**CALIFORNIA COASTAL COMMISSION**
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105- 2219
VOICE (415) 904- 5200
FAX ( 415) 904- 5400
TDD (415) 597-5885

May 13, 2010

Administrator Lisa Jackson
Environmental Protection Agency
1200 Constitution Ave., NW.
Washington, DC 20460.

**RE:** Comments on U.S. Environmental Protection Agency (EPA) March 22, 2010 Federal Register Notice on Clean Water Act Section 303(d) Program/Ocean Acidification (EPA-HQ-OW-2010-0175; FRL-9128-8).

Dear Administrator Jackson,

This letter provides comments from the California Coastal Commission in response to the above-referenced Federal Register notice. The notice requests comments about what considerations the EPA should take into account as it develops guidance to address ocean acidification resulting from increased greenhouse gas emissions to the atmosphere. The EPA is specifically considering using Section 303(d) of the federal Clean Water Act as a mechanism to address the impairment of the nation's coastal waters being caused by ocean acidification.

The Coastal Commission fully supports the EPA's use of the Clean Water Act to address ocean acidification. The consequences of ocean acidification and related climate change are grave, and we must use every tool available to us, including the Clean Water Act, to slow down and reverse our contributions to these evolving environmental catastrophes.

Protecting California's marine ecosystems from the negative effects of ocean acidification is important to the Coastal Commission's mission to "protect, conserve, restore, and enhance" the state's coastal and ocean resources. California's oceans and coasts are incredibly valuable – the state's coastal resources provide rich and diverse ecological value, services such as fishing and shellfish harvesting, and substantial economic benefits for both the state and national economy through coastal tourism, commerce, shipping, and other economic endeavors. California provides nearly 20% of the nation's economy derived from the ocean and approximately $40 billion each year in employment and goods and services (see, for example, "California's Ocean Economy," 2005).

California is taking a number of steps to protect its coastal resources and water quality. Along with the Coastal Commission's work to implement the California Coastal Act, the state is establishing reserves to protect marine life, developing policies and measures to reduce nonpoint pollution, and phasing out harmful once-through cooling technologies. The state is also implementing its landmark greenhouse gas reduction initiative to reduce greenhouse gas emissions and their adverse effects on the state's biological and economic resources.

Even with all these actions, however, we are unfortunately overseeing the ongoing degradation of these values and resources due to global, human-caused changes resulting from greenhouse gas emissions. We are already experiencing the initial consequences of climate change and ocean acidification (see, for example, "Evidence for Upwelling of Corrosive 'Acidified' Water onto the Continental Shelf," Science, 2008). Other studies show that ocean acidification could cause adverse effects throughout the entire marine ecosystem. At the very least, it could cause unpredictable changes to the ocean's food web and to the biophysical processes on which we humans rely; at worse, it has the potential to cause mass marine life extinctions similar to some that have happened in the past, apparently due in part to acidification. Continuing acidification could lead to declines in global fisheries and affect the food supply and livelihoods of hundreds of millions of people.

The Commission believes that using the Clean Water Act to reduce ocean acidification is both appropriate and necessary. Although the increasing rate of ocean acidification is due to atmospheric carbon dioxide emissions rather than water-borne discharges of pollutants to the nation's waters, acidification is clearly within the Clean Water Act's policy and regulatory purview. The ocean's absorption of those increased emissions and the resulting decrease in pH affects the ocean's water quality and biological conditions. The Act's implementing regulations list pH as a "conventional pollutant" and describe changes in a waterbody's pH level as a cause of waterbody impairment. The Act is therefore one of several appropriate tools for federal and state governments to use in combating climate change.

We specifically recommend that the EPA develop guidance for using existing information to identify coastal waters undergoing climate-driven acidification, and that the guidance also support the development of new monitoring and data collection for identifying pH changes in coastal waters. The guidance should also clearly identify that the decreasing pH caused by the ocean's carbon absorption is a cause of "impairment", as defined by the implementing regulations of Clean Water Act Section 303(d), and that acidification-caused impairment may result in non-attainment of a waterbody's designated uses. Finally, the guidance should identify increased acidification as a mechanism causing waterbodies to not meet the Clean Water Act's antidegradation requirements.

In summary, the California Coastal Commission urges the EPA to use the Clean Water Act as one of the many tools that must be put to use to combat global climate change, to develop guidance and information for states and the federal government to identify impaired waters, and to develop effective tools that will help slow and reverse the rate of ocean acidification. Thank you for your leadership regarding this important issue and your willingness to address this tremendous challenge.

Sincerely,

Bonnie Neeley, Chair
California Coastal Commission