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Laura H. Thielen, Chairperson
Hawaii Department of Land and Natural Resources (DLNR)
Kalanimokii Building, 1151 Punchbowl Street
Honolulu, HI 96813

Support for the proposed Herbivore Fisheries Management Area at Kahekili, and a call for strong, comprehensive measures to protect marine fishes and coral reefs of Maui Island

Dear Ms. Thielen:

As a conservation organization fairly new to Hawaii, we offer the following:

Observations:

1. Many marine fishes are severely depleted along Hawaii's more accessible and populated areas; excessive fishing is the principal cause (see, for example, Williams et al. 2008).
2. Herbivorous fishes, such as parrotfishes, surgeonfishes, and chubs, control invasive seaweeds which damage coral reefs (DAR 2008).
3. Maui's coral reef ecosystems are threatened by invasive algae as well as by land-based pollution (DAR 2008). Some are in a state of collapse.
4. Marine reserves serve to protect vulnerable coastal ecosystems, including coral reefs, and can improve fish stocks beyond their boundaries (NCEAS 2001). On Maui, the Honolua-Mokuleia Marine Life Conservation District harbors more than three times the fish biomass than comparable fished areas outside the reserve (Friedlander 2008). My wife and I often snorkel Maui's coral reefs from Kihei to the Ahihi Kinau Natural Areas Reserve. It is remarkable to see the high diversity, abundance, and size of fishes within the reserve, and, in sharp contrast, so few parrotfish, chubs, and certain surgeonfish outside of the reserve.

Comments:

1. Maui's fish stocks need strong protection from overexploitation if the Island is to achieve a sustainable fishery, protect its coral reefs, and safeguard the marine food web. Overfishing is a worldwide epidemic (The Economist 2008) that will require exceptional leadership to end at local and state, as well as national and international levels.

2. We applaud DLNR's efforts to consider enhanced regulations and management for certain marine fishes (your news release of January 12, 2009), and we are encouraged by the strong local support voiced by many fishermen and other community members at DLNR's public hearing in Kahului on January 14. However, it is highly unlikely that its current focus on "minimum size rules" will suffice to curtail overexploitation of Maui's fish stocks.

3. A robust marine reserve system is needed for Maui to help ensure the sustainability and ecological functionality of fish populations and those of other marine organisms. The Island currently has only two areas serving as refuges for fishes and other marine life, amounting to a mere 5 miles or so (4%) of the island's 120 miles of shoreline (by our estimate). Marine reserves, if adequate in number, distribution, and size, can yield tremendous ecological, economic, and cultural benefits (Roberts and Hawkins 2000).

4. We commend DLNR for its proposal to create an Herbivore Fisheries Management Area (HFMA) at Kahekili on West Maui. At the same time, we encourage broadening the scope of the current proposal, as it would add less than 2 miles of additional protected coastline. As an immediate measure, we suggest HFMA status also for the Kamaole area of south Maui since it is at similar risk from invasive seaweed as Kahekili (DAR 2008).

5. Maui's coral reef ecosystems are also threatened by runoff sedimentation, nutrient pollution, global warming, and other factors related to development and human population growth. Maui Island needs an effective wastewater treatment system, better control of non-point source pollution, a process for integrating conservation and development plans, a greenhouse gas emissions control program, and a monitoring program to evaluate the effectiveness of pollution abatement measures. Maui County seeks to address these matters in developing its long-range Maui Island Plan. We urge DLNR to vigorously support and collaborate with Maui County to meet these needs.

Thank you for considering our comments on this vital subject. We hope they will receive a favorable review. Mahalo!

Sincerely,

Tony Povilitis

Tony Povilitis, Ph.D.

cc:

Division of Aquatics Resources (1151 Punchbowl St., Room 330, Honolulu 96813)

Planning Office, County of Maui (via email)

Maui County Council (via email)

References:

Friedlander, A. 2008. Fish habitat utilization patterns and evaluation of marine protected areas in Hawaii. Presentation available on line at:

<http://www.wpcouncil.org/coralreef/InterimFinalPanelReport/CRFSAW%20Interim%20CD/Day%202%20Presentations/NOSFishHabitat-AFriedlander.pdf> (slide 18).

Hawaii Division of Aquatic Resources (DAR). 2008. Status and trends of Maui's coral reefs. DLNR. Honolulu.

National Center for Ecological Analysis and Synthesis (NCEAS). 2001. Scientific consensus statement on marine reserves and marine protected areas. Annual meeting of the American Association for the Advancement of Science. 17 Feb.

Roberts, C.M. and J.P. Hawkins. 2000. Fully-protected marine reserves: a guide. WWF Endangered Seas Campaign, 1250 24th Street, NW, Washington, DC 20037, USA and Environment Department, University of York, York, YO10 5DD, UK.

The Economist 2008. Grabbing it all: In most places fisheries policies have failed completely. A special report on the sea. Print edition Dec 30, 2008

Williams, I.D., W.J. Walsh, R.E. Schroeder, A.M. Friedlander, B.L. Richards, and K.A. Stamoulis. 2008. Assessing the importance of fishing impacts on Hawaiian coral reef fish assemblages along region-scale human population gradients. *Environmental Conservation* 35:261-272.