

Deep sea soft coral (NOAA photo)

In this <u>op-ed from Monday's Los Angeles Times</u>, UC San Diego scientists Tony Haymet and Andrew Dickson succinctly and directly summarizes the threat that ocean acidification poses to our world, and plead for reductions in carbon emissions. (My colleagues have blogged about ocean acidification before, <u>here</u> and <u>here</u> among other places.) Unfortunately, as my colleague Cara Horowitz noted yesterday, those reductions <u>aren't coming anytime soon</u>.

Because the ocean is a common pool international resource that no sovereign nation has the power to protect effectively, it's difficult not to be pessimistic about efforts to protect ocean resources. But, as the authors point out, if we don't, we will be in big trouble.

The potentially catastrophic impact of ocean acidification stems, among other things, from the oceans' fragile chemistry and marine life's dependence on specific conditions that are already changing as a result of our carbon dioxide emissions. And, the authors note, "the oceans have absorbed 30% of the carbon dioxide that humans have ever produced, and they continue to absorb more each year."

Unlike some other greenhouse gas-related impacts, ocean acidification can't be solved through geoengineering solutions that might reverse the global warming trend, since those technologies won't change the oceans' chemistry back or prevent future release of the gases that cause ocean acidification. And tinkering with the oceans' chemistry intentionally would be a terrible gamble in any event, if we could do it.

Last month, the U.S. EPA acknowledged this potential threat, in a <u>guidance document</u> that stemmed from the <u>settlement of a case filed by the Center for Biological Diversity</u>. The settlement, while a good first step, requires only assessment, reporting, and other steps that might eventually lead to serious regulatory efforts. (<u>See the EPA's fact sheet here</u>.) Of

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course, the U.S. can't solve this problem acting alone anyway. Let's hope that our national governments and international governance institutions start taking ocean acidification seriously.