

# **Informational Document**

## Public Scoping Meeting for Proposed Wetland and Riparian Area Protection Policy

March 2007

Division of Water Quality  
STATE WATER RESOURCES CONTROL BOARD  
California Environmental Protection Agency

## **Introduction**

The State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards (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 California Water Code. 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 to these areas is necessitated by statewide policies such as 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 (State Water Board Resolution No. 2004-0030).

Although the State and Regional Water Boards implement legal requirements to protect wetlands and riparian areas, the efficiency and effectiveness of these requirements could be improved to increase the overall level of water quality protection in the state. A statewide Wetland and Riparian Area Protection Policy is primarily needed to address the following three areas:

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal Clean Water Act (CWA) due to recent federal court cases that have 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, 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) and 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

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beneficial uses and provide important water quality functions, including pollutant removal, flood attenuation, and habitat connectivity (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 proposed 2006 federal CWA section 303(d) list of water quality limited segments (State Water Board 2006), riparian disturbance is believed to be a contributing factor to impairment in 76 percent of impaired watersheds in the North Coast Region. This includes 86 percent of all temperature impairments and 75 percent of all 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 "No Net Loss" Policy for Wetlands. 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 projects conducted in wetlands, as currently permitted, are contributing to a net loss of wetland functions and values.

### The Federal Role in Protecting Wetlands and Riparian Areas

- The federal CWA (33 U.S.C. § 1251 et seq.) 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 federal 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 section 404(b)(1) of the federal CWA, which regulates discharges of dredge or fill material and is administered by the United States Army Corps of Engineers (USACE).
- The United States Environmental Protection Agency (USEPA) and USACE define wetlands under the federal 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 federal CWA when it determined in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) (531 U.S. 159) 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 federal CWA protection. For example, the State Water Board found when it issued Water Quality Order No. 2004-0004-DWQ (State Water Board 2004a) that “from January 1, 2001 to December 31, 2003, the [USACE] disclaimed jurisdiction over 160 water bodies 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-estimated because 24 percent of the jurisdictional disclaimers did not specify the sizes of the disclaimed water bodies).”

#### 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” (Water Code § 13050(e)). Waters of the state include waters of the United States, but also include those waters excluded from federal jurisdiction.
- California has largely relied upon its authority under section 401 of the federal CWA 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

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permits may be issued. Among the permits that are subject to section 401 certification include the USACE's section 404 permits.

- California's authority and responsibility to evaluate certification requests under section 401 is dependent upon a valid application for a section 404 permit from the USACE or another application for a federal license or permit. 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 federal 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 2004b) further memorialized these steps by establishing tasks necessary to improve protection of wetlands and riparian areas in the state.

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- As recognized above, the California Water Code applies to a broader set of waters than does the federal CWA, 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. The State and Regional Water Boards commonly use the federal definition, due to its corresponding integration with the state's section 401 water quality certification program. However, several of the Regional Water Boards have adopted regional wetland definitions, and this lack of consistency has complicated the statewide identification of wetlands. Wetlands not recognized under the federal definition are still protected by the State and Regional Water Boards under the California 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 federal CWA does not explicitly define riparian areas. However, 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 section 401 water quality certification program. However, most riparian areas do 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 definitions for wetlands and riparian areas, consistent definitions of their beneficial uses have not been established statewide. The 2004 Workplan included 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 have adopted regional wetland and riparian area beneficial uses, including uses for Water Quality Enhancement (WQE) (North Coast Water Board and Lahontan Water Board), Flood Peak Attenuation/Flood Water Storage (North Coast Water Board and Lahontan Water Board), and Wetland Habitat (North Coast Water Board and Los Angeles Water Board).

- Consistent requirements to regulate impacts from discharges and other activities on wetlands and riparian areas have not been established. The 2004 Workplan includes 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 currently 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 are intended to establish regional wetland and riparian area protections.<sup>1</sup> The development of a State Water Board Wetland and Riparian Area Protection Policy would give a statewide regulatory context to the efforts of these and other Regional Water Boards to protect wetland and riparian areas.

## **SUMMARY OF PROJECT ALTERNATIVES**

The project alternatives are also summarized in the Table: Comparison of Project Alternatives.

### **Alternative 1: No Action**

- Continue to use existing State policies and authorities under the California Water Code and the federal CWA to protect wetlands and riparian areas.

### **Alternative 2: Adopt the Federal CWA Section 404(b)(1) Guidelines as the State Policy to Regulate Impacts of Dredge or Fill Material Discharges on Wetlands and Riparian Areas**

- Adopt the federal CWA 404(b)(1) Guidelines, making minimal revisions to reflect state authorities and differences between the California Water Code and federal CWA, as the state policy to regulate the impacts of dredge or fill material discharges to wetlands and riparian areas.

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<sup>1</sup> 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> .

- Continue to use existing state policies and authorities under the California Water Code and the federal CWA to protect wetlands and riparian areas from impacts other than those from dredge or fill material discharges.

**Alternative 3: Develop a New State Policy to Regulate Impacts of Dredge or Fill Material Discharges on Wetlands and Riparian Areas**

- Develop a new state policy using California Water Code authorities that is more protective than the federal CWA 404(b)(1) Guidelines to regulate the impacts of dredge or fill material discharges to wetlands and riparian areas.
- Continue to use existing state policies and authorities under the California Water Code and the federal CWA to protect wetlands and riparian areas from impacts other than those from dredge or fill material discharges.

**Alternative 4: Develop a New State Policy to Regulate a Variety of Discharges and Activities That Impact Wetlands and Riparian Areas**

- Develop a new state policy using California Water Code authorities to regulate a variety of discharges and activities that impact wetlands and riparian areas including, but not limited to, dredge or fill material discharges; discharges of other pollutants (e.g., nutrients); hydromodification; land and vegetation clearing activities; and invasive species.

**DETAILED DISCUSSION OF PROJECT ALTERNATIVES**

The project alternatives are also summarized in the Table: Comparison of Project Alternatives.

**ALTERNATIVE 1: NO ACTION**

**Discussion of Alternative 1**

Under Alternative 1, the State and Regional Water Boards would continue to use existing authorities under the California Water Code and federal CWA and applicable statewide plans and policies and Basin Plans to protect wetlands and riparian areas. No new state policies or requirements would be adopted to protect wetlands and riparian areas. Alternative 1 would neither override any existing Regional Water Board Basin Plans, nor would it limit the authorities of the State and Regional Water Boards under the California Water Code and federal CWA to protect wetlands, riparian areas, and other waters of the state.

### Needs Addressed by Alternative 1

Alternative 1 would NOT address the identified policy needs:

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal CWA.
- Lack of statewide consistency in the definition of wetlands and riparian areas.
- Lack of statewide consistency in definitions of beneficial uses and requirements for evaluating wetland and riparian area condition.

## **ALTERNATIVE 2**

### **Adopt the Federal CWA Section 404(b)(1) Guidelines as the State Policy to Regulate Impacts of Dredge or Fill Material Discharges on Wetlands and Riparian Areas**

#### **Discussion of Alternative 2**

Under Alternative 2, the State Water Board would adopt the federal CWA section 404(b)(1) Guidelines, making minimal revisions to reflect state authorities and differences between the California Water Code and federal CWA, as the state policy to regulate the impacts of dredge or fill material discharges to wetlands and riparian areas. This action would provide a minimum level of protection to waters not currently regulated under the section 401 and 404 programs (i.e., non-federal jurisdictional waters) that is equivalent to the minimum level of protection provided to waters that are regulated under the section 401 and 404 programs (i.e., federal jurisdictional waters).

The State and Regional Water Boards would continue to use existing authorities under the California Water Code and federal CWA and applicable statewide plans and policies and Regional Water Board Basin Plans to protect wetlands and riparian areas from impacts unrelated to dredge or fill material discharges. Alternative 2 would neither override any existing Regional Water Board Basin Plans, nor would it limit the authorities of the State and Regional Water Boards under the California Water Code and federal CWA to protect wetlands, riparian areas, and other waters of the state.

### Needs Addressed by Alternative 2

Alternative 2 would address, for dredge or fill material discharges only, the following identified needs through policy components, which are outlined in the next section:

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal CWA.

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- Lack of statewide consistency in requirements for evaluating wetland and riparian area condition.

For discharges and activities other than discharges of dredge or fill material, the following needs are not addressed by Alternative 2:

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal CWA.
- Lack of statewide consistency in the definition of wetlands and riparian areas, to ensure protection of beneficial uses under the California Water Code.
- Lack of statewide consistency in definitions of beneficial uses and requirements for evaluating wetland and riparian area condition.

### Policy Components Included in Alternative 2

- Rely on the federal definition of wetlands and USACE 1987 delineation manual as a standard metric for determining compensatory mitigation and compliance with the state's "No Net Loss" Policy for Wetlands. This wetland definition will not limit the State and Regional Water Board's regulatory jurisdiction, which extends to all waters of the state.
- Rely on minimum statewide requirements for dredge or fill material discharges based on the federal CWA section 404(b)(1) Guidelines. The section 404(b)(1) Guidelines would become state policy, although minimal revisions to the Guidelines would be required to reflect state authorities and differences between the California Water Code and federal CWA. The federal CWA section 404(b)(1) Guidelines are available online from the USEPA Web site:  
<http://www.epa.gov/owow/wetlands/pdf/40cfrPart230.pdf>.

The Guidelines include sections on the following:

- Subpart A General
- Subpart B Compliance With the Guidelines
- Subpart C Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem
- Subpart D Potential Impacts on Biological Characteristics of the Aquatic Ecosystem
- Subpart E Potential Impacts on Special Aquatic Sites
- Subpart F Potential Effects on Human Use Characteristics
- Subpart G Evaluation and Testing
- Subpart H Actions to Minimize Adverse Effects
- Subpart I Planning To Shorten Permit Processing Time

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- Be consistent with the February 6, 1990 Memorandum of Agreement (MOA) between the Department of the Army and the USEPA on “The Determination of Mitigation under the CWA Section 404(b)(1) Guidelines,” which is available online from the USEPA Web site: <http://www.epa.gov/owow/wetlands/regs/mitigate.html>. The MOA requires dischargers to avoid impacts from dredge or fill material if possible, minimize all unavoidable impacts to the maximum extent practicable, and provide compensatory mitigation for all impacts.
- Require permit applicants to provide a discharge alternative analysis.

### Implementation of Alternative 2:

- Beneficial uses and water quality objectives would be met according to existing requirements in Regional Water Board Basin Plans, state plans, and policies.
- Discharges of dredge or fill material would be prohibited unless authorized by a waste discharge requirement (WDR), waiver of WDR, or section 401 certification.

### **ALTERNATIVE 3:**

#### **Develop a New State Policy to Regulate Impacts of Dredge or Fill Material Discharges on Wetlands and Riparian Areas**

##### **Discussion of Alternative 3**

Under Alternative 3, the State Water Board would develop a new state policy that would be more comprehensive than the federal CWA section 404(b)(1) Guidelines to regulate the impacts of dredge or fill material discharges on wetlands and riparian areas. This action would provide a minimum level of protection to both federal jurisdictional and non-federal jurisdictional waters that likely would be higher than the level of protection currently provided to those waters through the section 401 and 404 programs (for federal jurisdictional waters) and existing state policies (for all waters).

The State and Regional Water Boards would continue to use existing authorities under the California Water Code and federal CWA and applicable statewide plans and policies and Basin Plans to protect wetlands and riparian areas from impacts unrelated to dredge or fill material discharges. Alternative 3 would neither override any existing Regional Water Board Basin Plans, nor would it limit the authorities of the State and Regional Water Boards under the California Water Code and federal CWA to protect wetlands, riparian areas, and other waters of the state.

Needs Addressed by Alternative 3

Alternative 3 would address the following needs through policy components, which are outlined in the next section:

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal CWA.
- Lack of statewide consistency in the definition of wetlands and riparian areas.
- Lack of statewide consistency in the definitions of beneficial uses and requirements for evaluating wetland and riparian area condition.

For discharges and activities other than discharges of dredge or fill material, the following needs are not addressed by Alternative 3:

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal CWA.
- Lack of statewide consistency in the definition of wetlands and riparian areas.
- Lack of statewide consistency in definitions of beneficial uses and requirements for evaluating wetland and riparian area condition.

Policy Components Included in Alternative 3

- Definition of wetlands that is fully protective of these waters, including wetlands that are not included in the federal regulatory definition, and recognizes their critical role in protecting water quality. The State Water Board is currently evaluating definitions of wetlands as alternatives to the federal regulatory definition, including those used by the California Department of Fish and Game and the California Coastal Commission.
- Definition of riparian areas that is fully protective of these waters and recognizes their critical role in protecting water quality. The State Water Board is currently evaluating definitions of riparian areas, including a definition developed by the National Research Council, which has been proposed for use by the Resources Agency in the Statewide Wetland Inventory.
- Consistent statewide beneficial use definitions for wetland and riparian area functions (e.g., pollutant removal, flood attenuation, and habitat connectivity).
- Minimum statewide requirements for dredge or fill material discharges. For consistency with the federal 404 program, the statewide requirements would be

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based on the federal CWA section 404(b)(1) Guidelines. Substantial language from the section 404(b)(1) Guidelines might be used in the statewide policy, although modifications would be required to reflect statewide authorities and differences between the California Water Code and federal CWA. The federal CWA section 404(b)(1) Guidelines are available online from the USEPA Web site: <http://www.epa.gov/owow/wetlands/pdf/40cfrPart230.pdf>. See page 10 for list of 404(b)(1) Guidelines sections that would be considered.

- Statewide requirements including substantial new requirements to address the following:
  - Cumulative impacts: The requirements would include a framework to predict cumulative impacts resulting from the discharge of dredge or fill material to wetlands and riparian areas and consideration of this information during the permit decision-making process.
  - Functional assessment: The requirements would include a functional assessment methodology using tools such as the California Rapid Assessment Method (CRAM) for wetlands and riparian areas to determine potential impacts of a discharge.
  - Mitigation sequencing and compensatory mitigation requirements: The requirements would establish that impacts from dredge or fill material discharges be avoided if possible and that all unavoidable impacts be minimized to the maximum extent practicable. Compensatory mitigation would be required for all impacts. The amount of compensatory mitigation would be determined based on the functions lost at the impact site and the proposed mitigation, including the location and timing of the mitigation project.
  - Performance standards: The requirements would include project performance standards to improve mitigation success. Performance standards would incorporate the recommendations of the State Water Board's 2006 Compensatory Mitigation Compliance Study, including:
    - Measuring parameters related to functions, services, and values lost at the discharge site and gained at the mitigation site;
    - Establishing success criteria for functions of wetland and riparian mitigation projects;
    - Improving mitigation requirements in permits;

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- Improving mitigation progress tracking and data collection and management;
- Improving clarity of permits;
- Measuring and evaluating progress on the state's no net loss goal for wetlands more effectively; and,
- Improving permitting coordination between agencies.

### Implementation of Alternative 3:

- Beneficial uses and water quality objectives would be met according to existing requirements in Regional Water Board Basin Plans, state plans, and policies.
- Discharges of dredge or fill material would be prohibited unless authorized by WDRs, waiver of WDRs, or section 401 certification.

### **ALTERNATIVE 4:**

#### **Develop a New State Policy to Regulate a Variety of Discharges and Activities That Impact Wetlands and Riparian Areas**

##### **Discussion of Alternative 4**

Under Alternative 4, the State Water Board would develop a new state policy to regulate a variety of discharges and activities that impact wetlands and riparian areas; including, but not limited to, dredge or fill material discharges; discharges of other pollutants (e.g., nutrients); hydromodification; land and vegetation clearing activities; and invasive species. This action would provide a minimum level of protection to all waters of the state from these discharges and activities. With respect to dredge or fill material discharges, Alternative 4 would provide a level of protection that likely would be higher than the level of protection currently provided to those waters through the section 401 and 404 programs (for federal jurisdictional waters) and existing state policies (for all waters).

Alternative 4 would neither override any existing Regional Water Board Basin Plans, nor limit the authorities of the State and Regional Water Boards under the California Water Code and federal CWA to protect wetlands, riparian areas, and other waters of the state.

#### Needs Addressed by Alternative 4

Alternative 4 would address all of the identified needs for dredge or fill discharges and other discharges through policy components, which are outlined in the next section:

- Lack of clarity in the existing regulatory framework for protecting those wetlands and riparian areas that are no longer regulated under the federal CWA.
- Lack of statewide consistency in the definition of wetlands and riparian areas.
- Lack of statewide consistency in definitions of beneficial uses and requirements for evaluating wetland and riparian area condition.

#### Policy Components Included in Alternative 4

- Definition of wetland that is fully protective of these waters, including wetlands that are not included in the federal regulatory definition, and recognizes their critical role in protecting water quality. The State Water Board is currently evaluating definitions of wetland as alternatives to the federal regulatory definition, including those used by the California Department of Fish and Game and the California Coastal Commission.
- Definition of riparian areas that is fully protective of these waters and recognizes their critical role in protecting water quality. The State Water Board is currently evaluating definitions of riparian areas, including a definition developed by the National Research Council, which has been proposed for use by the Resources Agency in the Statewide Wetland Inventory.
- Consistent definitions of statewide beneficial uses for wetland and riparian area functions (e.g., pollutant removal, flood attenuation, and habitat connectivity).
- Comprehensive framework for protecting wetlands and riparian areas from the impacts of a variety of discharges and activities, including:
  - Dredge or fill material discharges;
  - Discharges of other pollutants (e.g., nutrients);
  - Hydromodification;
  - Land and vegetation clearing activities; and
  - Invasive species.
- Framework to include minimum statewide requirements for discharges and activities that may impact wetlands and riparian areas. These requirements would address:

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- Cumulative impacts: The requirements would include a framework to predict cumulative impacts resulting from discharges and activities that impact wetlands and riparian areas and consideration of this information during the permit decision-making process.
- Functional assessment: The requirements would include a functional assessment methodology using tools such as CRAM for wetlands and riparian areas to determine potential impacts of a discharge or activity.
- Mitigation sequencing and compensatory mitigation requirements: The requirements would establish that impacts from discharges and activities that impact wetlands and riparian areas be avoided if possible and that all unavoidable impacts be minimized to the maximum extent practicable. Compensatory mitigation would be required for all impacts. The amount of compensatory mitigation would be determined based on the functions lost at the impact site and the proposed method of mitigation, including the location and timing of the mitigation project.
- Performance standards: The requirements would include project performance standards to improve mitigation success. Performance standards would incorporate the recommendations of the State Water Board's 2006 Compensatory Mitigation Compliance Study, including:
  - Measuring parameters related to functions, services, and values lost at the discharge site and gained at the mitigation site;
  - Establishing success criteria for functions of wetland and riparian mitigation projects;
  - Improving mitigation requirements in permits;
  - Improving mitigation progress tracking and data collection and management;
  - Improving clarity of permits;
  - Measuring and evaluating progress on the state's no net loss goal for wetlands more effectively; and
  - Improving permitting coordination between agencies.

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### Implementation of Alternative 4:

- Beneficial uses and water quality objectives would be met according to existing requirements in Regional Water Board Basin Plans, state plans, and policies.
- Discharges of dredge or fill material would be prohibited unless authorized by a WDR, waiver of WDR, or section 401 certification.

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**Table: Comparison of Project Alternatives**

Description	Alt 1	Alt 2	Alt 3	Alt 4
1. Continue to use existing policies and authorities to protect wetlands and riparian areas.	<b>x</b>			
2. Develop new policies to protect wetlands and riparian areas:			<b>x</b>	<b>x</b>
<u>Resource identification</u>				
Statewide wetland definition			<b>x</b>	<b>x</b>
Statewide riparian area definition			<b>x</b>	<b>x</b>
Statewide beneficial uses for wetlands and riparian areas			<b>x</b>	<b>x</b>
<u>Requirements for discharges and activities</u>				
Dredge or fill material discharges		<b>x</b>	<b>x</b>	<b>x</b>
Other pollutant discharges (e.g., nutrients)				<b>x</b>
Hydromodification				<b>x</b>
Land and vegetation clearing activities				<b>x</b>
Invasive species				<b>x</b>
<u>Types of requirements</u>				
Framework to address cumulative impacts			<b>x**</b>	<b>x</b>
Functional assessment methodology			<b>x**</b>	<b>x</b>
Mitigation sequencing and compensatory mitigation requirements		<b>x*</b>	<b>x**</b>	<b>x</b>
Project performance standards		<b>x*</b>	<b>x**</b>	<b>x</b>

\* Would be taken from the federal CWA 404(b)(1) Guidelines with minimal revisions to reflect state authorities under the California Water Code.

\*\* Would apply to dredge or fill material discharges only.

## Cited References

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