

Instructions for Completing the Application for
Clean Water Act §401 Water Quality Certification
and/or Waste Discharge Requirements for
Projects Involving Discharge of Dredged and/or Fill Material
To Waters of the U.S. and/or Waters of the State

These instructions are to assist you in providing information needed to complete the application for dredge and/or fill impacts associated with your project. For definitions of terms, see “Definitions” section (pg. 13). The California Regional Water Quality Control Board, Lahontan Region (Water Board) requires this information when applying for:

- Clean Water Act (CWA) Section 401 Water Quality Certification (WQC) for dredge or fill activities to waters of the U.S.
- Authorization to dredge, fill, or otherwise impact waters not regulated by the U.S. Army Corps of Engineers under CWA section 404, i.e. waters of the State.

Is this the correct form for your project?

Yes, if you propose to conduct a project that involves dredging, filling, or otherwise impacting, either temporarily or permanently, waters of the U.S.¹ and/or waters of the State². All dredge or fill impacts to waters of the U.S. require a 401 water quality certification from the Water Board prior to proceeding with your project. If you are proposing to discharge dredged or fill material, including earthen or rock material, to waters deemed by the U.S. Army Corps of Engineers (Corps) to be outside of Federal jurisdiction, this application may also be used to obtain coverage under either:

- State Water Resources Control Board Order No. 2004-0004-DWQ³ provided the project is involves dredge or fill discharges of *not more than*: (1) two-tenths of an acre, (2) 400 linear feet⁴, (3) and 50 cubic yards of dredge material; or
- Lahontan Water Board’s Order R6T-2003-0004⁵ if your project exceeds the above impact limits to waters of the State.

In cases where a CWA section 404 permit will not be issued by the Corps for the project, coverage under one of the above General WDRs (GWDRs) or individual WDR may be appropriate. The Water Board will make the final determination of concerning the appropriate requirements in cases involving discharges of dredged or fill materials and associated wastes to surface waters of the Lahontan Region.

¹ Prior to completing this form, Water Board staff recommends the project proponent contact the U.S. Army Corps of Engineers to determine whether they will assert jurisdiction over waters within the project area.

² All waters under the jurisdiction of the California Regional Water Quality Control Board are referred to as “waters of the State.” In the context of this application form for discharges of dredged and fill material, “waters of the State” typically implies waters that the Army Corps of Engineers have not asserted jurisdiction over. “Waters of the State” is defined pursuant to Water Code section 13050, subdivision (e) as “any surface water or groundwater, including saline waters, within the boundaries of the state.”

³ State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ, *Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction*. This Order regulates discharges of dredged or fill material to waters of the State not subject to Clean Water Act Section 404. (See State Board’s website at http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf .)

⁴ Measurements in linear feet of proposed impacts shall be disclosed if the excavation and fill activity runs along a drainage or shoreline.

⁵ These projects are typically regulated under Board Order No. R6T-2003-0004, *General Waste Discharge Requirements for Small Construction Projects, Including Utility, Public Works, and Minor Streambed/Lakebed Alteration Projects in the Lahontan Region Excluding the Lake Tahoe Hydrologic Unit*.

For other questions regarding Clean Water Act (CWA) section 401 WQC, see *Frequently Asked Questions for 401 Water Quality Certifications*.

An application for 401 Water Quality Certification or a Report of Waste Discharge must provide sufficient information for the Water Board to determine whether the proposed project complies with State water quality standards and will not result in adverse impacts to waters of the State, including Waters of the U.S. State water quality standards refer to both the beneficial uses and State water quality objectives for the water body in which the project is proposed. Water quality standards and the Water Board's policies for protecting waters of the State are defined in the *Water Quality Control Plan for the Lahontan Region* (Basin Plan). The Basin Plan may be viewed at www.waterboards.ca.gov/lahontan. Additional state regulations governing Water Board actions are found in the Porter-Cologne Water Quality Control Act (Sections 13000-14958 of the California Water Code) and Titles 14, 23, and 27 of the California Code of Regulations (CCR). Contents of a complete application for water quality certification are described in CCR Title 23 Section 3856. Similar information is required for evaluating proposed discharges of waste, dredged, and fill material to waters of the State. Federal regulations applicable to 401 Water Quality Certification actions are found in the Code of Federal Regulations (CFR), Title 33 Part 330, and Title 40 Parts 121, 131, and 230.

The following instructions are intended to help the Applicant prepare a complete application in compliance with CCR Title 23 Section 3856. Following these guidelines will help reduce delays in processing your application. Once an application is determined to be complete, additional information may be requested for clarification. Please contact the Water Board's South Lake Tahoe office at (530) 542-5400, or the Victorville Office at (760) 241-6583 if you need assistance.

*Answer each question completely. If there is insufficient room on the form for a complete response, please provide an attachment and identify the answer via the corresponding block number. **Additional documents must support information given within the application form; they are not a substitute for completing the form.*** For example "see attached" is not an adequate response to any question or field within the application form. Supplemental documents must be specifically cited within the application form. If necessary, page number(s) must be included within the citation, and documents indexed.

Incorrect, incomplete, and/or inaccurate applications may result in delays in application processing or a denial of 401 WQC. You will be notified within 30 days of receipt of the application if your application is incomplete. A resubmittal of the application begins a new 30-day review period. A review period of 60 days, as required by 33 CFR 325.2 (b)(ii), will commence when the Water Board **receives a complete application package**. The application is deemed complete if the Water Board has not notified the applicant by the 30th day of receiving the application that the application is incomplete. Once an application has been deemed complete, the Water Board can request materials to clarify impacts, mitigation, or other aspects of the application. The 60-day review period can be extended up to one year under certain circumstances. If

processing and review of the 401 WQC application will take more than 60 days, the Water Board may request additional time from the Corps or issue a Denial without Prejudice. Also, if an application is incomplete for more than one year, the Water Board may issue a Denial without Prejudice or request that the applicant withdraw their application. Once complete, the Water Board proceeds with the CEQA process, and the authorization or denial of the project.

Section 1: Owner and Agent Information

Provide the name, full mailing address, daytime phone number(s), and email address of the legal Applicant or “responsible party” in (a) of Section 1, and the same information for the Applicant’s agent in (b) of Section 1. The Applicant will be the entity or individual to whom the permit will be issued and is the legal applicant responsible for the proposed discharge. The address of the Applicant is where legal notice may be served. If the Applicant is an agency, company, corporation, or other organization, indicate the responsible officer and title.

Statement of Authorization

The applicant, which is the legal owner of property where proposed discharge of dredged and/or fill material would occur, must sign this section if an authorized agent is acting on behalf of applicant.

Section 2: Project Information

A detailed project plan and description of associated environmental impacts is required with every application. Clarification of information may be requested by Water Board staff during application review. This checklist is provided to aid applicants. Not all items on the checklist apply to every project, rather they are to be used as general guidelines for required information to be included. In addition, there may be items not covered on this checklist that may be requested by Water Board staff on a project-by-project basis. Attach additional pages as necessary.

- **Project Name or Title:** Provide a project name or title consistent with other agency applications.
- **Project Location:** Provide the address, city, county, latitude/longitude coordinates, directions where the project site lies. Directions to the site should be from a known location or landmark, including highway, street names and numbers. Consult the map on the following website to ensure you are sending the application to the appropriate Water Board: http://www.waterboards.ca.gov/waterboards_map.shtml. Note that, if the project site is in two or more regions, the application must be submitted to the State Water Resources Control Board, not the regional boards, for action.
- **Map:** Provide a map that clearly indicates the project site location and the boundary of the watershed within which the project lies, including an estimation of the drainage area (in acres) upstream of the project (USGS 7 ½ minute quadrangle is recommended).
- **Overall Project Scope, Purpose(s) and Project Goal:** Describe the overall scope, purpose and goal of the project that is proposed. For example (e.g.): bank

stabilization, crossing installation (bridge, culvert, etc.) for development purposes, repair and/or maintenance, development, restoration, etc.

- **Project Description:** Provide a full, technically accurate description of the entire activity and associated environmental impacts, both temporary and permanent, including areas outside of jurisdictional waters. The description should include, but should not be limited to, the following points, as applicable (if required later in the application, a brief description may be provided):
 - Locations and dimensions of existing and proposed structures or fill within waters of the State, including Waters of the U.S., such as culverts, gabions, riprap, wing walls, dikes, cofferdams, and excavations;
 - Impacts and potential impacts to beneficial uses as described in the Basin Plan, for any affected waterbody(ies). *Note: if the waterbody is not named in the Basin Plan, the beneficial uses of the nearest downstream named waterbody apply. For wetlands, see discussion on Wetlands Protection and Management in the Basin Plan beginning on page 4.9-8;*
 - Pre- and post-construction stormwater management and pollution control measures. If a Stormwater Pollution Prevention Plan (SWPPP) is being prepared for the project, it may be submitted for this requirement as long as it fully describes post-construction control measures proposed;
 - Existing functions and values of waterbody proposed to be impacted;
 - Direct or indirect changes in streambed slope, cross sectional dimension or area, vegetation, and/or surfacing;
 - Changes in the drainage patterns and potential impacts to onsite and downstream waterbodies, including groundwater;
 - The location and dimension of all associated access roads, work staging areas, and structures to be constructed on fill, piles, or floating platforms in waterbodies. Indicate if the structures are permanent or temporary. If temporary, provide a schedule or otherwise describe how long they will be placed in waterbodies, and how the site will be revegetated, restored, or otherwise reconditioned on their removal;
 - Temporary or permanent dewatering or water diversions; and,
 - Construction methods, schedule, and phasing plan.
- **Total Project Size:** Provide the total acreage size of entire project.
- **Site Description of Project Area:** Describe in a few words what a picture of the proposed project site would show; e.g., predominant vegetation in the area if project area is in rural setting; site is previously disturbed by past activities (grazing, etc.); site is adjacent to roadway. Include type(s) of receiving water body(ies) present on site and a brief list/description of applicant's previous and future projects related to the proposed activity or that may impact the same receiving water body(ies).
- **Area and Linear Feet of Waters in the Project Area:** In order to ascertain the percentage of waters that will be impacted by the project, provide the extent (area and linear feet) of all waters of the State or U.S. within the project area, including both those that are proposed to be impacted and those that will be avoided by the project. For example, the length of the stream or shoreline, or total wetland area, within the project boundary.

- **Proposed Schedule:** Provide the time period that the project is proposed for implementation.

Section 3: Waterbody Impact

This is an important part of the application. If you think this part of the application does not apply to your project, you may have the wrong application.

- a) **Waterbody Name(s):** Provide the name (if available) and type of any affected waterbody(ies). Indicate on a site location map the exact location of any waterbody(ies) or special aquatic site(s) that may be permanently or temporally affected either directly or indirectly by the project. If the project affects an unnamed tributary, clearly show the location of the tributary on a map and indicate the name of the nearest named waterbody to which it drains. The term “waterbody,” as used in this document, refers to any wetland, stream, creek, intermittent drainage, drainage ditch, drainage swale, seep, pond, bay, vernal pool, marsh, ground water basin, or other waters of the State. (Also, see definitions section of these *Instructions*.)
- b) **Photos:** Provide photographs of the project site and the location where impacts are proposed.
- c) **Fill and Excavation Information:** In the row or rows that correspond to the type of waterbody impacted by the Project, estimate the quantity of waters to be adversely impacted by any discharge (temporary or permanent) in acres and linear feet (for channels, shorelines, riparian corridors, and other linear habitat). Also, estimate the volume of fill for each type of impact, temporary or permanent.
 - i. Fill-related Impacts: “Fill” refers to material placed in waters of the U.S. [or State] where the material has the effect of either replacing any portion of a water of the U.S. with dry land or changing the bottom elevation of any portion of a waterbody. Examples of “fill material” include rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in waters of the U.S.

Water Type: See Definitions for description of each waterbody type.

Proposed Project’s Influences on Channel Processes: In order for Water Board staff to assess potential detrimental off-site impacts from channel destabilization due to the proposed Project, complete this section with information obtained from the Stream Protection Circular located at the following website:

http://www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/stream%20protection%20circular.pdf. The concepts and principles presented in this Circular are applicable to all Water Boards around the State. For projects involving fill or dredge discharges to rivers and streams, either perennial and intermittent, (for instance, river restoration projects, bank stabilization projects, culvert installation projects, bridge projects that span less than 1.5 times the bankfull width of the stream, etc.) provide flow information for the two-, ten-, fifty-, and 100-year storm event (Q_2 , Q_{10} , Q_{50} , Q_{100}) and a description of the potential hydrogeomorphic impacts from the project. Include flow rates, velocities, and shear stresses for the above storm events.

Fill Material: Describe as completely as possible all the types of fill material that will be used in the proposed Project.

- ii. Dredge/Excavation Impacts: *discharge of dredged material* means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States.

Purpose: Describe the reason(s) why dredging is required.

New Dredging vs. Maintenance Dredging: If the proposed Project area has been dredged in the past AND the dredging depths proposed are no deeper than those dredged previously, then the Project is maintenance dredging. Otherwise, the Project is new dredging.

Type of Material to be Dredged: Describe the dominant substrate type (e.g., sand, clay, etc.) at the location of the proposed project.

Dredging Method: What type of dredge will be used; e.g., suction, clam shell, etc.

Depth below Ordinary High Water Level (see Definitions): Indicate the depth to which the proposed Project will dredge to (e.g., 6219 feet, Lake Tahoe Datum).

Quantity of Proposed Dredging: Indicate the upper maximum volume of dredged material proposed to be removed from the waterbody, and the area from which it will be obtained. Dredging material estimates must be reported in cubic yards.

Method of Transfer and Containment: Describe how and where the dredged material will be removed, transferred and disposed of.

Results of analyses conducted on dredged material composition: Report on laboratory analysis of dredged sediment sampling results.

d) Is the water body “isolated?”

All Waters of the State are protected under California law. Additional protection is provided for Waters of the U.S, under the Federal Clean Water Act. Determinations of the jurisdictional extent of the Waters of the U.S. are made by the Corps of Engineers. Some Waters of the State are “isolated” from Federal jurisdictional waters. If you believe the waterbody impacted by your project is isolated, a letter disclaiming federal jurisdiction (or other formal determination by the Corps) must accompany the application in order to proceed with processing the application. According to the U.S. Environmental Protection Agency's (USEPA) June 2007 Guidance, an isolated wetland does not have a significant nexus to a navigable waterway, or in everyday terms, no readily identifiable surface connection to a larger body of water. There is no definition of “isolated wetland,” but the Supreme Court has ruled that an isolated wetland is determined by finding a “significant nexus” with traditional navigable waters, which are required for the following waters:

- (i) non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally (e.g., typically at least 3 months each year);
- (ii) wetlands that are adjacent to such tributaries; and
- (iii) wetlands that are adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

e) Does the proposed project involve in-channel hydromodification, floodplain modification, stream restoration, or bank stabilization?

If yes, complete the checklist in Attachment 2. Call Tobi Tyler at (530) 542-5435 if you have questions about filling this checklist out. This checklist is derived from concepts in the Stream Protection Circular⁶ written by staff at the San Francisco Bay Regional Water Quality Control Board. The purpose of the checklist in Attachment 2 is to ascertain the degree to which the applicant has evaluated relevant watershed processes affecting the project site and that may be impacted by the proposed project. The level of detail required to evaluate the watershed influences on a project site and develop strategies to avoid environmental impacts is going to increase with the complexity and scale of a project. For cases in which the landscape is composed of inherently unstable features, such as active landslides and/or alluvial fans, a detailed geotechnical report may be needed to identify these features and avoid impacts. Projects with complex hydrology and hydraulics involving the interactions of wetland, stream channels, and floodplains may need the latest generation of hydraulic models. Projects supported by government grants to restore critical habitats may need detailed habitat assessments. The parameters in the Attachment 2 checklist address and encourage geomorphic equilibrium, protection of drainage networks, avoidance and/or correction of hydraulic constrictions, avoidance of creating gullies and headcuts, repair of existing gullies and headcuts, and protection of floodplains and riparian functions and processes.

f) Is the proposed project in a Stream Environment Zone (Lake Tahoe watershed only) or 100-year floodplain of Lake Tahoe or its tributaries?

This section is required to comply with the Lahontan Basin Plan's discharge prohibition to Stream Environment Zones (SEZs) and 100-year floodplains in the Lake Tahoe Basin. See Basin Plan's Chapter 5 available at the following website: http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

g) Is any portion of the proposed project in the 100-year floodplain of the Truckee River or its tributaries?

This section is required to comply with the Lahontan Basin Plan's discharge prohibition to 100-year floodplains in the Truckee River and Little Truckee River Hydrologic Units. See Chapter 4 of the Basin Plan at: http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

Section 4: Delineation Information for Wetland and Other Waters

Provide the name, title and affiliation of the qualified professional who performed the delineation and the date the delineation was performed. Indicate the Supplement(s)⁷ used during the delineation and the date the delineation was verified by the Corps, if

⁶ The Stream Protection Circular is available at http://www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/stream%20protection%20circular.pdf.

⁷ The Corps of Engineers has developed Supplements to the 1987 Corps Delineation Manual. See http://www.usace.army.mil/CECW/Pages/reg_supp.aspx for a list of all Supplements and their links, or <http://www.usace.army.mil/CECW/Documents/cecwo/reg/trel08-28.pdf> for the Arid West Supplement and http://www.usace.army.mil/CECW/Documents/cecwo/reg/west_mt_intersupp.pdf for the Western Mountains Supplement.

available. If a delineation map has been sent to the Corps, this map must be provided with the application.

Section 5: Impact Avoidance

The applicant must demonstrate that the project is designed to avoid and minimize impacts to wetlands and other waters of the state and/or U.S. within the project area to the maximum extent practicable.

The contents of a complete WQC application are specified in the California Code of Regulations (CCR) title 23, section 3856. Section 3856(h)(6) specifies that a complete application must provide: "A description of any other steps that have been or will be taken to avoid, minimize, or compensate for loss or significant adverse impacts to beneficial uses of waters of the State."⁸

Describe, in detail, measures that have been taken to avoid and minimize direct impacts to waters of the State, including waters of the U.S. If it is not possible to avoid or minimize impacts to waters of the State, the applicant must provide the reasoning and evidence for that conclusion. The following represents the sequence in which proposals should be approached: (1) Avoid – avoid impacts to waters; (2) Minimize – modify project to minimize impacts to waters; (3) Mitigate – Where impacts cannot be avoided, adequate mitigation for the loss of water body acreage and function must be provided. An Alternatives Analysis, pursuant to the CWA section 404(b)(1) guidelines, may be required to determine the least environmentally damaging practicable alternative. *CFR 40 Part 230 Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material* is available at the following website:

<http://www.usace.army.mil/CECW/Documents/cecwo/reg/materials/40cfr230.pdf>

Information that may be relevant to this section of the application include:

- Alternatives considered that may involve less impact to waters of the U.S. and/or waters of the State.
- Measures to avoid impacts to wetlands or riparian vegetation within the project area.

Section 6: Impact Minimization

Provide a description of the efforts to minimize direct and indirect impacts to waters of the State, including waters of the U.S. For construction projects, describe how the project will achieve runoff reduction or maintenance such that pre-project hydrology matches post-project hydrology using principles such as Low Impact Development (LID) strategies. Minimization may also include, but is not limited to, the following:

- Explanation of how water quality will be maintained after the proposed project is complete in order to serve beneficial uses and pre-construction hydrologic functions of waters within the project area.
- For stream diversion plans, describe specific measures that will be taken and structures that will be installed to effectively isolate work areas from stream flows.

⁸ "Waters of the state" within this quote includes waters of the U.S."

- Plans for disposal of water from dewatering activities (i.e., removing water from excavated areas).

NOTE: Disposal of water from dewatering activities to land or surface waters requires coverage under General Waste Discharge Requirements or a National Pollutant Discharge Elimination System (NPDES) Permit, respectively.

Proposed Erosion Control and Storm Water Treatment Measures:

Provide a description of the efforts to avoid and minimize impacts to water during the project implementation. Provide a discussion of both the erosion and sediment control measures, project scheduling, flow diversions, staging and material storage yards, and winterization plans. Describe how control measures incorporated into the proposed project will prevent and minimize indirect impacts to waterbodies, such as upland impacts which may affect water quality. These measures should include Best Management Practices (BMPs) to avoid (or, if impacts are unavoidable, to minimize) impacts to waters of the State, including waters of the U.S., such as:

- Erosion control and sediment retention measures or other stormwater management, including stormwater management facilities.
- Maps and description of material stockpiles, staging areas, equipment access routes, etc. Access routes should be planned to minimize disturbance of vegetation. Describe how equipment will cross streams, and any measures that will be taken to prevent discharge of sediment during stream crossings.
- Plans for responding to inclement weather. Describe how work areas and materials will be protected in the event of adverse weather to prevent a discharge of earthen materials or other wastes from the site.
- Revegetation plans, including revegetation success criteria. (The applicant may wish to contact an advisor such as the Natural Resource Conservation Service for recommendations.)
- Winterization strategies to stabilize all bare soils and re-vegetation proposals. Please submit a map indicating the approximate locations of each method.
- Describe the methods proposed to treat storm water runoff from the project site prior to entering the storm drainage system, wetlands, streams, etc.
- Site dewatering for either diversion or inundated excavation.
- Solid waste disposal for dredged material.

Proposed Source Control Measures

Describe the methods that will be used to reduce sources of pollutants, such as fertilizers, pesticides, hydraulic fluid, etc. Proposed measures may include, but are not limited to, the following:

- Spill contingency plans. Describe measures to prevent and respond to potential spills of stored materials (e.g., chemicals, construction materials, fuels), mechanical fluids from leaking equipment or equipment washing, etc.
- Waste handling plans (for example, disposal of construction materials, and water from steam cleaning and concrete washout activities).

Post-Construction Treatment Controls

Describe the methods that will be used to reduce hydrogeomorphic impacts from increased peak flows due to increased impervious surfaces, and methods to reduce sources of pollutants in the long-term:

- Provide a description of the efforts to avoid and minimize impacts to water quality following project construction.
- Provide a description of each proposed land use (e.g., residential, street, commercial). Identify the expected pollutants, specific post-construction BMPs, their effectiveness with regards to the expected pollutants, maintenance requirements, and party(ies) responsible for maintenance.
 - The applicant must submit verify and document that the parties designated as responsible for BMP maintenance have accepted the maintenance responsibility and are aware of the maintenance requirements.
- Provide a detailed description of how the project will address post-construction changes in flow rates, velocities, and shear stresses.
- Provide a description of the LID strategies to be implemented.
- Provide a figure showing the location and type of all post-construction BMPs.
- Provide the latitude and longitude for each post-construction BMPs.

Section 7: Compensatory Mitigation

If it is determined that a watercourse will be unavoidably affected by the proposed project, mitigation will likely be necessary to preserve the functions and beneficial uses of the site. Water Board staff may request clarification of information during application review. The checklist in Attachment 5 is intended to aid applicants in submitting complete and proper information regarding mitigation plans and to enable staff to effectively evaluate the project for WQC or Waste Discharge Requirements. Attach additional pages and supporting documentation (such as a Bill-of-Sale for the purchase of mitigation credits) as necessary. *Wetlands should not be disturbed unless absolutely necessary.* If it is determined that a wetland will be affected by the proposed project, mitigation will need to be implemented at a minimum of least a 1.5:1 mitigation-to-impact ratio to result in no net loss of function and values, including temporary loss, of the wetland and its associated beneficial use. Appropriate assessment methodologies will be used by the applicant to demonstrate that the proposed compensatory mitigation site is capable of providing, and ultimately does provide, aquatic functions of equal or greater measure than the impact site.

- a. Mitigation Goal: Describe the intent of mitigation proposed for impacts.
- b. Complete a Draft Mitigation and Monitoring Plan for review by the Board that meets all the criteria in Attachment 5, Minimum Requirements for a Draft Mitigation and Monitoring Plan.
- c. Indicate whether there would temporary or permanent impacts at the mitigation site due to the mitigation proposed.
- d. Indicate in ACRES and LINEAR FEET (channels, shorelines, riparian corridors, and other linear habitat) the total quantity of waters of the United States proposed to be Established, Restored, Enhanced, or Preserved for purposes of providing Compensatory Mitigation. Establishment is defined as the creation of vegetated or unvegetated waters of the U.S./State where the resource has never previously

existed. Restoration is divided into two activities, re-establishment and rehabilitation. Re-establishment is defined as the return of natural/historic functions to a site where vegetated or unvegetated waters of the State, including waters of the U.S., previously existed. Rehabilitation is defined as the improvement of the general suite of functions of degraded vegetated or unvegetated waters of the State, including waters of the U.S. Enhancement is defined as the improvement to one or two functions of existing vegetated or unvegetated waters of the U.S./State. Preservation is defined as the acquisition and legal protection from future impacts in perpetuity of existing vegetated or unvegetated waters of the U.S./State.

- e. Provide the location information for the mitigation site if it is off-site mitigation.
- f. Provide the expected construction date of the mitigation project.
- g. Provide contact information of the implementers and/or monitors of the mitigation project.
- h. Provide Mitigation Bank or in-lieu fee information if available or appropriate.

Section 8: Threatened and Endangered Species

Indicate whether or not any threatened or endangered species are present or potentially impacted by this project.

- If yes, provide a list of the potentially impacted species (including common name).
- Provide a copy of the Biological Report or Assessment

Section 9: Federal Permit(s) Applied for, or Approved

If the project affects waters of the U.S., a copy of the CWA section 404 application sent to the Corps of Engineers must be included in the application. Provide information on Federal Permits/Licenses being sought or acquired for the proposed project. Identify any federal agency(ies) (e.g., the U.S. Army Corps of Engineers) from which permits/licenses are required or being sought for the proposed activities. Indicate permit/license type (e.g., for a U.S. Army Corps of Engineers permit, indicate whether an individual or Nationwide permit is being sought). Indicate license/permit number (e.g., Nationwide Permit number), if applicable. Attach copies of documentation such as federal permit applications, any final signed permits/licenses, notifications by federal agencies concerning the proposed activities, other pertinent communication with federal agencies regarding the proposed activities.

Section 10: State Permit(s)

Provide information on all other required license(s), permit(s), or agreement(s), including local regulatory approvals acquired or being sought. Attach a copy of any final signed Agreement if available. If final documents are not available, attach copies of any draft documents and/or pertinent correspondence if available. Include information on any de-watering, NPDES, storm water permits, or Streambed or Lakebed Alteration Agreements.

Attach a copy of your application for a Streambed or Lakebed Alteration Agreement.

Section 11: California Environmental Quality Act (CEQA) Compliance

Submittal of completed, approved and/or signed CEQA documentation is required prior to approval of WQC. Ample time must be provided to the certifying agency to properly review a final copy of a valid CEQA documentation before certification can occur.

If a Notice of Exemption had been filed indicate the type and basis for exemption being claimed. If a CEQA document is in the process of being prepared, indicate the lead CEQA agency preparing the document and approximate expected completion date.

- Provide the document type and title.
- Provide the lead agency and contact information (name, address, and phone number).
- Provide the State Clearinghouse number.
- Indicate whether or not the document has been certified/approved or if a Notice of Exemption has been filed.
 - If yes, provide a copy of the certification.
 - If no, provide the expected approval date.
- Provide a copy of the draft or final CEQA document with this application.
- The Regional Board is required to comply with CEQA before issuing a certification. Ample time must be provided to the certifying agency to properly review a final copy of valid CEQA documentation before certification can occur.
- Section 401 certification will not be granted without a certified CEQA document.⁹

Section 12: Application Fee

As part of a complete application, an application fee of \$200 must be submitted with the application. Make check payable to the State Water Resources Control Board. The application fee must be received with the application. If an application is not received with the application fee, the application may be returned to the applicant.

The review period of 60 days as required by 33 CFR 325.2 (b)(ii) will commence when the Water Board **receives a complete application package, including the application fee.**

Additional fees may be required depending on the nature of the project and the amount of impacts projected to occur once the proposed project is certified. The total fee amount will be assessed according to 23 CCR Sections 2200 (e) and 3833 (b)(2)(A), and will be specified as a condition of your certification order, if issued.

Section 13: Past/Future Proposals by the Applicant

Provide information on other projects planned or implemented by the applicant. Provide a brief list/description, including estimated adverse impacts of any projects implemented by the applicant within the last five years or planned for implementation by the applicant

⁹ Although CEQA documentation is not required to complete an application, pursuant to California Code of Regulations (CCR), title 23, section 3856(f), the certifying agency (Water Board) must be provided with and have ample time to properly review a final copy of valid CEQA documentation before taking a certification action. U.S. Army Corps of Engineers guidelines allow the Water Board 60 days to take action on a complete application. If the federal period for certification will expire before the Water Board has opportunity to consider the necessary environmental documentation, certification may be denied "without prejudice" pursuant to CCR title 23 section 3836(c) until an environmental document can be completed and considered.

within the next five years that are in any way related to the proposed activity or that may impact the same receiving water body(ies) as the proposed activity. Attach additional pages as necessary.

Section 14: Has Any Portion of the Work Been Initiated

Indicate whether any work has begun on the project.

Section 15: Certification

Mark the most appropriate box(es) that apply. Sign and date.

DEFINITIONS

100-year floodplain: A 100-year floodplain is defined as the extent of a flood that has a statistical probability of occurring once in 100 years. Floods of this extent may occur more than once every 100 years, and floods of even greater extent are possible. Most state, federal and local floodplain protection planning is based upon the 100-year floodplain. Floodplains often include wetland and riparian areas which may extend beyond the limits of the 100-year floodplain. Riparian areas are typically defined as the terrestrial moist soil zone immediately adjacent to wetlands, lakes, and both perennial and intermittent streams. (Lahontan Basin Plan, page 4.9-13) A one-hundred-year flood is calculated to be the level of flood water expected to be equaled or exceeded every 100 years on average. The 100-year flood is more accurately referred to as the 1% flood, since it is a flood that has a 1% chance of being equaled or exceeded in any single year. Based on the expected flood water level, a predicted area of inundation can be mapped out as the floodplain.

Bankfull: The term bankfull was originally used to describe the incipient elevation on the bank where flooding begins. In many stream systems, the bankfull stage is associated with the flow that just fills the channel to the top of its banks and at a point where the water begins to overflow onto a floodplain (Leopold et al. 1964). The bankfull stage and its attendant discharge serve as consistent morphological indices which can be related to the formation, maintenance and dimensions of the channel as it exists under the modern climatic regime. The terms effective and/or dominant discharge are synonymous with bankfull discharge as used in this procedure; see the federal manual [Stream Corridor Restoration: Principles, Processes and Practices](#) (FISRWG 1999) at <http://www.epa.gov/warsss/sedsource/bankfull.htm> for more detailed discussion.

Beneficial Uses: As defined in the California Water Code, beneficial uses of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Best management practices (BMPs): BMPs are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States from discharges of dredged or fill material. BMPs include methods, measures, practices, or design and performance standards which facilitate compliance with the section 404(b)(1) Guidelines (40 CFR part 230), effluent limitations or prohibitions under section 307(a), and applicable water quality standards. (40 C.F.R. § 232.2)

Salt marsh (non-tidal): Marsh associated or located on the fringes of salty playas.

Bogs are characterized by spongy peat deposits, acidic waters, and a floor covered by a thick carpet of sphagnum moss. Bogs receive all or most of their water from precipitation rather than from runoff, groundwater or streams. As a result, bogs are low in the nutrients needed for plant growth, a condition that is enhanced by acid forming peat mosses. (See <http://www.epa.gov/owow/wetlands/types/bog.html>)

Compensatory mitigation: The restoration, establishment (creation), enhancement, or preservation of aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved. (33 CFR part 328)

Condition means the relative ability of an aquatic resource to support and maintain a community of organisms having a species composition, diversity, and functional organization comparable to reference aquatic resources in the region. (33 CFR part 328)

Credit means a unit of measure (e.g., a functional or areal measure or other suitable metric) representing the accrual or attainment of aquatic functions at a compensatory mitigation site. The measure of aquatic functions is based on the resources restored, established, enhanced, or preserved. (33 CFR part 328)

Discharge: The term “discharge” means any discharge of dredged or fill material and any activity that causes or results in such a discharge.

Dredge Activities: Except as provided below, the term “discharge of dredged material” means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the State, including waters of the United States. The term includes, but is not limited to, the following (40 C.F.R. § 232.2 (Jul. 1, 1999) (Corresponding changes were also made to Corps regulations at 33 C.F.R. § 323.2(d)(1), (2) (Jul. 1, 1999):

- (1) The addition of dredged material to a specified discharge site located in waters of the U.S.;
- (2) The runoff or overflow, associated with a dredging operation, from a contained land or water disposal area; and
- (3) Any addition, including redeposit other than incidental fallback, of dredged material, including excavated material, into waters of the U.S. which is incidental to any activity, including mechanized land-clearing, ditching, channelization, or other excavation.

Dredging: The intentional or inadvertent excavation, movement or removal of any substrate material from any waters of the State, including Waters of the U.S., by any means.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area. (33 CFR part 328)

Erosion Control: the practice of preventing or controlling wind or water erosion in agriculture, land development and construction. “Vegetation, such as grasses and wildflowers, and other materials, such as straw, fiber, stabilizing emulsion, protective blankets, etc., placed to stabilize areas of disturbed soils, reduce loss of soil due to the action of water or wind, and prevent water pollution.” (State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, Construction General Permit)

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present at a given upland site to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area. (33 CFR part 328)

Fens are peat-forming wetlands that receive nutrients from sources other than precipitation: usually from upslope sources through drainage from surrounding mineral soils and from groundwater movement. Fens differ from bogs because they are less acidic and have higher nutrient levels. They are therefore able to support a much more diverse plant and animal community. These systems are often covered by grasses, sedges, rushes, and wildflowers. Some fens are characterized by parallel ridges of vegetation separated by less productive hollows. The ridges of these patterned fens form perpendicular to the downslope direction of water movement. Over time, peat may build up and separate the fen from its groundwater supply. When this happens, the fen receives fewer nutrients and may become a bog. (See <http://www.epa.gov/owow/wetlands/types/fen.html>)

Fill material means any "pollutant" which replaces portions of the "waters of the United States" with dry land or which changes the bottom elevation of a water body for any purpose. (40 C.F.R. § 232.2)

Filling: Any intentional or inadvertent addition, including redeposit other than incidental fallback, of any excavated material into waters of the state by any means, including Waters of the U.S.

Freshwater marsh: Freshwater marshes are non-forested, non-tidal, and have non-peat soils (unlike bogs and fens). They can be either fresh water mineralized marshes, from groundwater, streams and surface runoff, or poorly mineralized fresh water marshes resulting from direct precipitation; pH is usually neutral. Although the shallow marshes do not support many fish, deeper marshes are home to many species. Some of the most common plants are cattails, water lilies, arrowheads, and rushes.

Functional capacity means the degree to which an area of aquatic resource performs a specific function. (33 CFR part 328)

Functions means the physical, chemical, and biological processes that occur in ecosystems. (33 CFR part 328)

Impact means adverse effect. (33 CFR part 328)

In-kind means a resource of a similar structural and functional type to the impacted resource. (33 CFR part 328)

In-lieu fee program means a program involving the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy

compensatory mitigation requirements for Corps permits. Similar to a mitigation bank, an in-lieu fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor. However, the rules governing the operation and use of in-lieu fee programs are somewhat different from the rules governing operation and use of mitigation banks. The operation and use of an in-lieu fee program are governed by an in-lieu fee program instrument. (33 CFR part 328)

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Isolated wetland: According to US EPA's June 2007 Guidance, an isolated wetland does not have a significant nexus to a navigable waterway (no readily identifiable surface connection to a larger body of water). Isolated wetlands, or wetlands which are "not connected by streams or other bodies of water" was reviewed by the Supreme Court case, Solid Waste Agency of Northern Cook County (SWAANC) versus The Army Corps of Engineers (COE) in 2001 (SWWANC v. U.S COE). This major reinterpretation of the Clean Water Act, redefined the definition of isolated wetlands and minimized the Corps jurisdiction over isolated wetlands or waters that are "not navigable." The Court ruled that the mere presence of migratory birds is not sufficient for asserting the CWA jurisdiction over isolated, non-navigable water bodies of water. Due to the removal of the COE's oversight of the regulation of isolated wetlands, it now falls to a motley collection of state and local laws in all 50 states, some with stringent rules on the use of wetlands and other states with looser regulations (Midwest and Western states). According to the Supreme Court, an isolated wetland is determined by finding a "significant nexus" with traditional navigable waters, which are required for the following waters:

- (i) non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally (e.g., typically at least 3 months each year);
- (ii) wetlands that are adjacent to such tributaries; and
- (iii) wetlands that are adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

Significantly, the definition does not stray into directly defining an isolated wetland, it circumvents a straight definition in preference for a definition of navigable waters and how they are connected via surface water, and remains silent on the role of groundwater hydrology.

http://www.wetlandresearch.com/wiki/index.php?title=Isolated_Wetlands

The Corps considers isolated wetlands to be those of any size that are not adjacent* to or do not have a sufficient hydrologic connection to navigable waters. Corps policy regarding the definition and regulation of isolated wetlands is currently in flux, and future court or administrative decisions may further change how isolated wetlands are regulated by the federal government. (See 33 CFR 328.3[c] for definition.)

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Low Impact Development (LID): Unlike traditional storm water management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility, LID uses site design and storm water management to maintain the site's pre-development runoff rates and volumes. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall. (see http://www.waterboards.ca.gov/water_issues/programs/low_impact_development/index.shtml)

Mitigation bank means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by Corps permits. In general, a mitigation bank sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument. (33 CFR part 328)

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line). (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Off-site means an area that is neither located on the same parcel of land as the impact site, nor on a parcel of land contiguous to the parcel containing the impact site. (33 CFR part 328)

On-site means an area located on the same parcel of land as the impact site, or on a parcel of land contiguous to the impact site. (33 CFR part 328)

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within

the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Out-of-kind means a resource of a different structural and functional type from the impacted resource. (33 CFR part 328)

Ordinary High Water: means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. (33 CFR part 328.3(e))

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Playa lakes are round hollows in the ground in the Southern High Plains of the United States. They are ephemeral, meaning that they are only present at certain times of the year. Most playas fill with water only after spring rainstorms when freshwater collects in the round depressions of the otherwise flat landscape. There are also a few saltwater-filled playas. These are fed by water from underlying aquifers, which brings salt with it as it percolates up through the soil. As the water evaporates, the salt is left behind in the increasingly salty playas. (See <http://www.epa.gov/owow/wetlands/types/playa.html>)

Post-Construction BMPs: Structural and non-structural controls which detain, retain, or filter the release of pollutant to receiving waters after final stabilization is attained. (SWRCB Order No. 2009-0009-DWQ, Construction General Permit)

Preservation means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions. (33 CFR part 328)

Re-establishment means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions. (33 CFR part 328)

Reference aquatic resources are a set of aquatic resources that represent the full range of variability exhibited by a regional class of aquatic resources as a result of natural processes and anthropogenic disturbances. (33 CFR part 328)

Rehabilitation means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area. (33 CFR part 328)

Restoration means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: reestablishment and rehabilitation. (33 CFR part 328)

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Riparian areas are lands adjacent to streams, rivers, lakes, and estuarine-marine shorelines. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (33 CFR part 328)

Seasonal Wetland: In California, wetlands are commonly classified according to the length of time that an area is inundated or saturated by water or the types of plants and animals an area supports. For example, if an area is only saturated or inundated for part of the year it can be classified as a seasonal or perennial wetlands. Likewise, areas that are inundated or saturated throughout the entire year may be referred to as permanent wetlands. (see http://ceres.ca.gov/wetlands/introduction/defining_wetlands.html)

Sediment Control BMPs: Practices that trap soil particles after they have been eroded by rain, flowing water, or wind. They include those practices that intercept and slow or detain the flow of storm water to allow sediment to settle and be trapped (e.g., silt fence, sediment basin, fiber rolls, etc.). (SWRCB Order No. 2009-0009-DWQ, Construction General Permit)

Service area means the geographic area within which impacts can be mitigated at a specific mitigation bank or an in-lieu fee program, as designated in its instrument. (33 CFR part 328)

Services mean the benefits that human populations receive from functions that occur in ecosystems. (33 CFR part 328)

Spring Seep: Spring seeps are small wetlands typically found in sloping terrains. Groundwater reaches the surface through a distinct hole from which shallow, broad flows move outward and create a saturated zone. The groundwater typically flows year round and has a relatively constant temperature (usually between 50 and 60 degrees F). Spring seeps are essentially discharge wetlands, though they can provide recharge functions under some conditions. (See http://www.epa.gov/reg3esd1/wetlands/spring_seep.htm)

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Streambed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Stream Environment Zones (SEZs) are biological communities that owe their characteristics to the presence of surface water or a seasonal high ground water table. Specific criteria for defining SEZs have changed over time; the history of these criteria is summarized in Volume III of the Tahoe Regional Planning Agency's (TRPA) 208 Plan. Current criteria for identification of SEZs and SEZ setbacks are outlined below. The following criteria are used by both the Lahontan Water Board and TRPA. A SEZ is determined to be present if any one of the following key indicators is present, or in the absence of a key indicator, if any three of the following secondary indicators are present¹⁰.

1. **Key Indicators:** Key indicators are: (a) Evidence of surface water flow, including perennial, ephemeral, and intermittent streams, but not including rills or man-made channels; or (b) Primary riparian vegetation; or (c) Near surface groundwater; or (d) Lakes or ponds; or (e) Beach (Be) soils; or (f) One of the following alluvial soils: (i) Elmira loamy coarse sand, wet variant (Ev) (ii) Marsh (Mh).
2. **Secondary Indicators:** Secondary indicators are: (a) Designated floodplain (b) Groundwater between 20-40 inches (c) Secondary riparian vegetation (d) One of the following alluvial soils: (i) Loamy alluvial land (Lo), or (ii) Celio gravelly loamy coarse sand (Co), or (iii) Gravelly alluvial land (Gr).

The boundary of a SEZ is the outermost limit of the key indicators; the outermost limit where three secondary indicators coincide; or if Lo, Co or Gr soils are present, the outermost limit where two secondary indicators coincide, whichever establishes the widest SEZ at any point. The outermost boundaries of a stream are the bank-full width of such stream which is defined as the level of frequent high flow, i.e., the level of flood with a recurrence interval of approximately 1.5 years. Other definitions of terms used in the criteria above are given in Table 5.7-1. Note that SEZs can include bodies of open water as well as wet meadows without defined stream channels. SEZs are generally identical with Bailey land capability Class 1b lands (see the section of this Chapter on land capability, above). One hundred year floodplains are sometimes, but not always, included within SEZs; see the separate section of this Chapter on 100-year floodplain protection for control measures associated with 100-year floodplains which are not also SEZs. The SEZ criteria can be compared to the federal definition of wetlands (40 CFR § 110.1[f]). Federal "jurisdictional" wetlands. (Lahontan Basin Plan)

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

¹⁰ Soil types are discussed in Volume I of the Tahoe Regional Planning Agency's (TRPA) 208 Plan. Plant communities are identified in accordance with the definitions and procedures contained in the report entitled *Vegetation of the Lake Tahoe Region, A Guide for Planning* (TRPA 1971).

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Temporal loss is the time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site. Higher compensation ratios may be required to compensate for temporal loss. When the compensatory mitigation project is initiated prior to, or concurrent with, the permitted impacts, the district engineer may determine that compensation for temporal loss is not necessary, unless the resource has a long development time. (33 CFR part 328)

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Vernal Pool: Vernal pools are seasonal depressional wetlands that occur under the Mediterranean climate conditions of the West Coast. They are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. These wetlands range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland. Although generally isolated, they are sometimes connected to each other by small drainages known as vernal swales. Beneath vernal pools lies either bedrock or a hard clay layer in the soil that helps keep water in the pool. (See <http://www.epa.gov/owow/wetlands/types/vernal.html>)

Waterbody: A waterbody is a Waters of the State, which is defined, pursuant to Water Code section 13050, subdivision (e), as “any surface water or groundwater, including saline waters, within the boundaries of the state.” A waterbody is also defined as a jurisdictional water of the United States that, during a year with normal patterns of precipitation, has water flowing or standing above ground to the extent that an ordinary high water mark (OHWM) or other indicators of jurisdiction can be determined, as well as any wetland area (see 33 CFR 328.3(b)). If a jurisdictional wetland is adjacent—meaning bordering, contiguous, or neighboring—to a jurisdictional waterbody displaying an OHWM or other indicators of jurisdiction, that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

Examples of “waterbodies” include streams, rivers, lakes, ponds, and wetlands. (Federal Register /Vol. 72, No. 47 /Monday, March 12, 2007 /Notices 11197)

Waterbody Type: Those listed in the table in Section 3.c of the Application.

Water Quality Objectives (WQO): Water quality objectives are defined in the California Water Code as limits or levels of water quality constituents or characteristics, which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

Watershed means a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean. (33 CFR part 328)

Watershed approach means an analytical process for making compensatory mitigation decisions that support the sustainability or improvement of aquatic resources in a watershed. It involves consideration of watershed needs, and how locations and types of compensatory mitigation projects address those needs. A landscape perspective is used to identify the types and locations of compensatory mitigation projects that will benefit the watershed and offset losses of aquatic resource functions and services caused by activities authorized by Corps permits. The watershed approach may involve consideration of landscape scale, historic and potential aquatic resource conditions, past and projected aquatic resource impacts in the watershed, and terrestrial connections between aquatic resources when determining compensatory mitigation requirements for Corps permits. (33 CFR part 328)

Watershed plan means a plan developed by federal, tribal, state, and/ or local government agencies or appropriate non-governmental organizations, in consultation with relevant stakeholders, for the specific goal of aquatic resource restoration, establishment, enhancement, and preservation. A watershed plan addresses aquatic resource conditions in the watershed, multiple stakeholder interests, and land uses. Watershed plans may also identify priority sites for aquatic resource restoration and protection. Examples of watershed plans include special area management plans, advance identification programs, and wetland management plans. (33 CFR part 328)

Waters of the United States means (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate commerce; (4) All impoundments of waters otherwise defined as waters of the United States under the definition; (5) Tributaries of waters identified in paragraphs (a)(1)-(4) of this section; (6) The territorial seas; (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds

as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States. (8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA. (33 CFR 328.3(a))

Wetland: generic term for all the different kinds of wet habitats--implying that it is land that is wet for some period of time, but not necessarily permanently wet. Wetlands have numerous definitions and classifications in the United States as a result of their diversity, the need for their inventory, and the regulation of their uses. (Ralph Tiner, U.S. Fish and Wildlife Service, <http://water.usgs.gov/nwsun/WSP2425/definitions.html>)

- Those “areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances support a prevalence of vegetation typically adopted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.” (33 CFR 328.3(b); 40 CFR 230.3(t))
- An area is wetland if, under normal circumstances, it (1) is saturated by ground water or inundated by shallow surface water for a duration sufficient to cause anaerobic conditions within the upper substrate; (2) exhibits hydric substrate conditions indicative of such hydrology; and (3) either lacks vegetation or the vegetation is dominated by hydrophytes. [State Water Resources Control Board Draft Definition]
- The USFWS definition includes, swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools, periodically inundated saltflats; intertidal mudflats; wet meadows; wet pastures; springs and seeps; portions of lakes, ponds, rivers and streams; and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophytic vegetation, or in which the soils are predominantly hydric in nature. This definition is also used by the California Department of Fish and Game.

Wet Meadow / Pasture: A meadow is a field vegetated primarily by grass and other non-woody plants (grassland). It may be cut for hay or grazed by livestock. A wet meadow is a wetland which is saturated with water throughout much of the year. Wet meadows may occur because of poor drainage or the receipt of large amounts of water from rain or melted snow. They may also occur in riparian zones. Unlike a marsh or swamp, a wet meadow does not have standing water present except for brief to moderate periods during the growing season. Instead, the ground in a wet meadow is typically damp and squishy, like a well-soaked sponge. Wet meadows therefore do not usually support aquatic life such as fish. They are, however, a very fecund environment and typically attract large numbers of birds, small mammals and insects including butterflies. Vegetation in a wet meadow usually includes a wide variety of herbaceous species including sedges, rushes, forbs and grasses. Woody plants if present, account for a minority of the total area cover.