

Attachment F - Compliance with 40 CFR § 121.7

The purpose of Attachment F is to comply with Title 40, Code of Federal Regulations (CFR) sections 121.7(d)(2), which requires all general certification conditions to provide an explanation of why the condition is necessary to assure that any discharge authorized under the Certification will comply with water quality requirements, and a citation to federal, state, or tribal law that authorizes the condition.

Notwithstanding any determinations by the U.S. Army Corps or other federal agency made pursuant to 40 C.F.R. section 121.9, permittee must comply with the entirety of this Order because the Order is also waste discharge requirements.

Certification Conditions and Compliance with Title 40, Code of Federal Regulations (CFR) §121.7(d)(2)

Attachment F uses the same organizational structure as section IX, and the statements below correspond with the conditions set forth in section VII through IX. Sections I through VIII, and X through XIII are not “conditions” as used in 40 CFR section 121.7.

Attachment F includes citations to some 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. California Code of Regulations, title 23¹, Chapter 28 sets forth regulations pertaining to water quality certifications. As set forth in section 3861, the State Water Board may issue a general certification for discharges for a class or classes of activities only if those activities will not individually or cumulatively result in significant adverse impacts or violations of water quality objectives. Accordingly, the State Water Board imposes the conditions set forth in this Certification to assure that the discharge complies with water quality objectives adopted or approved under Sections 13170 or 13245 of the Water Code. These conditions are also generally required to comply with the state’s Anti-Degradation Policy (State Board Resolution No. 68-16), which requires that for 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 will be required to 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 (b) the highest water quality consistent with maximum benefit to the people of the state will be maintained.” All Regional Board Water Quality Control Plans incorporate the state’s Anti-Degradation Policy by reference. The state Anti-Degradation Policy incorporates the federal Antidegradation Policy (40 CFR Part 131.12 (a)(1)), which requires “[e]xisting instream water uses and the level of water quality necessary to protect the

¹ Unless as otherwise noted, all citations are to title 23 of California Code of Regulations.

existing uses shall be maintained and protected." According to U.S. EPA, for 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 Boards adopted a modified version of U.S. EPA's section 404(b)(1) Guidelines in the Dredge or Fill Procedures (State Supplemental Guidelines).

VII. Avoidance and Minimization

Conditions that require avoidance and minimization measures are consistent with the Dredge or Fill Procedures, section IV.B.1.a (Cal. Code of Reg., section 3013)², which requires applicants to demonstrate 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 to waters of the state." A description of avoidance and minimization measures is also required pursuant to the California Code of Regulations, section 3856(h)(6), which requires dischargers to provide a "description of any other steps that have been or will be taken to avoid, minimize, or compensate for loss of or significant adverse impacts to beneficial uses of waters of the state." This condition is also consistent with the State Supplemental Guidelines, section 230.10.

VIII. Compensatory Mitigation

Conditions regarding compensatory mitigation are necessary to ensure compliance with state and federal anti-degradation policies, which establishes any impacts will not affect beneficial uses nor result in water quality less than that prescribed in the policies (40 CFR 131.12 and Resolution No. 68-16). Compensatory mitigation requirements are consistent with State Supplemental Guidelines, section 230.10, restrictions on discharge and the Dredge or Fill Procedures, section IV.B.1.a (Cal. Code of Regs., section 3013), which requires that the Water Boards will 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 Cal. Code of Regs., section 3856(h) requiring submittal of proposed mitigation and description of steps taken to avoid, minimize, or compensate).

² The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Dredge or Fill Procedures) was adopted on April 2, 2019 and went into effect on May 28, 2020. The Dredge 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 13170 (water quality control plan), and accordingly have regulatory effect. Consistent with Government Code, section 11353, a clear and concise summary of the Dredge or Fill Procedures is available in California Code of Regulations, section 3013. A full version of the Dredge or Fill Procedures is available on the State Water Board's website. Although general orders are not directly subject to the procedural requirements set forth for individual orders, the Procedures do not preclude the incorporation of similar requirements in general orders and provide useful guidance that was adopted by the Water Boards for dredge or fill projects.

Accordingly, compensatory mitigation may be required for projects that would result in permanent impacts. 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 requires the imposition of requirements that implement water quality control plans, takes into consideration the beneficial uses to be protected, and the need to prevent nuisance.

These conditions related to mitigation requirements are consistent with the Dredge or Fill Procedures, section IV.B.1.a, which requires that the Water Boards will 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. Accordingly, compensatory mitigation is required for projects that would result in permanent impacts.

IX. Conditions

A. Reporting and Notification Requirements Accidental Discharges of Hazardous Materials

1. Request for Authorization

2. The water boards shall determine whether the activity is eligible...

Authorization under this Certification is granted based on the application information submitted. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification.

These conditions requiring dischargers to identify impacts in a notification are required pursuant to the California Code of Regulations, section 3856(h)(4), which requires dischargers identify "for each water body reported...the total estimated quantity of waters of the United States that may be adversely impacted..." This condition is also consistent with the Dredge or Fill Procedures, section IV.A.1.c and f, which requires applicants to provide a "description of the waters proposed to be impacted by the dredge or fill activity." (Cal. Code of Regs., section 3013.) (Also see Water Quality Control Plan for the San Francisco Bay Region, section 4.23.2.)

These conditions requiring a description of avoidance and minimization measures are also required pursuant to the California Code of Regulations, section 3856(h)(6), which requires dischargers to provide a "description of any other steps that have been or will be taken to avoid, minimize, or compensate for loss of or significant adverse impacts to beneficial uses of waters of the state." These conditions are also consistent with the Dredge or Fill Procedures, section IV.B.1.a, which requires applicants to demonstrate 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 to waters of the state." (Cal. Code of Regs., section 3013.)

3. Project Status Notifications

The reports confirm that the best management practices required under this Certification are sufficient to protect 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 can be taken as soon as possible. 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, is reasonable to the need and benefits of obtaining the reports. The anticipated costs are minimal as the reporting obligations require only visual monitoring and notification reporting.

Authorization under this Certification is granted based on the application information submitted, 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 Certification. If not, the original discharger remains responsible for compliance with this Certification. Confirmation is also necessary to confirm whether liability for long-term best management practices maintenance is accepted by another entity. If not, the original discharger remains responsible for compliance with this Certification. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification.

a. Commencement of Construction

b. Project Reporting

c. Request for Notice of Project Complete Letter

Conditions a-c related to notifications and reporting are required pursuant to California Code of Regulations, section 3861(c)(3), which requires the inclusion of “appropriate monitoring and agency-reporting requirements for all activities subject to federal licenses and permits issued in reliance on such certification.” These monitoring and reporting requirements are also consistent with the Water Boards’ authority to investigate the quality of any waters of the state within its region under Water Code section 13267. The burden of preparing these reports, including costs, is reasonable to the need and benefits of obtaining the reports. The reports confirm that the best management practices required under this Certification are sufficient to protect 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 can be taken as soon as possible. The anticipated costs are minimal as the reporting obligations require only visual monitoring and notification reporting.

4. Conditional Notifications and Reports:

a. Accidental Discharges of Hazardous Materials

b. Violation of Compliance with Water Quality Standards

Conditions a and b related to the accidental discharge of 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 notification and reporting requirements in the event of an accidental discharge of hazardous materials are required pursuant to section 13271 of the Water Code, which requires immediate notification of the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the state toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.16) of Chapter 7 of Division 1 of Title 2 of the Government Code.

Conditions related to monitoring and reporting are required pursuant to California Code of Regulations, section 3861(c)(3), which requires the inclusion of “appropriate monitoring and agency-reporting requirements for all activities subject to federal licenses and permits issued in reliance on such certification.” These monitoring and reporting requirements are also consistent with the Water Boards’ authority to investigate the quality of any waters of the state within its region under Water Code section 13267. The burden of preparing these reports, including costs, is reasonable to the need and benefits of obtaining the reports. The reports confirm that the best management practices required under this Certification are sufficient to protect 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 can be taken as soon as possible. The anticipated costs are minimal as the reporting obligations require only visual monitoring and notification reporting.

c. In-Water Work

Conditions related to monitoring and reporting are required pursuant to California Code of Regulations, section 3861(c)(3), which requires the inclusion of “appropriate monitoring and agency-reporting requirements for all activities subject to federal licenses and permits issued in reliance on such certification.” These monitoring and reporting requirements are also consistent with the Water Boards’ authority to investigate the quality of any waters of the state within its region under Water Code section 13267. The burden of preparing these reports, including costs, is reasonable to the need and benefits of obtaining the reports. The reports confirm that the best management practices required under this Certification are sufficient to protect 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 can be taken as soon as possible. The anticipated costs are minimal as the reporting obligations require only visual monitoring and notification reporting.

d. Modifications to Project

Authorization under this Certification is granted based on the application information submitted. This condition is necessary to ensure that if there are modifications to the project, that the project remains eligible for coverage under this Certification. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification.

e. Transfer of Long-Term Best Management Practices Maintenance

Authorization under this Certification is granted based on the application information submitted, including the legally responsible party. Notification is necessary to confirm whether liability for long-term best management practices maintenance is accepted by another entity. If not, the original discharger remains responsible for compliance with this Certification. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification.

B. Water Quality Monitoring

Conditions in this section related to monitoring and reporting are required pursuant to California Code of Regulations, section 3861(c)(3), which requires the inclusion of “appropriate monitoring and agency-reporting requirements for all activities subject to federal licenses and permits issued in reliance on such certification.” These monitoring and reporting requirements are also consistent with the Water Boards’ authority to investigate the quality of any waters of the state within its region under Water Code section 13267. The burden of preparing these reports, including costs, is reasonable to the need and benefits of obtaining the reports. The reports confirm that the best management practices required under this Certification are sufficient to protect 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 can be taken as soon as possible. The anticipated costs are minimal as the reporting obligations require only visual monitoring and notification reporting.

Conditions related to the accidental discharge of 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 notification and reporting requirements in the event of an accidental discharge of hazardous materials are required pursuant to section 13271 of the Water Code, which requires immediate notification of the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the state toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.16) of Chapter 7 of Division 1 of Title 2 of the Government Code.

These conditions are also necessary 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. (Water Quality Control Plan for the North Coast Region, section 4.1.8; Water Code section 13267; Dredge or Fill Procedures section IV. A.2(c).) For example, what needs to be monitored will depend on the project. (E.g., Water Quality Control Plan for the San Francisco Bay region, section 3.3.12 (sediment).)

1. General

This monitoring condition is 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 monitoring, including costs, is reasonable to the need and benefits of obtaining the monitoring. The anticipated costs are minimal as only visual monitoring is required.

2. In-water Work or Diversions

Consistent with the Dredge 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 Regional Water Board's Basin Plan contains provisions related to all these constituents.

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, is reasonable to the need and benefits of obtaining the reports. The anticipated costs are minimal as the sampling requirements are either visual or only require a grab sample every four hours.

3. Accidental Discharges/Noncompliance

The reports confirm that the best management practices required under this Certification are sufficient to protect beneficial uses and water quality objectives. The reports related to accidental discharges ensure that corrective actions, if any, that are necessary to minimize the impact or clean up such discharges can be taken as soon as possible. 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, is reasonable to the need and benefits of obtaining the reports.

The anticipated costs are minimal as the reporting obligations require only visual monitoring and notification reporting.

4. Post-Construction

The reports confirm that the best management practices required under this Certification are sufficient to protect beneficial uses and water quality objectives. The reports related to accidental discharges ensure that corrective actions, if any, that are necessary to minimize the impact or clean up such discharges can be taken as soon as possible. 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, is reasonable to the need and benefits of obtaining the reports. The anticipated costs are minimal as the reporting obligations require only visual monitoring and notification reporting.

C. Standard Conditions

1. Standard Condition CCR section 3860(a) for “subject to modification or revocation upon review...”

This is a standard condition that “shall be included as conditions of all water quality certification actions.” (Cal. Code of Regs., section 3860(a).) This condition is necessary to assure that any discharge authorized under the general license or permit 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. This condition was included to comply with section 3860, which sets forth conditions that must be included in all water quality certifications.

2. Standard Condition CCR section 3860(b) for “FERC...”

This is a standard condition that “shall be included as conditions of all water quality certification actions.” (Cal. Code of Regs., section 3860(a).) This condition is necessary to assure that any discharge authorized under the general license or permit 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 certification for point source discharges to waters of the United States. This condition was included to comply with section 3860, which sets forth conditions that must be included in water quality certifications.

3. Standard Condition CCR section 3860(c) for “fees...”

This is a standard condition that “shall be included as conditions of all water quality certification actions.” (Cal. Code of Regs., section 3860(a).) This fee requirement

condition is also required pursuant to California Code of Regulations, sections 3861(c)(4) and 3833(b), which requires payment of fees by project proponents enrolling in this Certification. This condition is necessary to assure that any discharge authorized under the general license or permit 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 certification for point source discharges to waters of the United States.

D. General Conditions

1. General Condition “Permitted actions must not cause violation of applicable water quality standards...”

Conditions related to compliance with water quality objectives and designated beneficial uses are required pursuant to the state’s Anti-Degradation Policy (State Board Resolution No. 68- 16), which requires that for 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 will be required to 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 (b) the highest water quality consistent with maximum benefit to the people of the state will be maintained.” All of the Water Quality Control Plans incorporate the state’s Anti-Degradation Policy by reference. The state Anti-Degradation Policy incorporates the federal Antidegradation Policy (40 CFR Part 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.” According to U.S. EPA, for 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 Boards adopted a modified version of U.S. EPA’s section 404(b)(1) Guidelines in the Dredge or Fill Procedures (State Supplemental Guidelines).

These conditions are also required pursuant to California Code of Regulations section 3861(d), which requires that discharges comply with any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code.

- 2. General Condition “The Permittee must conform to the engineering plans...”**
- 3. General Condition “The Permittee shall adhere to all requirements in the mitigation monitoring and reporting program...”**
- 4. General Condition “Cumulative Impacts”**

For Condition 2, 3 and 4 above, authorization under this Certification is granted based on the application information submitted, including engineering plans, specifications, technical reports and any mitigation and monitoring plans which have been preapproved

by the Water Board. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification.

5. Avoidance and Minimization

California Code of Regulations, title 23, Chapter 28 also sets forth regulations pertaining to water quality certifications. Section 3856 sets forth information that must be included in water quality certification requests, includes a description of steps that have or will be taken to avoid, minimize, and compensate for impacts to waters of the state.

E. Administrative

1. Signatory Requirements

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

2. Site Access

Conditions related to site access requirements are authorized pursuant to the Water Boards' authority to investigate the quality of any waters of the state within its region under Water Code section 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 met and waste discharge requirements are being complied with."

3. The permittee shall be responsible for work...

This condition requires site personnel and agencies to be familiar with the content of the Certification and availability of the document at the project site. This condition is required to assure that any authorized discharge will comply with the terms and conditions of the Certification, which requires compliance with all of the water quality objectives and beneficial uses adopted or approved under sections 13170 or 13245 of the Water Code.

4. Lake and Streambed Alteration Agreement

This Condition is required pursuant to California Code of Regulations section 3856(e), which requires that copies be provided to the Water Boards of "any final and signed federal, state, and local licenses, permits, and agreements (or copies of the draft documents, if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity. If no final or draft document is available, a list of all remaining agency regulatory approvals being sought shall be included."

F. Construction Conditions

1. All materials and supplies necessary...

On-site availability of materials and supplies assures best management practices can be reasonably implemented and that the discharge complies with water quality objectives. This condition and other conditions related to best management practices are consistent with the 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 Certification have the potential to result in a discharge that exceed 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 Water Quality Control Plans incentivize the use of best management practices to prevent prohibited discharges into waters of the state.

2. All personnel who engage in construction activities...

This condition requires site personnel and agencies to be familiar with the content of the Certification and mandate availability of the document at the project site. This condition is required to assure that any authorized discharge will comply with the terms and conditions of the Certification.

3. Construction material, debris, rubbish....

Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification. This condition is necessary to prevent violation of state discharge prohibitions that protect water quality objectives. Water Quality Control Plans prohibit the discharge of construction materials and byproducts from being discharged into waters of the state. For example, "The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited" (Water Quality Control Plan for the North Coast Region, section 4.2.1).

This condition prohibiting discharge of materials detrimental to water quality or hazardous to aquatic life is also consistent with the Dredge or Fill Procedures, Appendix A, Subpart H, which requires actions to minimize and avoid adverse effects, including actions concerning the location, the material, and controlling the material after the discharge (§ 230.70 et seq.).

4. Environmentally sensitive areas and environmentally restricted...

This condition is necessary to assure that the project discharge will comply with state discharge prohibitions that protect beneficial uses and water quality objectives. A description and delineation of impact sites is necessary to assure that the discharge from the proposed project will comply with water quality objectives established for

surface waters (California Code of Regulations, title 23, section 3856(h); Dredge or Fill Procedures section IV.A.1(c); Water Quality Control Plan for the San Francisco Bay Region, section 4.23.2).

In addition, Water Quality Control Plans prohibit the discharge of construction materials and byproducts from being discharged into waters of the state, including areas that may be environmentally sensitive, such as vernal pools or eel grass beds. For example, "The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited" (Water Quality Control Plan for the North Coast Region, section 4.2.1). Identification and visible demarcation of areas of avoidance must be obvious to all on-site personnel, to ensure that impacts only occur within the permitted boundaries of project disturbance and to prevent unauthorized discharges to other waters of the state, including environmentally sensitive areas. Furthermore, waters that are not quantified and mapped as either a temporary or permanent impact site in a water quality certification must be fully avoided throughout the duration of the construction activity. This condition is necessary to ensure protection of aquatic resources where no discharge is authorized to occur. Furthermore, excavated material that is improperly exposed can produce or contribute to runoff that results in an unintentional discharge to waters of the state, which is prohibited (Water Quality Control Plan for the North Coast Region, section 4.2.1).

- 5. Bridges, culverts, dip crossings, or other structures**
- 6. Temporary materials places in any water of the state...**
- 7. A method of containment must be used below any temporary bridge, trestle...**
- 8. Vegetation removal...**

Conditions 5, 6, 7 and 8 limit activities such as construction or maintenance of access roads, staging areas, water crossings, and temporary structures to assure that the activities are minimally impacting and comply with water quality objectives. These types of activities commonly require grading, construction, excavation, and vegetation removal, and may result in erosion and increased sediment loads, turbidity, etc., that adversely affect water quality. These conditions are required to assure that the discharges from such activities do not exceed water quality objectives established in Water Quality Control Plans, including water quality objectives for oil and grease, pH, sediment, settleable materials, temperature, and turbidity. For example, the sediment water quality objective requires that, "the suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses" (Water Quality Control Plan for the North Coast Region, section 3.3.11). Additionally, improperly designed and/or installed roads and bridges may also create physical barriers to fish passage and impair the

beneficial use of fish spawning (Water Quality Control Plan for the San Francisco Basin, section 7.8.4.1).

9. Unless authorized for restoration, material excavated to prepare a site...

Condition 9 is required pursuant to the Water Quality Control Plans, and the water quality objectives therein prohibiting excavated material erosion or disposal into waters of the state. For example, the North Coast Water Quality Control Plan prohibits waters from containing settleable material in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses (Section 3.3.12), and prohibits waters from containing suspended material in concentrations that cause nuisance or adversely affect beneficial uses (Section 3.3.13).

10. Topsoil

The top 6 to 12 inches of topsoil tend to be richer in organic matter than other soil horizons below this depth. Therefore, it is essential to stockpile the topsoil layer separately from the rest of the soil in order to ensure survivorship of riparian vegetation populations upon completion of the project.

Backfilling of native topsoil is necessary to assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. "Operations and activities should be planned and conducted in a manner that will not disturb extensive areas of soil or that will disrupt local drainage. Areas where soil is disturbed should be promptly reseeded or stabilized to prevent erosion." (Water Quality Control Plan for the Tulare Lake Basin, section 4.1.7.) Backfilling of native topsoil also assures that the pre-project hydrologic regime is not altered or adversely impacted by introduction of new backfill materials. "The stream flow regimen should be stabilized and maintained, and soil control measures should be applied in a timely manner." (Water Quality Control Plan for the Tulare Lake Basin, section 4.1.7.) "Limit disturbance of natural drainage features and vegetation." (Water Quality Control Plan for the North Coast, Appendix D, page 4-104, Urban and Suburban Runoff Management Measures.)

11. Any structure, including but not limited to culverts, pipes, piers, and coffer dams, placed within a stream...

Conditions related to placement of structures within waters are required to assure that they do not create physical barriers to fish passage and spawning activities. "Any barrier to migration or free movement of migratory fish is harmful. Natural tidal movement in estuaries and unimpeded river flows are necessary to sustain migratory fish and their offspring. A water quality barrier, whether thermal, physical, or chemical, can destroy the integrity of the migration route and lead to the rapid decline of dependent fisheries" (Water Quality Control Plan for the San Francisco Region, section 2.1.10). Furthermore, barriers to migration or free movement may result in an impairment of state water quality objectives, including but not limited to Rare, Threatened, or Endangered Species

(RARE), Spawning, Reproduction, and/or Early Development (SPWN), Cold Fresh Water Habitat (COLD), or Warm Fresh Water Habitat (WARM), which occur in all regions of the state.

The Water Quality Control Plan for the North Coast Region sets a numeric target of “zero human-caused barriers” for migration barriers on Class I watercourses (Section 4.2.8). Barriers would also impair beneficial uses designated in the Water Quality Control Plans including “migration of aquatic organisms,” “spawning, reproduction, and/or early development,” “fish migration,” and “fish spawning” (Water Quality Control Plan for the North Coast Region, section 2.2; Water Quality Control Plan for the San Francisco Region, sections 2.1.10 and 2.1.18).

“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.” (Water Quality Control Plan for the San Francisco Region, section 4.26.7.) Conditions related to placement of structures within waters of the state are required to assure that they do not result in adverse impacts related to hydromodification. Failure to comply with these conditions may trigger bank failure, channel incision, or headcutting along the channel thalweg, creating excess sediment and barriers to fish passage. These impacts can impair beneficial uses including fish migration, fish spawning, wildlife habitat, cold freshwater habitat, preservation of rare and endangered species, and warm freshwater habitat (Water Quality Control Plan for the San Francisco Region, section 2.1).

12. Dust Abatement

This dust abatement condition is required to assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. Chemicals used in dust abatement activities can result in a discharge of chemical additives and treated waters to surface waters of the state. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state. The Water Quality Control Plan for the San Francisco Region, section 3.3.8, requires that all waters should be free of toxic substances in concentrations that are lethal to or that produce significant alterations in population or community ecology or receiving water biota. In addition, the health and life history characteristics of aquatic organisms in waters affected by controllable water quality factors should not differ significantly from areas unaffected by controllable water quality factors, such as toxicity. This condition will ensure that the discharge will not adversely affect beneficial uses of the receiving water or cause a condition of nuisance. (Water Quality Control Plan for the North Coast Region, section 4.1.8; Water Code section 13267; Dredge or Fill Procedures section IV. A.2(c)).

13. Use of Mechanized Equipment

This condition is necessary to prevent violation of state discharge prohibitions that protect water quality objectives. Water Quality Control Plans prohibit the discharge of

mechanized equipment and byproducts from being discharged into waters of the state. Water Code section 13264 prohibits any discharge that is not specifically authorized in this Certification.

14. Piers or Piles

15. Road surface Drainages

16. Access Routes

Conditions 14, 15 and 16 are necessary to prevent violation of state discharge prohibitions that protect water quality objectives. By altering an aquatic resource's surface topography and reducing hydrologic connectivity and capacity, the use of mechanized equipment can cause a direct loss of aquatic resource area and degrade beneficial uses of waters of the state, including designations that protect listed species habitat. These impacts would result in violations of water quality objectives that have been set in Water Quality Control Plans. For example, the Water Quality Control Plan for the Santa Ana Regional Board, section 4.6, requires that, "Inland surface water communities and populations, including vertebrate, invertebrate, and plant species, shall not be degraded as a result of the discharge of waste." Additionally, fuels and lubricants associated with the use of mechanized equipment have the potential to result in toxic discharges to waters of the state. The North Coast Regional Water Board's toxicity water quality objective prohibits waters from containing toxic substances in concentrations that are toxic to, or that, "produce detrimental physiological responses in human, plant, animal, or aquatic life" (Water Quality Control Plan for the North Coast Region, section 3.3.16).

The conditions related to roads are necessary to assure that the activities are minimally impacting and comply with water quality objectives. Activities related to road construction or maintenance commonly require grading, construction, excavation, and vegetation removal, and may result in erosion and increased sediment loads, turbidity, etc., that adversely affect water quality. These conditions are required to assure that the discharges from such activities do not exceed water quality objectives established in Water Quality Control Plans, including water quality objectives for oil and grease, pH, sediment, settleable materials, temperature, and turbidity. Specifically, activities associated with road maintenance have the potential to exceed water quality objectives for oil and grease, pH, sediment, settleable materials, temperature, and turbidity (Water Quality Control Plan for the Central Valley Region sections 3.1.10, 3.1.11, 3.1.15, 3.1.16, 3.1.19, 3.1.21.). Section IV.B.1 of the Dredge or Fill Procedures requires that project impacts will not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources; cause or contribute to a degradation of waters; or violate water quality standards. These conditions are also necessary to assure that activities related to road construction or maintenance do not create physical barriers to fish passage and spawning activities or degradation associated with hydromodification.

17. Watercourse Crossings

a. Rock ford or rock armored fill crossings...

b. Remove or stabilize water course crossings as follows...

Conditions a and b 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. If surface waters or ponded waters are not appropriately diverted from areas undergoing grading, construction, excavation, and/or vegetation removal, the waters will 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 assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. For example, the sediment water quality objective requires that, "the suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses" (Water Quality Control Plan for the North Coast Region, section 3.3.11). Additionally, improperly designed and/or installed roads and bridges may also create physical barriers to fish passage and impair the beneficial use of fish spawning (Water Quality Control Plan for the San Francisco Basin, section 7.8.4.1).

18. Culvert Construction or Maintenance

Conditions related to structures within waters, including placement of instream piers or piles, and culvert replacement and maintenance activities, are required to assure that they do not create physical barriers to fish passage and spawning activities. "Any barrier to migration or free movement of migratory fish is harmful. Natural tidal movement in estuaries and unimpeded river flows are necessary to sustain migratory fish and their offspring. A water quality barrier, whether thermal, physical, or chemical, can destroy the integrity of the migration route and lead to the rapid decline of dependent fisheries" (Water Quality Control Plan for the San Francisco Region, section 2.1.10).

The Water Quality Control Plan for the North Coast Region sets a numeric target of "zero human-caused barriers" for migration barriers on Class I watercourses (Section 4.2.8). Barriers would also impair beneficial uses designated in the Water Quality Control Plans including "migration of aquatic organisms," "spawning, reproduction, and/or early development," "fish migration," and "fish spawning" (Water Quality Control Plan for the North Coast Region, section 2.2; Water Quality Control Plan for the San Francisco Region, sections 2.1.10 and 2.1.18).

“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.” (Water Quality Control Plan for the San Francisco Region, section 4.26.7.) Conditions related to culverts and other instream structures are required to assure that they do not result in adverse impacts related to hydromodification. Failure to comply with these conditions may trigger bank failure, channel incision, or headcutting along the channel thalweg, creating excess sediment and barriers to fish passage. These impacts can impair beneficial uses including fish migration, fish spawning, wildlife habitat, cold freshwater habitat, preservation of rare and endangered species, and warm freshwater habitat (Water Quality Control Plan for the San Francisco Region, sections 2.1).

19. Toxic and Hazardous Materials

These conditions are required pursuant to the Water Quality Control Plans, and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP)³, which prohibit the discharge of substances in concentrations toxic to human, plant, animal, or aquatic life. For example, the North Coast Water Quality Control Plan prohibits waters from containing toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The concentrations of toxic substances in the water column, sediments or biota shall not adversely affect beneficial uses (Water Quality Control Plan for the North Coast Region, section 3.3.16). All waters should be free of toxic substances in concentrations that are lethal to or that produce significant alterations in population or community ecology or receiving water biota. In addition, the health and life history characteristics of aquatic organisms in waters affected by controllable water quality factors should not differ significantly from areas unaffected by controllable water quality factors, such as toxicity (Water Quality Control Plan for the San Francisco Bay Region, section 3.3.8).

Toxic compounds impair the beneficial uses of cold fresh water habitat, estuarine habitat, marine habitat, preservation of rare and endangered species, fish migration, fish spawning, warm fresh water habitat, and wildlife habitat (Water Quality Control Plan for the San Francisco Bay Region, sections 2.1.3; 2.1.5; 2.1.9; 2.1.14; 2.1.10; 2.1.18; 2.1.19; & 2.1.20).

Conditions related to concrete/cement are required pursuant to the Water Quality Control Plans, which prohibit discharges to waters that adversely raise or lower pH levels. For example, the North Coast Water Quality Control Plan prohibits discharges from lowering pH levels below 6.5 or raising them above 8.5, or raising/lowering the pH to a level that causes a nuisance or impairs beneficial uses. Concrete/cement is an alkaline component that has the potential to raise the pH of water resources to levels

³ The SIP implements criteria for priority toxic pollutants contained in the California Toxics Rule promulgated by the U.S. Environmental Protection Agency (U.S. EPA).

that would negatively affect beneficial uses (Water Quality Control Plan for the North Coast Region, section 3.3.16).

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.

Many waters in California are high in mercury either naturally or due to historic mining activities. This mercury, when discharged to waters of the state can become bioavailable and impair beneficial uses including Subsistence Fishing (SUB) and Tribal Subsistence Fishing (T-SUB). Effective sediment control is required under the Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions (Cal. Code of Reg., section 3010).

20. Invasive Species and Soil Borne Pathogens

Soil borne pathogens cause disease and death to native plants, agricultural crops, and ornamental plants. Non-native invasive plant species can alter ecosystem processes such as nutrient cycling, hydrological cycles, and frequencies of wildfires, erosion, and sediment deposition. They interfere in ecosystem functions by outcompeting and displacing native plants and animals, by providing refuge for non-native animals, and by hybridizing with native species.⁴

Conditions related to invasive species and soil borne pathogens are required pursuant to the California Code of Regulations, section 3861 (d) (2) that prohibits discharges that violate any water quality objectives adopted or approved under Section 13170 or 13245 of the Water Code, including the Water Quality Control Plans in California. Invasive species and soil borne pathogens adversely affect beneficial uses designated in the Water Quality Control Plans, such as RARE, WILD, and BIOL. RARE (rare, threatened, or endangered species) is a designated beneficial use for “waters that support habitat necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered” (Water Quality Control Plan for the Central Coast Region, section 2.2.20; Water Quality Control Plan for the San Francisco Region, section 2.1.14). WILD (wildlife habitat) is a designated beneficial use of water that supports “terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food supplies.” (Water Quality Control Plan for the Central Coast Region, section 2.2.18). BIOL (preservation of biological habitats of special significance) is a designated beneficial use of water that supports “designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural

⁴ Bossard et al. (2000) *Invasive Plants of California's Wildlands*. University of California Press.

resources requires special protection” (Water Quality Control Plan for the Central Coast Region, section 2.2.19).

Invasive species and soil borne pathogen control practices prevent their uncontrolled spread to waters of the state and are necessary to assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. The spread of soil borne pathogens devastates host species populations in riparian ecosystems, such as *Phytophthora lateralis*, the cause of Port Orford cedar root disease, and threatens the stability of native and commercial cedar populations worldwide. Invasive weeds degrade physical and chemical water quality characteristics, and overgrown vegetation reduces special species habitat and reduces aquatic resource capacity.

Furthermore, in State Water Board Resolution No. 2017-0012, the State Water Board resolved that the state shall update plans, permits, and policies to improve “ecosystem resilience to the impacts of climate change, including but not limited to actions that protect headwaters, facilitate restoration, enhance carbon sequestration, build and enhance healthy soils, and reduce vulnerability to and impacts from fires.”

Lastly, species diversity and growth anomalies, which are adversely affected by invasive species and soil borne pathogens, are measures of water quality health as it relates to water quality objectives for toxic substances. “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. Compliance with this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, and biotoxicity tests of appropriate duration or other methods as specified by the Regional Water Board” (Central Valley Regional Board Basin Plan, section 3.1.20).

21. Work in Delineated Waters of the State

Conditions related to work in delineated waters are required pursuant to the California Code of Regulations, section 3861 (d) (2) which prohibits discharges that violate any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code. Work in waters must not cause exceedances of water quality objectives; accordingly, these conditions require implementation of best practicable treatments and controls to prevent pollution and nuisance, and to maintain water quality. Consistent with the Dredge or Fill Procedures, section IV.A.2.c, water quality monitoring plans are required for any 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 (Water Quality Control Plan for the North Coast Region, section 4.1.8; Water Code section 13267).

Conditions related to dewatering and diversions or impoundments of water are required pursuant to the California Code of Regulations, section 3861(d)(2) which prohibits discharges that violate any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code. Work in waters and temporary diversions must not cause exceedances of water quality objectives; accordingly, these conditions require implementation of best practicable treatments and controls to prevent pollution and nuisance, and to maintain water quality.

These conditions are also required pursuant to the state's Anti-Degradation Policy (State Board Resolution No. 68-16), which requires that for 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 will be required to 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 (b) the highest water quality consistent with maximum benefit to the people of the state will be maintained." All of the Water Quality Control Plans incorporate the state's Anti-Degradation Policy by reference.

If surface waters or ponded waters are not appropriately diverted from areas undergoing grading, construction, excavation, and/or vegetation removal, the waters will be susceptible to erosion and increased sediment loads, contamination and pollution from construction equipment, temperature fluctuations, etc. Diverting waters away from these areas will ensure that the discharge will not exceed water quality objectives, adversely affect beneficial uses of the receiving waters, or cause a condition of nuisance. Dewatered areas must also be stabilized prior to a rainfall event to assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. For example, the Water Quality Control Plan for the Central Coast Region, section 3.3.2, prohibits alteration of the suspended sediment load and suspended sediment discharge rate of surface waters in such a manner as to cause nuisance or adversely affect beneficial uses. Similarly, the Water Quality Control Plan for the San Francisco Bay Region, section 4.19, requires stabilization prior to a rainfall event as necessary to prevent sediment contributions to water bodies.

Consistent with the Dredge 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 (Water Quality Control Plan for the North Coast Region, section 4.1.8; Water Code section 13267).

Conditions related to groundwater permits are required pursuant to the Cal. Code of Regs, title 23, section 3856(e), which requires complete copies of any final and signed federal, state, or local licenses, permits, and agreements (or copies of drafts if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity.

22. Stormwater

a. Erosion and Sediment Control

Discharges that are not covered under the State Water Board's Stormwater Construction General Permit are required to comply with the conditions in this section (VI.B.18.a through VI.B.18.b) pursuant to the California Code of Regulations, section 3861(d)(2), which prohibits discharges that violate any water quality objectives adopted or approved under sections 13170 or 13245 of the Water Code. 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 in the Water Quality Control Plans in California. Water Quality Control Plans impose design requirements to ensure excess stormwater sediment does not exceed water quality objectives in the plans. For example, "The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited. 2. The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited " (Water Quality Control Plan for the North Coast Region, section 4.2.1. "Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration for turbidity related to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU. (Water Quality Control Plan for the San Francisco Region, section 3.3.19.)

Conditions on projects that result in a hydromodification to a water of the state are necessary to assure that the discharge from the proposed 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." "Protecting beneficial uses within the Region consistent with the federal Clean water Act and Porter-Cologne Act requires careful consideration of projects that result in hydrogeomorphic changes and related adverse impacts to the water quality and beneficial uses of waters of the state." (Water Quality Control Plan for the San Francisco Region, section 4.26.7.) Improper project design and installation of any

project that results in a hydromodification to a water of the state may trigger bank failure and channel incision which results in excess sediment impacts to downstream beneficial uses.

Many waters in California are high in mercury either naturally or due to historic mining activities. This mercury, when discharged to waters of the state can become bioavailable and impair beneficial uses including Subsistence Fishing (SUB) and Tribal Subsistence Fishing (T-SUB). Effective sediment control is required under the Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions (Cal. Code of Reg., section 3010.)

b. Storm Water Management

In addition, disturbed areas in delineated waters must be stabilized prior to a rainfall event to assure that the discharge from the proposed project will comply with water quality objectives established for surface waters. For example, the Water Quality Control Plan for the Central Coast Region, section 3.3.2, prohibits the suspended sediment load and suspended sediment discharge rate of surface waters from being altered in such as manner as to cause nuisance or adversely affect beneficial uses. Similarly, the Water Quality Control Plan for the San Francisco Bay Region, section 4.19, requires stabilization prior to a rainfall event as necessary to prevent sediment contributions to water bodies.

Conditions related to stormwater management are required to comply with the Water Quality Control Plans and to assure that the discharge complies with water quality objectives adopted or approved under Sections 13170 or 13245 of the Water Code. 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 in order to avoid or minimize such degradation. Implementation of control measures and best management practices (BMPs) described in the condition will assure compliance with water quality objectives including sediment, turbidity, temperature, suspended material, and settleable material. For example, “[w]aters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration for turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU” (Water Quality Control Plan for the San Francisco Region, section 3.3.19). The Water Quality Control Plan for the Central Coast Region, section 3.3.2, prohibits alternation of the suspended sediment load and suspended sediment discharge rate of surface waters in such as manner as to cause nuisance or adversely affect beneficial uses. The Water Quality Control Plan for the San Francisco Bay Region, section 4.19, requires stabilization prior to a rainfall event as necessary to prevent sediment contributions to water bodies.

23. Directional Drilling

Conditions related to directional drilling are necessary given the risks posed by an inadvertent return of drilling fluids to waters. Given the likely toxicity of the discharge and the proximity to the impacted water, significant adverse impacts to waters would be expected and remediation would be difficult. All Water Quality Control Plans prohibit the discharge of substances in concentrations toxic to human, plant, animal, or aquatic life. Horizontal directional drilling, and similar drilling operations, may result in the unintentional discharge of drilling fluids to waters of the state. These conditions are necessary to ensure 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.

G. Restoration and Mitigation for Temporary Impacts

Conditions in this section related to restoration and/or mitigation of temporary impacts are required pursuant to California Code of Regulations, section 3861(d), which requires the inclusion of conditions to avoid and mitigate all project impacts, and to assure that the discharge complies with water quality objectives adopted or approved under Sections 13170 or 13245 of the Water Code. These conditions are also consistent with the Dredge or Fill Procedures, which requires "in all cases where temporary impacts are proposed, a draft restoration plan that outlines design, implementation, assessment, and maintenance for restoring areas of temporary impacts to pre-project conditions." (Dredge or Fill Procedures section IV. A.2(d) & B.4.) Mitigation is also required to ensure compliance with Executive Order W-59-93 that requires no net loss of the structure or function of California's wetland resources.

H. 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 Procedures requires that the Water Boards will 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, section 230.10, restrictions on discharge & Cal. Code of Regs., section 3856(h) (requiring 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 state and federal anti-degradation 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 requires the imposition of

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 has sufficient funds to fulfil the compensatory mitigation required. (Dredge or Fill Procedures, section IV.B.5.f.)