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EPA needs to get serious about ocean acidification

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Ocean acidification is underway, and it's hurting oysters in Washington, plankton in California and corals around the world.

This serious, escalating problem, caused by increasing carbon dioxide emissions and local pollution and runoff, is acknowledged by the U.S. Environmental Protection Agency but strangely, the federal agency has chosen to ignore the developing crisis in its regulations.

Gov. Jerry Brown just signed Assembly Bill 2139, calling for California to start addressing acidification that is already affecting our coastal waters, but the EPA shouldn't wait until 2018 when the first recommendations from that new law are due.

The EPA sets baseline water-quality standards for each state under the Clean Water Act, but it hasn't updated its criteria on water acidity in 40 years.

Scientists Joth Davis, left, and Brian Allen of the Puget Sound Restoration Fund in Washington state check on an experiment testing whether a seaweed farm can take up carbon dioxide from surrounding waters to combat ocean acidification. Manuel Valdes The Associated Press

The Center for Biological Diversity, where I work, petitioned the EPA in 2013 to update those standards, but more than three years later, it has taken no formal action. So we sued the agency this month to force it to finally meet its legal obligations.

"Although the ocean's ability to take up carbon dioxide prevents atmospheric levels from climbing even higher, rising levels of carbon dioxide dissolved in the ocean can have a negative effect on some marine life," the EPA acknowledges on its website, later admitting, "Signs of damage are already starting to appear in certain areas."

So why won't the agency take the next logical step to reflect that new reality in its regulations?

The Clean Water Act can be a powerful tool for improving water quality by freeing up federal funds and expertise. The law has a long history of being used to address water pollution from mercury and acid rain. But addressing carbon dioxide will only be possible if the EPA sets adequate standards that reflect our changing ocean chemistry.

Halting acidification will ultimately require us to end our overreliance on fossil fuels and to transition to clean energy sources. As long as global carbon emissions continue to increase, so will ocean acidification.

But there's much we can do to mitigate the problem on the local level in the short run. For example, setting new and biologically meaningful pH standards for estuaries and marine waters in Washington's Puget Sound or California's Central Coast, which are affected by urban storm water and agricultural runoff, might help slow acidification that is weakening shellfish and killing zooplankton. Designating water bodies as impaired due to acidification could trigger new management of local pollution sources that also affect pH levels.

Once the EPA recognizes and regulates ocean acidification, maybe it will finally take on carbon dioxide emissions directly. Just as it did more than 10 years ago when it decided to regulate the power plant emissions that were causing acid rain – substantially reducing that threat under budget and ahead of deadline – the EPA needs to take the dire threat of ocean acidification seriously.