



## **SIERRA CLUB COMMENTS FOR THE U.S. CORAL REEF TASK FORCE – 10/24/06**

Task Force Chairs, members, and fellow participants: My name is Dave Raney. I am a volunteer for Sierra Club and Reef Check, and serve as Chair of the Sierra Club's Coral Reef Working Group. I also participate in the Task Force's Education and Outreach Working Group. I serve as an informal liaison between NGOs and the Task Force, so some of my public comments include updates on activities and concerns of other NGO groups not able to attend Task Force meetings.

Although I have been a resident of Hawai'i for almost forty years, I am a graduate of the University of Florida and a former resident of Broward and Palm Beach counties in Florida. I have fond memories of snorkeling and diving the South Florida reefs in the mid 1950's and early 1960's when Elkhorn corals were abundant and healthy – even a short distance off the shore at Lauderdale by the Sea.

In preparation for this meeting, I contacted Sierra Club volunteers and Local NGOs in South Florida, including Cry of the Water and Reef Relief. I was pleased to discover that Reef Relief helped author, and Cry of the Water and the Florida Chapter of the Sierra Club endorsed, a very comprehensive Issue Paper titled **“Florida's Coastal and Ocean Future – A Blueprint for Economic and Environmental Leadership.”** The Primary Author of the report was Julie Hauserman, and the Authoring Organizations were: **Caribbean Conservation Corporation and Sea Turtle Survival League, Clean Water Network of Florida, Environmental Defense, Natural Resources Defense Council, National Wildlife Federation, Reef Relief, Surfrider Foundation, and The Ocean Conservancy.** The report can be downloaded at: <http://www.nrdc.org/water/oceans/florida/flfuture.asp>. These organizations have also summarized the top issues they identified for Florida. Their summary is attached this testimony.

It is significant, and very helpful, that NGOs, large and small, local, national, and international in scope have worked together to develop consensus recommendations for decision makers, including the Task Force, to consider and implement. The following are some of those most directly related to coral reef issues:

### **RECOMMENDATIONS FOR FLORIDA CORAL REEF CONSERVATION**

#### **Reduce Global Warming Pollution**

- **Lead a public driven process that will by the end of 2007 result in a plan to:**
  - **Combat the effects of global warming in order to protect Florida from the worst of its impacts, such as stronger hurricanes, dying coral reefs and threatened fisheries, rising sea-levels, and threatened coastal communities;**
  - **Reduce Florida's contribution of harmful greenhouse gases; and**
  - **Lead our state to a new energy future that will create a more secure and prosperous and energy independent Florida.**

#### **Reduce Coastal and Ocean Pollution**

- **Halt the state's efforts to weaken water quality standards and, instead, develop stronger standards, including numeric criteria for nutrients. Include an enforceable nitrogen standard in the Everglades restoration plan in order to protect Florida Bay and the downstream coral reefs of the Florida Keys.**
- **Upgrade the state's stormwater regulations to address both dissolved and solid pollutants to ensure that water quality is not degraded by construction or new development.**
- **Oppose opening up new areas of the Eastern Gulf of Mexico to offshore oil and gas activities. (Note: See the proposed Task Force resolution on this issue submitted by Reef Relief in their public comments to the Task Force).**

#### **Curb Unwise Coastal Development and Protect Valuable Coastal Habitats**

- **Revise the Coastal Construction Control Line Program in order to ensure the program is accomplishing its original coastal resource protection goals (including long term protection of the beach and dune system) and explore a policy of siting of coastal development away from critically eroding shorelines.**
- **Discontinue state efforts to assume delegation of wetlands permitting rules from the federal government and stop allowing wetlands destruction in exchange for wetlands mitigation, since scientific experts document that wetlands mitigation has not lived up to its promise.**

## **Restore Marine Ecosystems, Ensure Robust Fisheries, and Protect Marine Species**

- Integrate Florida’s Fish and Wildlife Conservation Commission’s marine fisheries management with DEP’s management of submerged sovereign lands, coastal ecosystems and water quality to achieve more effective management of valuable fisheries, special places and the ecosystems upon which they depend.
- Restore the operating budget of the Florida Oceans and Coastal Resources Council and support funding for the ocean research priorities identified by the Council.

Specific examples of some of the general concerns listed above include the following:

- Impacts to coral reefs from treated sewage discharges from the series of ocean outfalls ranging from Miami-Dade County northward to Palm Beach County. These concerns include potential human health impacts as well as occurrences of algal blooms in the vicinities of the outfalls. These blooms are particularly of concern to divers using Gulf Stream Reef near the Delray-Boynton outfall. We note that a recent study by the University of Florida, commissioned by the Florida Department of Environmental Protection, suggests that there are economically viable, and environmentally superior, alternatives to ocean outfalls, i.e. technologies for use of properly treated effluents for irrigation or for recharge into aquifers. This report may be accessed at: <http://www.dep.state.fl.us/Water/reuse/docs/OceanOutfallStudy.pdf>. Sierra Club is reviewing this report and its recommendations.
- Impacts of injection wells at current levels of treatment and nutrient removals.
- Impacts to coral reef areas from beach “renourishment” projects.

## **PUERTO RICO ISSUES**

Some of the Florida issues, especially those dealing with global warming and water quality/ sewage discharges, are echoed in the public comments submitted by the NGO CORALations, based on the island of Culebra in Puerto Rico. The Puerto Rico Chapter of the Sierra Club works closely with CORALations on coral reef issues.

Culebra suffered major losses, estimated at 70 percent, of its coral reefs during recent bleaching episodes – including some reefs said to date back to the time of Columbus.

CORALations also reported on recent damage to coral reefs from the grounding of the vessel *Magara* and related salvage operations. Their comments highlighted the need to establish local island-based immediate coral rescue response teams trained to assess damage to area corals and rescue and stabilize corals impacted by physical damage such as storms and ever increasing oil tanker and recreational boat groundings in this region.

### **The Sad, (Smelly), Saga of Sewage Treatment in Puerto Rico**

As detailed in CORALations public comments, the Task Force was informed of water quality issues related to sewage treatment plants in Puerto Rico at the 1999 Task Force meeting in St. Croix. Those problems persist today, as documented in the Consent Decree published by EPA and the Department of Justice in June, 2006. The Consent Decree enumerates a long list of chronic violations by the Puerto Rico Aqueduct and Sewage Authority (PRASA), including fifteen felony counts, and failure to comply with a previous Consent Decree.

Sierra Club supports strong enforcement of the Clean Water Act, and attainment of the objective stated in the Decree of “..causing PRASA to come into and remain in full compliance with the Clean Water Act, and with the terms and conditions of its NPDES permits.” We note, however, that the Decree establishes “interim” standards which reduce or eliminate some key limitations in effect under current NPDES permits. This raises the question as to whether PRASA will be in full compliance of its NPDES permits through corrective actions, or as a result of relaxations of the terms and conditions of the NPDES permits.

Of particular concern are the numerous facilities listed in Appendix E, Interim Effluent Limits, wherein TSS (Total Suspended Solids) and BOD (Biochemical Oxygen Demand) interim standards for weekly average amounts are set at “**MO**” – **Monitor Only**. The expiration dates for many of these “interim” standards are shown as “**a = Interim level will be effective until the next NPDES Permit Renewal.**” Since some of the capital improvement projects identified in Appendix D, Table 3 of the Decree have deadlines of June 1, 2021, we are concerned that enforcement of such key parameters and weekly average amounts and concentrations of TSS and BOD could be deferred for many years. We also note that the lawsuit filed by CORALations to enforce the Clean Water Act for the Ponce facility cites TSS and BOD violations in particular.

The final version of the Decree has not been published as far as we know. We urge that the final version of the Decree be strengthened as recommended by the public comments submitted by the Mid-Atlantic Environmental Law Center, in cooperation with CORALations, including their recommendation that the lenient effluent limitations provided in Appendix E be addressed.

## **HAWAI'I UPDATES AND ISSUES**

### **EDUCATION AND OUTREACH: LIVING REEF AWARDS AND COMMUNITY GUIDE**

The second annual Living Reef Awards luncheon was held in Waikiki September 20, 2006. The luncheon brought together several hundred citizen volunteers, NGOs, private sector companies, and government agencies active in coral reef conservation throughout Hawai'i. Neighbor islanders received the bulk of the awards this year. Although the awards brought well-deserved recognition to the recipients, a major benefit of the event was the opportunity for participants to share their ideas and accomplishments through personal contacts and the many displays set up for the event.

The State of Hawai'i Living Reef Program also recently released a publication titled "Getting involved in caring for Hawai'i's coastal resources: a community guidebook" The guidebook provides individuals and communities with ideas, examples and resources on how to get involved in marine stewardship projects. Topics include: how to get your community organized, awareness/outreach projects, observation and voluntary compliance, monitoring, and other ways to get involved. Appendices include case study examples of other community projects in Hawai'i, funding, and other resources.

### **ALIEN ALGAE UPDATE**

Community volunteers continue to remove the alien algae *Gracilaria salicornia* from sites in Waikiki and Kaneohe Bay on O'ahu, reaching a total of 107 tons as of September, 2006. A community project for removing a different alien algae species, *Avrainvillea amadelpha*, which is threatening a native seagrass in Maunalua Bay on O'ahu, is showing promising results. That algae species is relatively slow growing, in contrast to *Gracilaria salicornia*, allowing the seagrass to occupy areas where the alien algae were removed. Local students, under the supervision of the Principal Investigator, have been volunteering their time and efforts for the removal project.

### **INCREASE IN CRUISE SHIP ACTIVITIES SPAWNS POTENTIAL IMPACTS ON CORAL REEF DIVE SITES**

The cruise ship industry has recently expanded in the Main Hawaiian Islands, and the types of activities offered its customers have also increased. In addition to ongoing concerns by local residents over the direct impacts of increased numbers of visitors, and their related effluents discharged into ocean waters, some secondary impacts potentially harmful to coral reefs have been identified. These include dramatic increases in the numbers of recreational divers and snorkelers appearing at popular dive sites as a result of commercial operators ferrying them to and from the cruise ships. Increases in fish feeding, sunscreen oils, and oils and wastes from vessels are likely to be associated with such activities. The State currently has no caps on the numbers of divers visiting most dive sites.

### **RESEARCH IN THE NORTHWESTERN HAWAIIAN ISLANDS MARINE NATIONAL MONUMENT - OUT OF CONTROL?**

News that President Bush had created the Northwestern Hawaiian Islands (NWHI MNM) Marine National Monument was greeted with surprise, followed by gratitude, by NGOs seeking permanent protections for those islands. The NGOs includes Kahea, the Hawaiian Environmental Alliance, which has long sought designation of the NWHI as a "pu'u honua," or place of refuge for the endangered Hawaiian monk seal and green sea turtle, as well as the birds, fish, and other species found there. The vision of the pu'u honua is being threatened, however, by a burgeoning increase in research activities targeting the NWHI. (See the Kahea handout available at the display table).

Monument status, and the phasing out within five years of the small number of commercial fishing boats currently operating in the NWHI, appeared to fulfill the protection goals favored by the vast majority of citizens submitting comments over the past few years during the designation process for the proposed NWHI National Marine Sanctuary. Ironically, however, the very nature of the NWHI as one of the few remaining large marine ecosystems relatively free from human impacts, and the attention given the NWHI in recent years, have created a "gold rush" atmosphere among well-funded researchers.

The protections for the NWHI MNM are quite specific and very stringent but can be overridden through the permitting process. Many actions otherwise illegal within Monument waters are allowed through the granting of permits for research or resource management purposes. The federal permitting processes under NOAA and the U.S. Fish and Wildlife Service are not open for public review, but the permitting processes for the State of Hawai'i NWHI Marine Refuge are. Permits are subject to approval

by the State's Board of Land and Natural Resources, through a public hearing process. The public hearings on recent research permits reviewed by the Board, most of which were granted with conditions, have revealed major problems with the permitting processes at this stage of development. Among these problems are (1) a lack of research priorities to guide the Board in its permit review process, (2) lack of an independent technical advisory board reporting to the Board, and (3) insufficient time for thorough review of research proposals geared to specific departure dates of research vessels.

The most recent example of these problems was the permit review for the voyage of the NOAA vessel *Oscar Elton Sette* to French Frigate Shoals. French Frigate Shoals is the prime nesting area for the Green sea turtle and is an important habitat for the endangered Monk seal. It is clearly an environmentally sensitive area. The purpose of the voyage was to gather specimens for the Census of Coral Reefs, a part of the larger Census of Marine Life project. Collection of specimens, numbering in the thousands because of their small size, employed a wide variety of collection techniques over different habitat types, by diver teams operating over a two-week period in numerous locations within French Frigate Shoals.

The prospect of diver teams conducting various collection methods within a variety of habitats in the heart of French Frigate Shoals raised many concerns by NGOs and at least one member of the State agency reviewing the permit request. The NWHI are still relatively free from the alien species of algae which dominate many reefs in the Main Hawaiian Islands, but they are at risk. Every vessel and every researcher, with his or her equipment, entering the waters of the NWHI is a potential carrier of alien species, and every voyage represents a potential threat of alien species introductions. Strict preventive measures are supposed to be in place, and strict conditions can be imposed through the permit process, but the gains from obtaining research information must be weighed against the risks of such research.

An informal process for working out issues on the permit application took place between the researchers, the State Division of Aquatic Resources, and some concerned NGOs. In the end, however, the permit process was driven by the deadline imposed by the ship's schedule. The permit application for the *Sette* voyage was still under review days a few days before the scheduled departure of the vessel. The permit application presented the morning of the permit hearing had been revised significantly from the version previously available to the public for comment. Rather than reschedule the revised permit application to allow adequate time for review, as was requested by Sierra Club and others testifying before the Board, the Board negotiated some changes to the application, listed a set of conditions to be met, and approved the permit. One Board member voted against the permit in protest to the process which was followed.

Fortunately, weather patterns will preclude more research voyages to the NWHI until next Spring. In the interim, it is crucial that steps be taken to (a) improve the permitting process for the Monument, (b) establish research priorities in place of a first-come-first-served approach, (c) establish an independent advisory committee to review major permits, and (d) develop a Management Plan for the Monument, including a citizens' advisory committee. Strict management and control over the number and nature of research and resource management activities within the Monument is necessary to reduce the risks to the resources there, including the cumulative impacts on the limited number of land sites available to researchers and managers. The fundamental question is, how much research and management data are really required to "manage" a no-take marine protected area intended to remain in a natural state?

## **MEETING THE CHALLENGE OF GLOBAL WARMING - A MODEST PROPOSAL FOR TASK FORCE ACTION**

The Task Force recognizes the importance of local actions and has sought comments from the public in the Atlantic, Caribbean, and Pacific areas. The message from the public, including major NGOs concerned with coral reef conservation in Florida and the Caribbean, has been loud and clear. Global warming, and its attendant impacts on coral reefs, must be addressed through actions to reduce greenhouse emissions. As a major contributor to those emissions the United States must take a leadership role in this effort. This is the message coming upward from the grassroots to the Task Force. Now we are, again, asking that the Task Force respond to this request by adopting the resolution attached below:

### **BACKGROUND**

- Goal 11 of the National Coral Reef Action Strategy, published by the Task Force in June, 2002, states that our Nation will **"Exercise global leadership through commitment to and collaboration with domestic and international partners to protect and conserve coral reefs and associated ecosystems globally."**

- Task Force Resolution 2-3, adopted March, 1999, acknowledges the role of global warming in contributing to coral bleaching and mortality. It reads as follows:

**“Support the Department of State's statement on coral bleaching and climate change. The statement acknowledged that in 1998 coral reefs around the world suffered the most extensive bleaching and subsequent mortality in modern record. It is likely that anthropogenic global warming has contributed to increasing sea surface temperatures, the extensive coral bleaching, and the coral mortality that occurred simultaneously.”**

- Task Force Resolution 8-5, “Coral Reefs and Climate Change,” adopted October, 2002, calls for establishment of a “Coral Reefs and Climate Change Program,” for “... **detecting, studying, predicting, and understanding the response of coral reef ecosystem structure and function to changing climate, and the socioeconomic impacts of such...**” This resolution focuses primarily on strategies for adapting to the impacts of climate change, but lacks a policy statement regarding reduction in greenhouse gas emissions to address the fundamental issue of global warming.
- Task Force Resolution 14-2, “Call for Action to Respond to Caribbean/Atlantic Bleaching Event”, adopted November, 2005, calls for the Task Force to play a leadership role in developing a comprehensive response to the Caribbean/Atlantic bleaching event, and states the need to **“Take steps to better understand and address the underlying causes of massive bleaching events; ..”** This resolution does not, however, extend the call for leadership to include action by the Task Force, and the U. S. government, to address the role of greenhouse gas emissions as a major underlying contributor to massive bleaching events worldwide.
- An August, 2003 article in the American Association for the Advancement of Science journal, co-authored by fourteen scientists from around the globe and titled **“Climate Change, Human Impacts, and the Resilience of Coral Reefs,** concluded the following:
  - **“The link between increased greenhouse gases, climate change, and regional-scale bleaching of corals, considered dubious by many reef researchers only 10 to 20 years ago is now incontrovertible.”**
  - **“International integration of management strategies that support reef resilience need to be vigorously implemented and complemented by strong policy decisions to reduce the rate of global warming.”**  
(Emphasis added)
- Among the more recent of the many papers on the topic of global climate change published by coral reef scientists is the April, 2006 paper by Aronson and Precht, published in Coral Reefs (2006) 25: 441-450. This paper was referred to in the CORALations testimony submitted to the Task Force. Aronson and Precht state the following:

**“If predictions of escalating coral mortality from bleaching and related causes are realized, then local management in vacuo will amount to little more than a series of rear-guard actions, which will at best delay the demise of coral populations and the dissolution of reef ecosystems. Reversing the global-scale causes of coral mortality will be critical to saving coral reefs.”**

## **PROPOSED TASK FORCE RESOLUTION REGARDING GLOBAL WARMING**

Recognizing that global warming may represent the single greatest threat to coral reefs worldwide, and has contributed to major events of coral bleaching and mortality in Florida and Caribbean reefs in particular, the Task Force acknowledges the need to address this issue by supporting efforts, including those of the federal government, to reduce the greenhouse gas emissions that contribute so significantly to climate change.

Accordingly, the Task Force approves of the following expansion of Objective 5 of Goal 11 of the National Action Strategy by changing **“Address the impact of global change, coral bleaching, and reef health on reefs and people,”** to **“Address the impact of global change, coral bleaching, and reef health on reefs and people, and support efforts at the local, state, national, and global levels to reduce emissions of greenhouse gases.”**

## **REQUEST FOR TASK FORCE ACTION**

We urge your adoption of this modest, but significant, amendment.

Thank you for the opportunity to present our comments.

Caribbean Conservation Corporation and Sea Turtle Survival League ●  
Clean Water Network of Florida ● Environmental Defense ●  
National Wildlife Federation ● Natural Resources Defense Council ●  
The Ocean Conservancy ● Reef Relief ● Sierra Club ● Surfrider Foundation

## **Top Policy Recommendations That Should be Implemented in the Next Year To Protect Florida's Coasts and Oceans**

### Strengthen Ocean Governance

- Hold a Governor's Coasts and Oceans Symposium that will form the basis for a plan of action for better ocean and coastal protection and make implementation of the plan a top priority of the new Administration.
- Create a Coastal and Ocean Policy Office in the executive office of the Governor to coordinate scattered programs and provide unified leadership for ocean and coastal management.

### Curb Unwise Coastal Development and Protect Valuable Coastal Habitats

- **Revise the Coastal Construction Control Line Program in order to ensure the program is accomplishing its original coastal resource protection goals (including long term protection of the beach and dune system) and explore a policy of siting of coastal development away from critically eroding shorelines.**
- Discontinue state efforts to assume delegation of wetlands permitting rules from the federal government and stop allowing wetlands destruction in exchange for wetlands mitigation, since scientific experts document that wetlands mitigation has not lived up to its promise.

### Reduce Coastal and Ocean Pollution

- **Halt the state's efforts to weaken water quality standards and, instead, develop stronger standards, including numeric criteria for nutrients. Include an enforceable nitrogen standard in the Everglades restoration plan in order to protect Florida Bay and the downstream coral reefs of the Florida Keys.**
- **Upgrade the state's stormwater regulations to address both dissolved and solid pollutants to ensure that water quality is not degraded by construction or new development.**
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- Integrate Florida's Fish and Wildlife Conservation Commission's marine fisheries management with DEP's management of submerged sovereign lands, coastal ecosystems and water quality to achieve more effective management of valuable fisheries, special places and the ecosystems upon which they depend.
- **Restore the operating budget of the Florida Oceans and Coastal Resources Council and support funding for the ocean research priorities identified by the Council.**

### Reduce Global Warming Pollution

- Lead a public driven process that will by the end of 2007 result in a plan to:
  - Combat the effects of global warming in order to protect Florida from the worst of its impacts, such as stronger hurricanes, dying coral reefs and threatened fisheries, rising sea-levels, and threatened coastal communities;
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  - Lead our state to a new energy future that will create a more secure and prosperous and energy independent Florida.

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