

Honolulu Declaration presentation to USCRTF

Members of the Coral Reef Task Force, good afternoon, and thank you very much for the opportunity to deliver a summary of the findings and recommendations of the “Honolulu Declaration on Ocean Acidification and Reef Management” resulting from a workshop convened by The Nature Conservancy the week before last.

About 1/3 of the CO₂ released to the atmosphere is absorbed by the oceans where it contributes to acidification and a decrease in the aragonite saturation state, which means there is less carbonate available for calcifying organisms like corals to build their skeletons.

If the current emission trend continues, we could see a doubling of atmospheric CO₂ in as little as 50 years; and ocean acidification will continue to an extent and at rates that have not occurred for tens of millions of years.

Ocean acidification is creeping, progressive, and insidious – likened by one workshop participant to osteoporosis of the reef – a weakening of the reef structure that makes corals more vulnerable to breakage from waves and human use.

Because it is harder to see than bleaching, we don’t know whether we have reached or surpassed the critical thresholds for any reef species, such as we have for temperature thresholds.

The best evidence we have suggests that when atmospheric CO₂ levels reach 560 ppm, many reefs will already have moved from net growth to net erosion.

Recognizing the potential irreversibility of ocean acidification impacts, it has never been more imperative to improve the management of coral reef ecosystems; and to be both proactive and adaptive in our efforts.

Responding to this challenge, the Conservancy convened leading climate and marine scientists and coral reef managers from the US and Australia to chart a course of action to address ocean acidification. Two major strategies emerged:

1. Limit fossil fuel emissions, and second
2. Build the resilience of coral reef ecosystems and communities to maximize their ability to resist and recover from climate change impacts, including ocean acidification

We have 7 policy recommendations and 8 concerning management.

Highlights of the policy recommendations include the need to:

- stabilize CO₂ emissions and reduce marine pollution from all sources, land, sea and sky, especially those contributing to acidification
- mandate the inclusion of climate change actions into marine protected area management plans, and
- increase appropriations to improve the science and actions addressing ocean acidification impacts on coral reefs

Key management recommendations include the need to:

- reduce all stresses on coral reefs as much as possible to enhance their health and resilience
- protect reefs that are less vulnerable to the impacts of ocean acidification by creating new marine protected areas, if necessary, and through revision of zoning plans in existing ones
- implement innovative interventions to reduce damage to weakened reefs and replenish species loss caused by ocean acidification
- develop a collaborative international program on ocean acidification that includes a coordinated network of monitoring stations

These recommendations will be submitted in full to the Task Force with the declaration and a technical background document that expands on the science and proposed actions.

Task Force Members, while the consequences of inaction are too depressing to contemplate, our workshop generated some good news. We identified some practical steps we can take to buy time for coral reefs while CO₂ levels are stabilized; and that there is hope for coral reefs if we act now.

We respectfully request you to consider our recommendations and to respond at the next Task Force meeting. We look to you for help and leadership.

Thank you on behalf of the Koolau Retreat Team

Rod Salm
The Nature Conservancy