

PROJECT DISCUSSION PAPER

POLICY TO PROTECT WETLANDS AND RIPARIAN AREAS

PROJECT BACKGROUND

In April 2007, the State Water Resources Control Board (State Water Board) staff held California Environmental Quality Act (CEQA) scoping meetings to discuss with the public four alternative approaches to a statewide Wetland and Riparian Area Protection Policy (Policy). Based on comments received, the State Water Board approved the current three-phase approach to developing a statewide Policy in April 2008 (State Water Board [Resolution No. 2008-0026](#)).

Phase 1: Develop a Policy to protect wetlands from dredge and fill activities, including:

- A wetland definition that would reliably define the diverse array of California wetlands based on the U.S. Army Corps of Engineers' existing wetland delineation methods to the extent feasible
- A wetland mechanism for regulating wetlands, building upon the Federal Clean Water Act 404 (b)(1) Guidelines (40 C.F.R. parts 230-233) and including a watershed focus
- An assessment method for collecting wetland data to monitor progress toward wetland protection and to evaluate program development

Phase 2: Expand the scope of the Policy to protect wetlands from all other activities potentially impacting water quality, and will include:

- New and/or revised beneficial use definitions
- Water quality objectives
- A program of implementation to achieve the water quality objectives, as necessary, to protect wetland-related functions

Phase 3: Expand the scope of the Policy to protect surface waters from impacts that may result from riparian area disturbances, and will include:

- New and/or revised beneficial use definitions
- Water quality objectives
- A program of implementation to achieve the water quality objectives, as necessary, to protect riparian area water quality related functions

Staff has received direction from the State Water Board to immediately commence work on Phase 1, and to develop the Policy using a collaborative process that includes the Regional Water Quality Control Boards (Regional Water Boards). For this purpose, a California Water Board Wetland Policy Development Team has been formed. The Development Team will consider and utilize relevant plans, policies, and technical documents already adopted or being developed by the Regional Water Boards, including the Stream and Wetland Systems Protection Policy Basin Plan Amendment being prepared by the North Coast and San Francisco Bay Regional Water Boards.

It is essential that the Policy coordinates with state and federal programs that regulate wetlands. An Interagency Coordinating Committee is participating in this project as part of the Development Team. Participating agencies include U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Department of Agriculture – Natural Resources Conservation Service; California State Department of Fish and Game; and California Coastal Commission.

Stakeholder workgroups will also participate in formulation of a preliminary draft Policy prior to release for public comment. Workgroup meetings will address each stakeholder group's particular concerns with the preliminary draft Policy. These groups will be kept small, but should represent the range of opinions within particular interest groups or affiliations.

PHASE 1 PROJECT DESCRIPTION

The intent of Phase 1 of the statewide Policy is to protect waters of the state, including wetlands, from dredge and fill activities that are not regulated by the federal government under the Clean Water Act (CWA) (33 U.S.C. §1251 et seq.). Recent U.S. Supreme Court rulings (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 2001* and *Rapanos v. United States, 2006*) have reduced the jurisdiction of the Clean Water Act over wetland and riparian areas by limiting the definition of "waters of the United States." These decisions necessitate the use of California's independent authorities under the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) to protect these vital resources.

The Policy will support compliance with California's Wetlands Conservation Policy ('No Net Loss' policy; Executive Order W-59-93), which requires state agencies to "ensure no overall net loss [of wetlands] and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California in a manner that fosters creativity, stewardship and respect for private property."

The Policy will provide clear, comprehensive, and enforceable requirements for protection of waters of the state, support of beneficial uses, and improvement of water quality. While the Policy will not be enforceable in itself, it will inform the Water Boards' permit writing and other regulatory programs. Waters protected under the Policy will include perennial, intermittent, and ephemeral streams; connected and isolated wetlands; riparian areas; floodplains; and estuaries not regulated under the CWA.

REGULATORY BACKGROUND AND NEED FOR A NEW STATEWIDE POLICY

This section summarizes:

- Conditions of Wetlands and Riparian Areas in California
- The Federal Government's Changing Role in Protecting Wetlands and Riparian Areas
- The State's Role in Protecting Wetlands and Riparian Areas

- Gaps in the State's Wetlands and Riparian Areas Protections
- Improving the State's Wetlands and Riparian Areas Protections

The State Water Board and the nine Regional Water Boards are the state's primary water quality regulatory agencies, tasked with protecting the beneficial uses of the waters of the state under the Porter-Cologne Water Quality Control Act. The State and Regional Water Boards' duties include the regulation of wetlands and riparian areas, which are critical to the protection and enhancement of water quality throughout California's diverse watersheds. Additional regulatory attention of these areas is necessitated by statewide policies such as the Policy for Maintaining High Quality Water ([State Water Board Resolution No. 68-16](#)), the Wetlands Conservation Policy (Executive Order W-59-93), also known as the state's "No Net Loss" Policy for Wetlands, and the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004) (State Water Board 2004a).

Although the State and Regional Water Boards currently protect wetlands and riparian areas, additional policy direction is needed to improve the efficiency and effectiveness of regulatory programs and increase the overall level of water quality protection in the state. To this end, the State Water Board passed Resolution No. 2008-0026 on April 15, 2008. As stated in the resolution, a statewide Wetland and Riparian Area Protection Policy is needed to address the following four areas:

- Lack of clarity in the existing regulatory framework for protecting wetlands and riparian areas that are no longer regulated under the federal CWA due to recent federal court cases. Case law has limited the extent of federal jurisdiction and increased the relative role and importance of the state's independent water quality programs and authorities.
- Lack of statewide consistency in the definition of wetlands and riparian areas, necessary to ensure protection of beneficial uses under the California Water Code.
- Lack of statewide consistency in definitions of beneficial uses for wetland and riparian area functions (e.g., pollutant removal, floodwater retention, and habitat connectivity).
- Lack of consistent statewide requirements for evaluating the condition of wetland and riparian area resources. Condition assessments are necessary for determining potential impacts from discharges and other activities on wetland and riparian area water quality and associated beneficial uses; and for determining the actions that are necessary to avoid, minimize, and mitigate any potential impacts to protect wetland and riparian resources.

Improvements to these regulatory areas and the need for a statewide Wetland and Riparian Area Protection Policy are further outlined below:

Conditions of Wetlands and Riparian Areas in California

- Wetlands and riparian areas are among the state's most valuable, most heavily impacted, and most threatened natural resources. They support a variety of beneficial uses and provide important water quality functions, including pollutant removal, flood attenuation, and habitat (State Water Board 2003).
- California has lost an estimated 91 percent of its historic wetland acreage, the highest loss rate of any state (Dahl 1990). Similarly, California has lost between 85 and 98 percent of its historic riparian areas (RHJV 2004).
- Loss of wetlands and riparian areas in the state has led to water quality impairments. For example, according to the 2002 CWA section 303(d) List of Water Quality-Limited Segments (State Water Board 2004b), riparian disturbance is a contributing factor in 80 percent of impairments in the North Coast Region. This includes 92 percent of temperature impairments and 67 percent of sediment impairments in the North Coast Region.
- The State Water Board funded a 2006 study of permitted wetland impacts and mitigation (Ambrose et al. 2006), which revealed that wetland acreage has largely been preserved in compliance with the state's Wetland Conservation Policy, also known as the "No Net Loss" Policy. However, on average the *quality* of created, restored, and enhanced wetlands achieved through mitigation was lower than the quality of intact, reference wetlands, suggesting that wetland projects, as currently permitted, are contributing to a net loss of wetland functions and values, and that further policy direction and more effective regulation are required to reverse this trend.

The Federal Government's Changing Role in Protecting Wetlands and Riparian Areas

- The CWA applies to "waters of the United States." Wetlands that are adjacent to navigable waters are waters of the United States. Regardless of adjacency, wetlands also fall within CWA jurisdiction if they have a significant nexus to traditionally navigable waters. Riparian areas are waters of the United States if they meet the criteria for wetlands or are located below the "ordinary high water mark" of a water body (as defined in 33 C.F.R. § 328.3[e]), which generally corresponds to relatively frequent high flow events.
- Wetlands are primarily regulated by the federal government under CWA section 404(b)(1), which regulates discharges of dredge or fill material, and is administered by the U.S. Army Corps of Engineers (USACE).
- The U.S. Environmental Protection Agency (USEPA) and USACE define wetlands under the CWA as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 C.F.R. § 328.3[b]).

The USACE's 1987 *Wetland Delineation Manual* (USACE 1987), which is used to interpret the federal wetland definition in the field does not recognize all

wetlands in California. For example, the USACE's manual requires that an area exhibit certain soil characteristics commonly associated with wetlands, but some wetland types, such as mudflats and sand bars, are unlikely to develop these characteristics due to their frequent disturbance regimes or substrate materials, even though they exhibit other physical, chemical, and biological characteristics associated with wetlands (NRC 1995). Additionally, some wetlands in California may not develop the vegetation characteristics required by the USACE's manual due to their specific chemical or physical characteristics, such as high sulfide soils that cause vegetation mortality (NRC 1995).

- In 2001, the U.S. Supreme Court limited the extent of federal jurisdiction under the CWA when it determined in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) that certain "isolated" waters, including many wetlands and riparian areas, do not fall within the USACE's interpretation of waters of the United States.
- Since the SWANCC decision, the USACE has disclaimed jurisdiction over numerous waters that previously would have received CWA protection. For example, the State Water Board found when it issued [Water Quality Order No. 2004-0004-DWQ](#) (State Water Board 2004c) that "from January 1, 2001 to December 31, 2003, the [USACE] disclaimed jurisdiction over 160 waterbodies comprising 449 acres of waters of the state, including 251 acres of wetlands, 121 acres of riparian areas, and 77 acres of other waters (these figures are under-reported because 24 percent of the jurisdictional disclaimers did not specify the sizes of the disclaimed waterbodies)."

The State's Role in Protecting Wetlands and Riparian Areas

- The California Water Code applies to "waters of the state," which are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Wat. Code § 13050 subd.(e)). Waters of the state include waters of the United States, but also waters excluded from federal jurisdiction.
- California has largely relied upon its authority under CWA section 401 to regulate discharges of dredge or fill material to waters of the state, including wetlands. Section 401 requires applicants for certain federal licenses or permits to obtain "water quality certification" from California ensuring that the project will comply with State water quality standards before such licenses or permits may be issued. Among the permits subject to section 401 include the USACE's section 404 permits.
- California's authority and responsibility to evaluate certification requests under section 401 relies on a valid application for a section 404 permit from the USACE or another application for a federal license or permit. However, under USACE Guidelines, not all projects that affect waters of the state require section 404 certification, and thus may miss section 401 review. For example, if the USACE determines that the water body in question is not subject to regulation under the USACE's section 404 program, no application for section 401 certification will be required.

- By limiting the definition of waters of the United States and those projects requiring section 404 permits, the SWANCC decision also limited the number of projects requiring certification from the state under section 401. However, the U.S. Supreme Court emphasized in its decision that it is within the states' purview to regulate impacts to waters outside of federal jurisdiction using their independent authorities under state law.
- The State Water Board's Office of Chief Counsel (OCC) issued a memorandum on January 25, 2001 (State Water Board 2001), clarifying that waters exempted from the CWA by the SWANCC decision are still subject to California law and that "California Water Code section 13260 requires 'any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the state to file a report of discharge (an application for waste discharge requirements).'" Furthermore, OCC wrote that "the fact that [Regional Water Boards] have often opted to regulate discharges to waters of the state, including isolated wetlands, through the 401 program in lieu of or in addition to issuing waste discharge requirements (WDRs) (or waivers thereof) does not preclude the regions from issuing WDRs (or waivers of WDRs) in the absence of a request for 401 certification."

Improving the State's Wetlands and Riparian Areas Protections

- Governor Schwarzenegger's *Action Plan for California's Environment* directed state agencies to fill any gaps in wetlands protection. The State Water Board's 2003 Report to the Legislature on *Regulatory Steps Needed to Protect and Conserve Wetlands Not Subject to the Clean Water Act* (State Water Board 2003) identified several such gaps in wetland and riparian area protections, which are described below, and outlined a series of steps needed to fill these gaps. The State Water Board's 2004 Workplan (State Water Board 2004d) further memorialized these steps by establishing tasks necessary to improve protection of wetlands and riparian areas in the state.
- As recognized above, the California Water Code applies to a broader set of waters than does the Clean Water Act, but the full extent of these waters is not always clear, particularly with respect to wetlands and riparian areas.
- The State Water Board has not yet adopted its own definition of wetlands. The federal definition of wetlands is used to administer the CWA section 404 program and is commonly used by the State and Regional Water Boards due to its corresponding integration with the state's 401 water quality certification program. Several of the Regional Water Boards independently have adopted regional wetland definitions, and the consequent lack of consistency has complicated identification and protection efforts. Wetlands not recognized under the federal definition are still protected by the State and Regional Water Boards under the Water Code through Water Quality Control Plans (Basin Plans), and applicable statewide plans and policies, including the "No Net Loss" Policy. The 2004 Workplan specified a task to adopt a state wetland definition to "provide a

standard metric to help determine compensatory mitigation requirements and compliance with [the] “no net loss” policy.”

- The CWA does not explicitly define riparian areas, but riparian areas that meet the criteria for wetlands or are located below the ordinary high water mark of a water body are considered to be waters of the United States and are regulated by the CWA. The State and Regional Water Boards concurrently protect these riparian areas through the 401 water quality certification program. However, the majority of riparian areas does not meet the federal wetland criteria and are not located below the ordinary high water mark. The State and Regional Water Boards protect these riparian areas as necessary to protect water quality and support beneficial uses, but the State Water Board has not established a statewide definition of riparian areas, which makes identification and protection efforts inconsistent.
- In addition to the lack of statewide wetland and riparian area definitions, consistent definitions of wetland and riparian area beneficial uses have not been established statewide. The 2004 Workplan specified a task to develop beneficial use definitions for wetland-related functions to “provide a Statewide regulatory standard to systematically protect wetland-related functions (e.g. pollutant removal, floodwater retention, and habitat connectivity) not explicitly included in the existing list of [beneficial uses].” The State Water Board has not yet adopted statewide wetland and riparian area beneficial uses, although several of the Regional Water Boards independently have adopted regional wetland and riparian area beneficial uses, including uses for Water Quality Enhancement (WQE) (North Coast and Lahontan Regional Water Boards), Flood Peak Attenuation/Flood Water Storage (North Coast and Lahontan Regional Water Boards), and Wetland Habitat (North Coast and Los Angeles Regional Water Boards).
- Consistent requirements to regulate impacts from discharges and other activities on wetlands and riparian areas have not been established. The 2004 Workplan specified a task to “provide a State policy framework” to address the impacts of dredge or fill material discharges that is “at least as protective as the federal requirements applicable to fill and dredged discharges to waters of the [United States].” Also needed are policy frameworks to address impacts on wetlands and riparian areas from other discharges and activities, including discharges of pollutants other than dredge or fill material (e.g. nutrients); hydromodification; land and vegetation clearing activities; and invasive species.
- The North Coast and San Francisco Bay Regional Water Boards are developing a “Stream and Wetlands System Protection Policy,” which will be proposed as Basin Plan amendments in those regions. The Regional Water Boards’ amendments will establish regional wetland and riparian area protections.¹ The development of a State Water Board Wetland and Riparian Area Protection

¹ More information on the North Coast and San Francisco Bay Regional Water Boards’ proposed Basin Plan amendments can be found online at:

<http://www.waterboards.ca.gov/northcoast/programs/basinplan/swspp.html> and
<http://www.waterboards.ca.gov/sanfranciscobay/streamandwetlands.htm>.

Policy would give a statewide regulatory context to this and other Regional Water Board wetland and riparian area protection efforts.

KEY ISSUES AND QUESTIONS

State Water Board staff identified the following key issues and questions for public input related to the appropriate scope and content of a statewide Wetland and Riparian Area Protection Policy:

- Wetland Definition – The Policy is to include “a wetland definition that would reliably define the diverse array of California wetlands based on the United States Army Corps of Engineers’ (Corps) wetland delineation methods to the extent feasible” (e.g., without limiting the definition to federal “waters of the United States”). Based on this directive, our preliminary considerations for a wetland definition include that it must:
 1. be sufficiently broad to encompass California’s diverse array of wetlands;
 2. promote consistency among other state and federal agencies with concurrent jurisdiction over wetlands, to the extent feasible, while maintaining #1; and
 3. utilize accepted field methods to identify wetland boundaries.
 - What other considerations for a wetland definition should the State Water Board use that would reliably define the diverse array of California wetlands?

- Federal 404(b)(1) Guidelines (40 C.F.R. § 230.10(a)) – The State Water Board directed that a wetland regulatory program based on the federal 404(b)(1) Guidelines (Guidelines) be adopted. The Policy will adapt the Guidelines from the CWA to reflect the authorities of the State Water Board under the Porter-Cologne Water Quality Control Act. The State Water Board Staff has identified areas of the Guidelines that may be revised to reflect State Water Board authorities and directives. The Policy may include new requirements to address the following:
 1. Avoidance Requirements and Alternative Analysis

The Guidelines require the applicant demonstrate that their proposed dredge or fill discharges is unavoidable and incorporates the least environmentally-damaging practicable means of achieving project objectives. The applicant must demonstrate that impacts have been avoided where possible, and, where unavoidable impacts occur, that all possible steps to minimize impacts have been taken. For any remaining unavoidable impacts, the Guidelines require appropriate mitigation.

 - What additional measures should the Policy include to strengthen avoidance requirements including the alternatives analysis?

2. Evaluation of Impacts

The Guidelines list actions to minimize adverse effects in Subpart H, which includes actions related to analyzing and controlling the material to be discharged, actions related to construction activities, actions related to plant and animal protection, actions related to effects on human health and use, and other actions.

- What additional measures should the Policy include to evaluate and minimize adverse impacts of dredge or fill material discharges?

3. Mitigation Requirements

The Guidelines require compensatory mitigation for any remaining impacts after all steps have been taken to avoid and minimize impacts.

- What additional measures should the Policy include to strengthen mitigation requirements to adequately replace lost wetland areas and functions and meet the goals of the no-net loss policy?
- Wetland Condition Assessment – The Policy is to provide guidance on the use of rapid assessment methods for collecting wetland data, and monitoring progress toward wetland protection. The Policy will also encourage utilizing the data collected from mitigation projects to assist in the statewide effort of tracking wetland gains and losses to determine if the State is meeting the “no-net loss” goal of Executive Order W-59-83 (State “no-net loss policy”).
 - The Policy will require monitoring plans for compensatory mitigation projects. How should the Policy address evaluating the performance of a mitigation project over time with rapid assessment methods?

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