Reshaping the Regulatory Framework for Hawaii Aquaculture – Water Quality Standards, Coastal Fishponds, and Shellfish Grounds
Problem and Research Objectives

The goal of our seed grant project is to establish a broad-based, collaborative effort to promulgate new water quality regulations that will provide for greater community self-reliance in aquaculture production while sustaining environmental health. Due to personnel changes that were beyond our control, the timeline for achieving our four main objectives is now one year later than originally proposed:

(1) identify the different types of water quality standards revisions that could be proposed, including a survey of the practices in other jurisdictions (March-June 2012);

(2) document procedural roadmaps and scientific information needs for each type of revision identified (June-September, 2012);

(3) analyze the potential for success in revising water quality standards for one or more coastal fishponds (September- November, 2012); and

(4) estimate the resources needed to complete revisions on a wider scale (October-December 2012).

Methodology

We are conducting technically-based policy analyses utilizing all readily available scientific data and historical/contemporary regulatory information. We will use the results of these analyses to develop a comprehensive inventory of potential regulatory approaches and compliance practices. The suitability of these approaches and practices for local implementation will be assessed through participatory research with project collaborators and other interest groups.

Principal Findings and Significance

We initiated collaboration with the Pacific Aquaculture & Coastal Resources Center (PACRC), University of Hawaii at Hilo, which enabled us to identify the membership and strategic approach of the Hawaii Shellfish Working Group (HSWG). The HSWG includes representatives from Hui Malama Loko Γ’a (a consortium of thirty non-profit organizations focused on the restoration of fishponds originally built by native Hawaiians), the State of Hawaii Aquaculture Development Program, NOAA’s Pacific Regional Aquaculture Program, shellfish producers and management consultants, and scientists from the University of Hawaii and Oregon State University. The PI joined the Hawaii Aquaculture & Aquaponics Association, which provides another avenue for connecting with potential collaborators and vetting our research results with the affected community.

During the last year, the U.S. Department of Agriculture evaluated state laboratories, trained state regulatory staff on sanitary surveys and growing area classification, and visited and sampled potential grow-out sites. See Department of Health (2011). The water quality sampling results indicated that several of the sites tested are suitable for USDA “conditional approval” of
commercial shellfish harvest. However, it is difficult for Hawaii to meet the federal operating requirements operating for conditionally-approved sites because the sanitation branch staff charged with the implementation of the state’s shellfish sanitation program do not have the necessary law enforcement powers. If these enforcement issues are not resolved, it will become increasingly important to plan and develop relay procedures and depuration facilities for transporting shellfish from grow-out areas to “fully approved” harvest areas. Maria Haws, PACRC, personal communication, March 20, 2012.

**Publications Cited in Synopsis**