and Bay-Delta Plan. Beneficial uses in West False River that would be most impacted by increased erosion and sedimentation include cold freshwater habitat and wildlife habitat. Condition 3 requires DWR to implement erosion and sedimentation control measures to prevent water quality objective violations and unreasonable impacts to beneficial uses. Condition 3 also includes a post-installation erosion monitoring component to ensure the work area and materials do not cause erosion.

6.5 Rationale for Condition 4: Hazardous Material Control Measures

Conditions related to site management require best practices to prevent, minimize, and/or clean up potential construction spills, including from construction equipment. 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 toxicity and floating material water quality objectives. This condition is also required pursuant to Water Code section 13264, which prohibits any discharge that is not specifically authorized in this water quality certification.

The SR/SJR Basin Plan includes narrative water quality objectives for oil, grease, and other hazardous materials. Waters must be free of hazardous materials in concentrations that cause nuisance or "detrimental physiological responses in human, plant, animal, or aquatic life." (Central Valley Regional Water Board, 2018). Beneficial uses in the Delta that would be most impacted by hazardous materials include contact water recreation, cold freshwater habitat, and wildlife habitat. Condition 4 requires development and implementation of a hazardous materials management program to prevent hazardous material spills into waterways, including containment criteria pursuant to California Code of Regulations, title 27, section 20320.

6.6 Rationale for Condition 5: Project Activity Progress Reports

Condition 5 requires DWR to submit Project Activity Progress Reports (Progress Reports) during construction to document Project status and compliance with water quality certification requirements. The Progress Reports will inform the Deputy Director of potential water quality objective violations or impacts to beneficial uses. This will allow quick implementation of remediation measures to limit or prevent any violations or impacts.

6.7 Rationale for Conditions 6 through 25

This water quality certification imposes additional conditions regarding Project approvals, monitoring, enforcement, and potential future revisions. Conditions 6-9, 12-14, 17-19, and 21-22 are necessary to ensure that the Project is implemented to meet water quality standards and other appropriate requirements of state law, or that adjustments are made to ensure continued compliance with water quality requirements in light of new information, changes to the Project, determinations of invalidity or waiver, or changes to standards themselves. Conditions 11, 15, 16, and 20 contain important clarifications concerning the scope and legal effect of this certification, and other legal

requirements that may apply to the Project. In addition, Condition 10 is necessary to comply with Water Code section 13167 and Conditions 23-25 are required by California Code of Regulations, title 23, section 3860, which requires imposition of these conditions for all certifications.

7.0 Conclusion

The State Water Board finds that, with the conditions and limitations imposed under this water quality certification, the Project will be protective of state water quality standards and other appropriate requirements of state law.

8.0 Water Quality Certification Conditions

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES that implementation of the 2021 Emergency Drought Salinity Barrier (Project) will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if the California Department of Water Resources (Applicant) complies with the following terms and conditions.

CONDITION 1. Monitoring, Analysis, and Reporting

The Applicant shall monitor, analyze, and report on water quality and related monitoring associated with Project activities as outlined in this condition. Project activities include the construction, operation and maintenance, and removal of the Project. The Applicant shall implement its 2021 Emergency Drought Salinity Barrier – Monitoring Plan (Monitoring Plan), dated May 2021⁶, except as modified by the conditions of this water quality certification or otherwise approved by the Deputy Director of the Division of Water Rights (Deputy Director).

Turbidity and Settleable Matter.

- Turbidity: Waters shall be free of changes in turbidity (due to Project activities)
 that cause nuisance or adversely affect beneficial uses. Increases in turbidity
 attributable to the Project shall not exceed the following limits: except for periods
 of storm runoff, the turbidity of Delta waters shall not exceed 50 nephelometric
 turbidity units (NTUs) in the waters of the Central Delta and 150 NTUs in other
 Delta waters.
- Settleable Matter: Activities shall not cause settleable matter to exceed
 0.1 milliliters per liter (ml/l) in surface waters.

In determining compliance with the limits shown above for turbidity and settleable matter, a 24-hour averaging period may be applied provided that three consecutive samples do not exceed the given limits. Minimum grab sampling frequency shall be three times per day during disturbance to the bed and bank of the Delta associated with construction of the Project. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The Applicant shall take samples 300 feet upstream of Project activities and 300 feet downstream of the point of river's edge construction activities. If an increase in turbidity or settleable material, caused by Project activities, is observed between the upstream and downstream sampling locations, the monitoring frequency shall be increased to a minimum of every hour during this period. If three consecutive sample results or a 24-hour average turbidity indicate that turbidity levels exceed the limits in the SR/SJR Basin Plan, the associated Project activities shall cease immediately. In addition, any and all actions shall be implemented immediately to reduce and maintain turbidity at or below the given

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⁶ As provided to the State Water Board on May 21, 2021.

thresholds. Turbidity shall be measured using NTUs. A hand-held field meter may be used, provided the meter uses a United States Environmental Protection Agency-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. For each meter used for monitoring, a calibration and maintenance log shall be maintained onsite and provided to State Water Board staff upon request.

Other Water Quality Parameters. The Applicant shall monitor the following water quality parameters at the locations described in Table 2 of the Monitoring Plan to ensure compliance with the SR/SJR Basin Plan, Bay-Delta Plan, and any order issued by the State Water Resources Control Board (State Water Board) in response to a Temporary Urgency Change Petition, including the May 17 petition, filed by the Department of Water Resources and United States Bureau of Reclamation, pursuant to Water Code section 1435 et seq., to address critically dry conditions in the Bay-Delta (TUCP Order). Project activities shall comply with all applicable water quality requirements of the State Water Board's TUCP Order, and any extensions or modifications thereto, as they relate to the water quality impacts of the Project. The State Water Board reserves jurisdiction to add to or modify the conditions of this certification as appropriate to ensure compliance.

Continuous Monitoring (every 15 minutes):

- Temperature
- Dissolved Oxygen
- Specific Conductance
- Turbidity
- Flow
- Stage
- Velocity

Monthly Monitoring:

- Chlorophyll
- Nutrients
- Bromide
- Organic Carbon

Continuous monitoring shall be conducted: prior to and during construction; during operation of the Project; during removal of the barrier; and following removal of the barrier until at least December 31, 2021, unless otherwise modified by a State Water Board action or approved by the Deputy Director. The Applicant shall follow the monitoring procedures specified in DWR's Monitoring Plan. Continuous monitoring equipment shall be in place and operational prior to starting in-water work. All additional monitoring shall start and be in full operation prior to commencing in-water work unless otherwise approved by the Deputy Director, and shall continue, as described in the Monitoring Plan, throughout the duration of the Project.

All water quality compliance monitoring shall be conducted using the State Water Board Surface Water Ambient Monitoring Program methods and procedures described in Code of Federal Regulations Title 40, Chapter I, Subchapter D, Part 136 (40 C.F.R. § 136.1 et seq.) unless otherwise approved by the Deputy Director.

<u>Visual Monitoring for Pollutants</u>. The Applicant shall conduct visual inspections for turbidity plumes, oily sheens, and signs of construction-related pollutants⁷ continuously throughout the barrier installation and removal periods.

<u>Fisheries</u>. The Applicant shall perform monitoring for Delta smelt, longfin smelt, and salmonids as outlined in the Biological Resources section of the Monitoring Plan.

Harmful Algal Blooms and Aquatic Weeds. In coordination with the State Water Board, Central Valley Regional Water Quality Control Board (Central Valley Regional Water Board), and Interagency Ecological Program⁸, the Applicant shall complete a special study that identifies the effects of this Project and any associated actions on the prevalence and extent of harmful algal blooms (HABs) and expansion of invasive aquatic weeds in the Sacramento-San Joaquin Delta (Delta). A report on the findings of the special study shall be submitted to the Deputy Director by December 15, 2021.

General Monitoring and Reporting Provisions. The Applicant shall submit monitoring reports to State Water Board staff within 30 days of initiating monitoring and every two weeks thereafter for the remainder of any in-water and water-adjacent work associated with the Project, including Project construction, operation, and removal of the barrier. The monitoring reports shall include the monitoring data, as well as summary and analysis of the data. Within 10 days of initiating in-water work, the Applicant shall consult with State Water Board staff on the analyses that will be included in the monitoring reports. Monitoring reports, which contain turbidity sampling results and all other required monitoring, shall be submitted to the State Water Board's designated Project Manager. The Project Manager may require changes to the format of future monitoring reports.

The Deputy Director and the Central Valley Regional Water Board Executive Officer (Executive Officer) shall be notified promptly, and in no case more than 24 hours, following an exceedance of a water quality objective or the turbidity averaging period limits, or identification of construction-related pollutants. Project activities associated with the exceedance or pollutant shall immediately cease and the Applicant shall

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Visible construction-related pollutants may include oil, grease, foam, fuel, petroleum products, uncured concrete, and construction-related excavated, organic, or earthen material.

The Interagency Ecological Program (IEP) is a consortium of nine member agencies: three State departments and six federal agencies that has been conducting cooperative ecological investigations since the 1970s. The IEP provides and integrates relevant and timely ecological information for management of the Bay-Delta ecosystem and the water that flows through it.

immediately implement remedial measures to contain or clean up any pollutant. Construction shall not resume without approval from the Deputy Director.

The Applicant may request modifications to the water quality monitoring program. The request shall include the proposed modifications and rationale. Any such modifications shall not be implemented until approved by the Deputy Director.

CONDITION 2. Project Activities

Authorization under the water quality certification is granted based on the application submitted. Unless otherwise modified by conditions of this certification, the Applicant shall implement the Project as described in its May 15, 2021 water quality certification application (DWR 2021) and any supplemental materials received prior to issuance of this water quality certification. The Applicant shall implement all the Avoidance and Minimization Measures described in its May 15, 2021 application for water quality certification, and supplements thereto, relevant to water quality and beneficial uses of the Delta.

The Applicant shall obtain coverage under and comply with the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit)⁹ and any amendments thereto.

Pursuant to the State Water Board's Revised Decision 1641, the Applicant's water rights are conditioned on meeting certain water quality objectives in the Bay-Delta Plan, including requirements related to Delta salinity control. If a TUCP Order is issued approving temporary changes to the Applicant's water right terms and conditions involving compliance with the Bay-Delta Plan's water quality objectives, Project activities shall comply with the applicable water quality requirements as they may be temporarily amended by a TUCP Order, to the extent that they relate to the water quality impacts of the Project, and provided that the Applicant complies with the terms of the TUCP Order and this water quality certification.

The Applicant shall submit a Compensatory Mitigation Plan to the Deputy Director for review and approval. The Compensatory Mitigation Plan shall provide information on the impacts to water quality, including to beneficial uses, associated with the Project, and mitigation that will be provided to ensure physical loss and ecological degradation of waters of the state are adequately mitigated. The compensatory mitigation ratio for loss of habitat shall not be less than 1:1. The Deputy Director may require modifications as part of any approval. The Applicant shall implement the Compensatory Mitigation Plan upon approval of the Deputy Director and any other required approvals.

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⁹ Water Quality Order No. 2009-0009-DWQ NPDES No. CAS000002, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. Available online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html Last accessed: May 19, 2021.

Removal of the barrier and all in-water work associated with the Project shall be completed by no later than November 30, 2021, unless otherwise approved by the Executive Director. If the Applicant proposes to leave portions of the barrier in place, the Applicant shall consult with the United States Army Corps of Engineers and State Water Board staff to determine whether it is necessary to apply for a new permit and associated water quality certification. If it is determined that a new permit is not necessary, the Applicant shall submit a plan for leaving portions of the barrier in place to the Deputy Director for review and approval by no later than November 1, 2021. The Deputy Director may require modifications as part of any approval.

CONDITION 3. Erosion and Sedimentation Control Measures

The Applicant shall implement erosion, sedimentation, and turbidity control measures, including the following measures:

- Control measures for erosion, excessive sedimentation, and sources of turbidity shall be implemented and in place prior to the commencement of, during, and after any ground disturbing activities, or any other Project activities that could result in erosion or sediment discharges to surface water.
- 2) Stockpiles shall be located outside of riparian habitat and protected in accordance with appropriate best management practices. If more than 0.25 inch of rain is forecasted during Project implementation, all stockpiles shall be surrounded with sediment control technologies or berms to prevent sediment run-off.
- 3) Imported materials (i.e., not from on-site rock borrow locations) used for rock slope protection shall be clean prior to use. If materials are washed on-site, washing shall be performed and wash water shall be stored at least 300 feet from any waterway and either disposed of off-site or used for dust abatement.
- 4) If erosion or sedimentation causes increased turbidity above the limits described in Condition 1, the Applicant shall contain the turbid water. The turbid water may be released downstream once the water is below turbidity limits, disposed of offsite, or used for dust abatement, in a manner that does not impair water quality.
- 5) Dredged or excavated material shall be either used as backfill or disposed of offsite in a manner that does not impair water quality. Dredged or excavated material shall be stored at least 300 feet from any waterway, unless otherwise approved by the Deputy Director.
- 6) Sediment control measures shall be in place in all disturbed areas prior to the onset of the first forecasted rain event or October 15, whichever comes first. Sediment control measures shall be monitored and maintained in good working condition until vegetation becomes established.
- 7) Upon Project completion, the Applicant shall inspect the Project site for signs of excessive erosion or other water quality impairment monthly through March 31, 2022. The Applicant shall provide its observations to State Water Board staff no more than two weeks following each inspection. If erosion or other impairments are observed, the Applicant shall notify the Deputy Director and

Executive Officer and include: (1) a description of the erosion or impairment with photo documentation; (2) potential causes of the erosion or impairment; and (3) proposed measures to prevent future erosion or impairment. The Applicant shall implement the proposed measures upon receipt of Deputy Director approval. The Deputy Director may require modifications to the proposed measures, including implementation of alternate measures, as part of any approval.

CONDITION 4. Hazardous Materials Control Measures

The Applicant shall develop and implement a Hazardous Materials Management Program (HMMP) to identify hazardous materials ¹⁰ that could be used during construction; describe measures to prevent, control, and minimize the spillage of hazardous materials; describe transport, use, storage, and disposal procedures for these materials; and outline procedures to be followed in the event of a spill of a hazardous material. The HMMP shall be submitted to the Deputy Director for review and approval prior to commencing construction activities. The Deputy Director may require modifications as part of any approval. The Applicant shall implement the submitted HMMP and any modifications once approved by the Deputy Director. At a minimum, the HMMP shall include the following measures:

- 1) The Applicant shall develop and implement, as applicable, onsite Project-specific protocols for hazardous materials spill prevention, containment, and clean up. The protocols shall detail construction equipment types and locations, access and staging, practices to prevent, minimize, and/or clean up potential spills, and construction sequence. The protocols shall include all applicable requirements of this certification. The Applicant shall provide the protocols to State Water Board staff upon request.
- Caution shall be used when handling and/or storing hazardous materials near waterways. Appropriate materials shall be on site to prevent and manage spills to prevent impacts to surface waters.
- 3) When not in use, equipment shall be stored in upland areas outside the boundaries of waterways.
- 4) All construction equipment shall be inspected for leaks before entering the Project area. All equipment shall be well maintained and inspected daily while on site to prevent leaks of fuels, lubricants, or other fluids into waters of the United States or waters of the state. Stationary equipment (e.g., generators) within 100 feet of waterways shall be parked over secondary containment.
- 5) Service and refueling procedures shall be conducted in a designated area, where no potential exists for fuel spills to seep or wash into waterways. Service and

¹⁰Hazardous materials include, but are not limited to, petroleum products, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete or the washing thereof, asphalt, paint, coating material, drilling fluids, or other substances potentially hazardous to water quality and beneficial uses.

- refueling areas shall include secondary containment including drip pans and/or placement of absorbent material.
- 6) Wet concrete or cement shall not be placed into stream channel habitat. Concrete or cement shall be completely cured before coming into contact with waters of the United States or waters of the state. Any surface water that contacts wet concrete or cement must be pumped out and disposed of in accordance with applicable laws and regulations.
- 7) Any water contaminated by hazardous materials shall be stored according to items (2) and (8) of this condition and disposed of properly off-site in a manner that does not impair water quality.
- 8) Containment areas shall include secondary containment. All containment structures shall comply with California Code of Regulations, title 27, section 20320.

CONDITION 5. Project Activity Progress Reports

No later than 45 days following completion of barrier installation and 45 days following barrier removal, the Applicant shall submit a Project Activity Progress Report (Progress Report) to the Deputy Director. The Progress Report shall include:

- 1) A summary of Project activities performed;
- 2) Documentation of compliance with each condition of this water quality certification and details of any failure to meet the certification requirements;
- 3) Details of Project-related adverse impacts to beneficial uses, if applicable; and
- 4) Any proposed modifications to Project implementation to address impacts or other concerns.

The Deputy Director may require the Applicant to implement corrective actions in response to the information provided in a Progress Report. The Applicant shall provide any additional information or clarification requested by the Deputy Director related to a Progress Report.

CONDITIONS 6 – 25

CONDITION 6. Notwithstanding any more specific provision of this certification, any plan developed as a condition of this certification requires review and approval by the Deputy Director. The State Water Board's approval authority, including authority delegated to the Deputy Director or others, includes the authority to withhold approval or to require modification of a plan, proposal, or report prior to approval. The State Water Board may take enforcement action if the Applicant fails to provide or implement a required item in a timely manner. If a time extension is needed to submit an item for approval, the Applicant shall submit a written request for the extension, with justification, no later than 15 days prior to the deadline. The Applicant shall not implement any plan, proposal, or report until after receiving approval and any other necessary regulatory approvals.

CONDITION 7. The State Water Board reserves the authority to add to or modify the conditions of this certification: (1) to incorporate changes in technology, sampling, or methodologies; (2) if monitoring results indicate that Project activities could violate water quality objectives or impair beneficial uses; (3) to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act; and (4) to require additional monitoring and/or other measures, as needed, to ensure that Project activities meet water quality objectives and protect beneficial uses.

CONDITION 8. The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to add to or modify the conditions of this certification.

CONDITION 9. Unless otherwise specified by conditions in this certification, Project activities shall be conducted in a manner consistent with all applicable water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act. The Applicant must take all reasonable measures to protect the beneficial uses of the Delta.

CONDITION 10. Unless otherwise specified in this certification or at the request of the Deputy Director, data and/or reports shall be submitted electronically in a format accepted by the State Water Board to facilitate the incorporation of this information into public reports and the State Water Board's water quality database systems in compliance with California Water Code section 13167.

CONDITION 11. This certification does not authorize any act which results in the take of a threatened, endangered, or candidate species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (ESA) (Fish & G. Code, §§ 2050–2097) or the federal ESA (16 U.S.C. §§ 1531–1544). If a "take" will result from any act authorized under this certification or water rights held by the Applicant, the Applicant must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Applicant is responsible for meeting all requirements of the applicable ESAs for the Project authorized under this certification.

CONDITION 12. The Applicant shall submit any change to the Project, including operations, facilities, technology changes or upgrades, or methodology, which could have a significant or material effect on the findings, conclusions, or conditions of this certification, to the State Water Board for prior review and written approval. The State Water Board shall determine significance and may require consultation with state and/or federal agencies. If the State Water Board is not notified of a change to the Project, it will be considered a violation of this certification.

CONDITION 13. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation is subject to any remedies, penalties, process, or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process, or sanctions for the violation or threatened

violation constitutes a limitation necessary to ensure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to any violation of the conditions of this certification, the State Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

CONDITION 14. In response to a suspected violation of any condition of this certification, the State Water Board or Central Valley Regional Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. (Wat. Code, §§ 1051, 13165, 13267, and 13383.)

CONDITION 15. This certification shall not be construed as replacement or substitution for any necessary federal, state, and local approvals. The Applicant is responsible for compliance with all applicable federal, state, or local laws or ordinances and shall obtain authorization from applicable regulatory agencies prior to the commencement of Project activities.

CONDITION 16. Any requirement in this certification that refers to an agency whose authorities and responsibilities are transferred to or subsumed by another state or federal agency, will apply equally to the successor agency.

CONDITION 17. Upon request, a construction schedule shall be provided to State Water Board and Central Valley Regional Water Board staff. The Applicant shall provide State Water Board and Central Valley Regional Water Board staff access to the Project site to document compliance with this certification.

CONDITION 18. A copy of this certification shall be provided to any contractor and all subcontractors conducting Project-related work, and copies shall remain in their possession at the Project site. The Applicant shall be responsible for work conducted by its contractor, subcontractors, or other persons conducting Project-related work.

CONDITION 19. The Applicant shall use analytical methods approved by California's Environmental Laboratory Accreditation Program (ELAP), where such methods are available. Samples that require laboratory analysis shall be analyzed by ELAP-certified laboratories.

CONDITION 20. Nothing in this certification shall be construed as State Water Board approval of the validity of any water rights, including pre-1914 claims. The State Water Board has separate authority under the Water Code to investigate and take enforcement action, if necessary, to prevent any unauthorized or threatened unauthorized diversions of water.

CONDITION 21. This certification serves as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act (Water Code sections 13000 et seq.) as authorized by State Water Board Water Quality Order No. 2003-0017-DWQ,

Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification.

CONDITION 22. The provisions of this certification are severable. If any provision of this certification is found invalid, affects the validity of the certification, or would result in a determination that the State Water Board has waived its section 401 certification authority for the Project, the Board reserves authority to consider whether an alternative term would address the water quality issue without being found invalid or resulting in a waiver determination. If any provision of this certification is found invalid, affects the validity of the certification, or would result in a determination that the State Water Board has waived its section 401 certification authority for the Project, the remainder of this certification shall not be affected.

CONDITION 23. This certification is subject to modification or revocation upon administrative or judicial review, including but not limited to review and amendment pursuant to California Water Code, section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with section 3867).

CONDITION 24. This certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent application for certification was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b) and that application for certification specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

CONDITION 25. This certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28.

Eileen Sobeck Executive Director May 28, 2021

Date

9.0 References

Central Valley Regional Water Board. 2018. The Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin (Basin Plan). Fifth Edition. Revised May 2018 (with Approved Amendments). Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/. Last accessed May 19, 2021.

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10.0 Figures

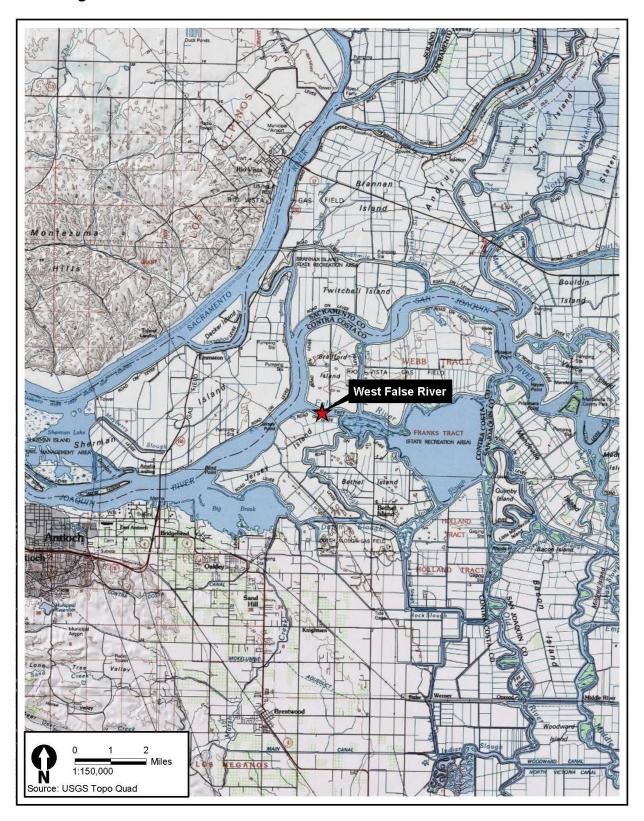


Figure 1. 2021 Emergency Drought Salinity Barrier Location on West False River

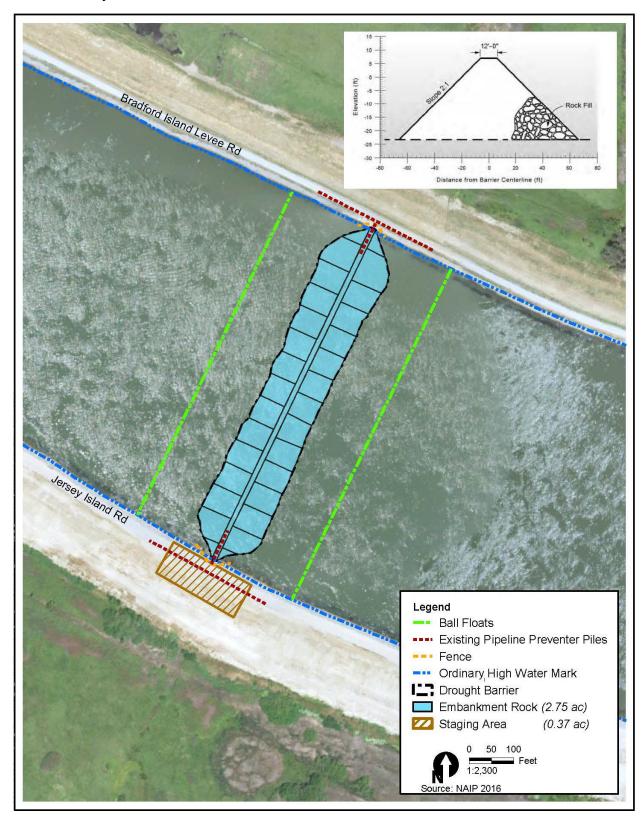


Figure 2. Aerial View Depiction of 2021 Emergency Drought Salinity Barrier