



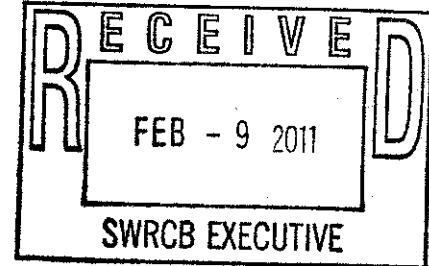
O R A N G E
COASTKEEPER
EDUCATION / ADVOCACY / RESTORATION / ENFORCEMENT

3151 Airway Avenue, Suite F-110
Costa Mesa, CA 92626
Phone 714-850-1965
Fax 714-850-1592
Website www.Coastkeeper.org

February 9, 2011

Send Via Email: commentletters@waterboards.ca.gov

Jeanine Townsend, Clerk of the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-2000



RE: COMMENT LETTER – CEQA – WETLAND AREA PROTECTION POLICY & REGULATIONS

Dear Chair Hoppin and Board Members,

Orange County Coastkeeper (“Coastkeeper”) is a grass roots environmental organization with the mission to preserve, protect and restore the watersheds and coastal environment of Orange County. In the interest of the people of Orange County we welcome the opportunity to comment on the ongoing development by the State Water Resources Control Board (“Board”) of a Wetland and Riparian Area Protection Policy (“Policy”).

Wetlands are celebrated world-wide for the many services they provide. They help regulate climate, store surface water, control pollution and flooding, replenish aquifers, promote nutrient cycling, protect shorelines, maintain natural communities of plants and animals, serve as critical nursery areas, and provide opportunities for education and recreation.¹

The loss of wetlands in the United States has been dramatic since settlement began, but no state has had a larger percentage of wetland loss than California. Since the 1780’s, approximately fifty-three percent of wetlands have been lost in the lower forty-eight states, with the highest percentages of loss in the agricultural states of Illinois, Indiana, Iowa, Kentucky, Missouri, and Ohio, each losing at least eighty percent of their wetlands.² However, California ranks highest in overall wetland loss with an approximate ninety-one percent reduction in wetland acreage.³ This unenviable distinction as the state with the worst historical wetland record brings with it a responsibility to ensure the future health and protection of California’s remaining acres of natural wetlands from both anthropogenic and naturally occurring threats.

¹ State of State’s Wetlands, Natural Resources Agency, June 2010

² Rodger Doyle, *By the Numbers: U.S. Wetlands*, 278 *Scientific American*, no. 6, at 24 (June 1998). Robert E. Beck, *Waters and Water Rights* § 61.01, 1116 (Michie 1996).

³ Dahl, T.E., *Wetlands Losses in the United States 1780s – 1980s*, U.S. Fish & Wildlife Service. Robert E. Beck, *Waters and Water Rights* § 61.01, 1116 (Michie 1996).

In the fall of 2010, the California Natural Resources Agency released their second ten-year review of the health and progress made in acquiring, restoring, and protecting the state's wetlands in a document titled *State of the State's Wetlands*. The Agency's exhaustive wetland review identified "significant stressors" to the health of wetlands in general with declining health and function of salt marshes statewide due to increased urbanization. As the one of the most rapidly developing areas of California, Orange County is in particular need of protection from continued loss of wetlands. While the region is geographically the smallest of the other eight regions in the state, at 2,800 square miles, it boasts one of the largest populations of the other regions with almost 5 million people. In addition to Orange County, the San Diego Region estimates conservatively that approximately 1,380 acres of wetlands or riparian habitat were filled through unpermitted activities since the mid 1990s.⁴

The salt marshes in the South Coast region, home to Orange County, received the fewest acreage of salt marshes rated as having "very good health" and the *only* region of the state with salt marshes rated in "poor health."⁵ Magnolia Marsh, Talbert Marsh, Brookhurst Marsh, Upper Newport Bay, and the Bolsa Chica coastal wetlands are each ecologically significant coastal wetlands found in Orange County that are under a variety of "stressors" including toxic contamination, invasive plants and animals, and altered hydrology and flood control structures. For example, the Upper Newport Bay Ecological Reserve is 303d listed for constituents such as copper and metals from unknown sources and urban runoff. The continuance of deferred wetland maintenance and persistent delay in resolving foundational causes of poor wetland health threaten the entirety of our state's wetlands.

Fortunately, progressive policy decisions by state and federal agencies have direct impacts on vulnerable resources such as wetlands and can yield relatively immediate results considering the vast scale of the problem. Over the last 10 years tremendous effort and resources have been invested to acquire, restore, manage, and regulate wetlands in California. The Bolsa Chica wetland went under restoration in 2006 and the Magnolia Marsh wetland is currently receiving federal stimulus funding to restore the land to a more suitable habitat for the coastal fish and wildlife. Coastkeeper has been an active participant in improving our coastal wetland habitat by working on protecting and restoring native eelgrass habitat in the Upper Newport Bay since 2008.

Cooperative statewide wetland monitoring programs, developed in tandem with these efforts, are beginning to show a more comprehensive assessment of the state's wetlands.⁶ A key component of this success is the adoption of a unified definition of a wetland that will be expansive enough to protect the few wetlands California has left comports with the Board's Policy goals in addition to mitigation policies that increase wetlands.

⁴ Holland, R.F. January 17, 2009. (pers. comm.). "Great Valley vernal pool distribution, photo-revised 2005", Oral presentation. CNPS 2009 Conservation Conference: Strategies and Solutions. Sacramento, CA.

⁵ State of the State's Wetlands, Natural Resources Agency, June 2010

⁶ State of the State's Wetlands, Natural Resources Agency, June 2010

I. The Board's Adoption of a New Definition of Wetland Will Achieve The Policy Goals of Preserving Wetlands

The current definition supplied by the United States Army Corps of Engineers ("USACE") fails to incorporate all of the diverse wetland habitats found in California.⁷ The USACE uses a rigorous three parameter approach, requiring all three parameters be met to determine a wetland. The indicators for each parameter are hydrology, soil, and vegetation. The third parameter requires 'positive' evidence that the vegetation cover is dominated by hydrophytes. Under the USACE definition, if any one of these indicators is not present, there is no wetland and those areas would not enjoy any protection. The USACE's definition conflicts with the Board's Policy goals of preserving wetlands because the definition is not expansive enough.

California landscapes are diverse and variable and require a wetland definition that accommodates California's unique landscapes. Each landscape in every part of the State experiences seasonal and annual variations in rainfall, and is occasionally subject to drought and deluge. Some areas in California function as wetlands despite lacking abundant wetland vegetation. For example, non-vegetated playas, tidal flats, river bars, and ephemeral or intermittent washes provide a variety of wetland functions, including water filtration, groundwater recharge, and the support of wetland wildlife. None of these areas would necessarily be defined as wetlands according to the current definition of wetland.⁸ For the preservation of all of California's wetlands, there must be a more expansive definition.

The Board's recommended definition will achieve its policy goals of preserving wetlands through the elimination of the vegetation requirement. The definition recognizes that all three parameters may not be evident or present in some areas that provide wetland functions, beneficial uses, or ecological services at some times of the year or in some years (especially during prolonged dry periods), and that some of these areas lack vegetation and therefore may satisfy only two parameters (i.e., wetland hydrology and hydric substrates). The Board determined that a modification for the vegetation parameter was necessary to address instances where the USACE definition is problematic. This definition reflects the natural spatial and temporal variability in wetland extent and condition.

Coastkeeper supports the Board's proposal of this new definition of a wetland because it will further the Policy goals of protecting and preserving all of California's diverse and unique wetlands.

⁷ The USACE define wetlands as "those areas that are inundated or saturated by surface or groundwater 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. Wetlands generally include swamps, marshes, bogs, and similar areas." (33 C.F.R. § 328.3(b); 40 C.F.R. § 122.2.)

⁸ Technical Memorandum No. 2: Wetland Definition, Technical Advisory Team, June 2009.

II. California's Current No-Net Loss Policy Does Not Further The Protection of Wetlands or Wetlands Productivity

California was one of the first states in the nation to set a "no-net loss" policy for wetlands. This no-net loss policy requires developers to create a man-made wetland if a natural wetland is going to be destroyed. Although some new wetlands have been created by human activities—often as a result of required compensatory mitigation for development impacts—many of these wetlands do not provide the same degree of functionality as do their natural counterparts.⁹ Ambrose et al. (2007) found that between 1991 and 2002, compensatory mitigation wetlands required by the Water Boards were on average of lower quality than natural wetlands in the state.¹⁰ Additionally, wetlands gained through mitigation and other human activities, such as diking and construction of agricultural ponds, may be of different types than those wetlands that they directly or indirectly replaced, leading to shifts in the distribution and types of wetland habitats.

These historic losses signal an urgent need to protect the remaining wetland resources in the state, as remnant wetlands in many watersheds provide the only extant sources of critical water quality functions, such as maintenance of plant and animal communities, pollutant filtration, and flood peak attenuation/flood water storage, in those areas (NRC 1995).

Requirements for compensatory mitigation do not necessarily imply that mitigation is successfully completed or that the resultant wetlands provide comparable functions and services to those that have been impacted through permitted activities. Difficulties with the wetland compensatory mitigation program have been well documented in a study sponsored by the SWRCB to assess the performance of the federal CWA 404 and state 401 permit programs. The study revealed that most mitigation projects, while meeting their acreage goals, were not meeting their performance goals.¹¹ Ambrose et al. (2007) also found that only nineteen (19) percent of the mitigation wetlands were considered ecologically successful, and twenty-seven (27) percent did not meet the federal definition of wetland. Thus many of the mitigation wetlands represented a type conversion from one wetland class to another or even from wetlands to uplands. Mitigation practices included replacing a coastal wetland with an inland wetland. The effect of losing a coastal wetland is not made up by the addition of an inland wetland. The two perform different functions and are habitats to different ecosystems.

In general, Ambrose et al. (2007) found that the primary state and federal wetland protection programs have been generating more wetlands of lower quality than the wetlands they allowed to be destroyed. For mitigation to be successful the State must adopt a policy that requires better construction of wetlands or a different ratio between man-made wetlands and loss

⁹ Ambrose, R.F., J.C. Callaway, and S.F. Lee. 2007. An evaluation of compensatory mitigation projects permitted under Clean Water Act section 401 by the California State Water Resources Control Board, 1991-2002. Technical Report prepared for the Los Angeles Regional Water Quality Control Board. Los Angeles, CA: University of California. San Francisco, CA: University of San Francisco.

¹⁰ Id.

¹¹ Ambrose, R.F., J.C. Callaway, and S.F. Lee. 2007.

of natural wetlands keeping location of the proposed man-made wetland in mind relating to the lost wetland.

While many state agencies do require wetland mitigation for projects with wetland impacts, follow-up monitoring and assessment of mitigation success is usually not required. The California Coastal Commission is unique in imposing a standard of long-term monitoring on wetland mitigation projects (most often a minimum of 5 years) and requirements for adaptive management if the project does not meet the established success criteria. In addition, the California Coastal Commission applies a 4:1 mitigation ratio to most projects in recognition of the temporal losses and strong evidence that wetland creation and restoration project failures are common, that adaptive management and eventual results often require more time than envisioned, and that projects are often not timely implemented in relation to when the impact occurs. These approaches could also be implemented by other agencies.

In conclusion, Coastkeeper supports the Board's proposed definition of wetland because it will encompass all of California's diverse landscapes. In addition, mitigation measures must be adjusted to maximize wetlands and wetland productivity. Coastkeeper would like to thank the State Water Resources Control Board and their remarkable staff for the opportunity to comment. The quality of our waters is of critical importance to our organizations and the people of Orange County and we look forward to continued cooperation during the completion of the Wetland Area Protection Policy and Dredge and Fill Regulations.

Sincerely,

A handwritten signature in cursive script that reads "Garry Brown". The signature is written in dark ink and is positioned above the typed name and title.

Garry Brown
Executive Director
Orange County Coastkeeper