Written Comments to Support Public Comments made at USCRTF Business Meeting, Nov 15, 2013

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Co-Chairs Sobeck and Schaefer and distinguished Task Force Members: I thank you for this opportunity to speak. My allotted time is very brief, and so I must be very straightforward and blunt in my comments. My written comments will amplify my statements where necessary.

To get straight to the point, US coral reefs, like coral reefs globally, are in the midst of an evolving crisis. We all are aware that we alone cannot undertake the actions necessary to address the root causes of this crisis—that's a fact. However, there are actions that the Task Force can accomplish to provide greater protection for US coral reefs--namely the establishment of large networks of Marine Protected Areas. I strongly urge that we become accountable and responsible by taking those actions

BACKGROUND

Coral reefs are in decline—that we can all agree on. The causes of the decline we can also agree on. They are many, from minuscule to giant, but the three that are on the top of every list are climate change, land-based pollution, and unsustainable fishing. The Task Force puts a large effort in addressing land-based sources of pollution, and does it well. However by ignoring the effects of unsustainable fishing, and especially climate change, we imperil the future of our majestic coral reefs. The most insidious of the short-term and long-term threats to coral reefs is now documented to be climate change. Warming, more acidic seas pose a very real threat to the ability of coral reefs to survive to mid century. How can we, you may ask, a small but concerned and dedicated group of coral reef scientists and managers, effect a change, when the governments of the world have thus far failed to satisfactorily address the emissions of green house gases?

A SOLUTION

There is a solution sitting in front of us that will provide an optimum chance for reef survival: large networks of Marine Protected Areas. Many recent studies provide convincing evidence that resilience—the ability of a coral reef to either return to its original state or transform to an alternate state that still yields the same ecosystem services—is enhanced by sustainable management of fisheries and control of pollution. It is well established that multiple stressors pose a great risk to coral reefs. If corals are to survive increased water temperatures as well as water chemistry less conducive to calcification, doesn't it make sense to identify the most resilient reefs and remove as many other stressors as possible? Certainly there are unknowns about how climate will change over the next 35 years, but none of the projections can be viewed as healthy for corals.

Does it therefore not make sense to prepare for the impacts that we know are coming by urging, supporting, demanding that large MPAs be established? Apparently many jurisdictions in the world think so. The success in Australia—as highlighted at the Ft Lauderdale CRTF Meeting—along with efforts, existing or planned, in Micronesia, Chagos, Fiji, the Caribbean, the Cook Islands and other locations, clearly points to MPAs as critical for providing healthy reefs decades from now. Even the establishment of MPAs won't guarantee reef survival, but it may provide them the best opportunity to do so. Which brings me to Hawaii.

A CASE IN POINT: HAWAII

Hawaii has some very large and complex thriving coral reef ecosystems. Nowhere is that more evident than in the Maui Nui island group where there are more than over 12,000 acres of rich reef with greater than 50% live coral coverage. BUT less than 1 % of those magnificent coral reefs, and those throughout the rest of the Main Hawaiian Islands are presently protected. Even the struggling nation of Haiti exceeds the Hawaii Islands in planned resource protection! The Papahānaumokuākea Marine National Monument is a true treasure—but it does not provide value or coral-reef ecosystem services to the Main Hawaiian Islands.

There is a growing number of managers, researchers, and institutions that recognize that Hawaiian MPAs are essential to provide an opportunity for long-term reef survival. Our immediate plans are to document the science parameters that provide resilience so that we can advise managers, legislators, and island people when they ask for that information, and we hope that they will. First, we will work with partners in Hawaiian and federal agencies, academia, and NGOs to identify the best candidate coral reefs for large Hawaiian MPAs based on scientific information (size, extent, complexity, diversity, threats, resilience). Second, we are planning a session on reef resilience at the Hawaii Conservation Conference next summer, and conducting a work-shop on MPAs for Hawaii's reefs. We will ask the Task Force at its fall meeting for endorsement of our recommendations.

CLOSING

The United States Coral Reef Task Force (USCRTF) was established in 1998 by Presidential Executive Order to lead U.S. efforts to preserve and protect coral reef ecosystems. One of its first actions was to establish 13 goals for addressing threats to coral reefs worldwide as a National Coral Reef Action Strategy. One goal identified specifically called for us to:

> "Improve management of coral reef resources through a strengthened and expanded network of coral reef **marine protected areas**. Strengthen networks of coral reef protected areas and, by 2010, protect **20%** of U.S. coral reefs as marine reserves."

We're not doing very well, are we?

The establishment of large networks of MPAs in Hawaii and other U.S. jurisdictions is one action that the USCRTF can help facilitate, and one that gives our coral reefs a very real chance to survive the coming decades. It is time—past time—for the USCRTF to take seriously these charges and responsibilities and work with each jurisdiction to develop a local network of MPAs. As pointed out by Salm et al, (2009) "*Strategically placed and well-managed MPAs seem to offer the most viable means of protecting and conserving key species and habitats in perpetuity".* Let's start now.

In closing, let's recall the words of the President:

> *"We will respond to the threat of climate change, knowing that the failure to do so would betray our children and future generations."*
> President Barack Obama, Inaugural Address, January 21, 2013

We have the mandate, the knowledge, and the capability to "*respond to the threat of climate change"* on coral reefs*.* **Let's start now**

I thank you for your kind attention.