

# **HAWAII OCEAN RESOURCES MANAGEMENT PLAN**

## **2005 Status Report to the Twenty-Third Legislature, Regular Session of 2006**

Submitted by the Hawaii Coastal Zone Management Program  
Office of Planning  
Department of Business, Economic Development and Tourism

January 2006

# **HAWAII OCEAN RESOURCES MANAGEMENT PLAN 2005 Status Report to the Twenty-Third Legislature, Regular Session of 2006**

This report responds to Senate Concurrent Resolution No. 137, H.D. 1, Regular Session of 2005, which designates Hawaii's Coastal Zone Management Program (CZM) under the Office of Planning (OP) as the lead agency in overall implementation of the ocean resources management plan and requires CZM to brief the Legislature on the status of the ORMP update process. This status report details the ORMP project-related activities for the calendar year ending December 31, 2005.

## **BACKGROUND**

The Hawaii Ocean Resources Management Plan (ORMP), published in 1991, was developed by a multi-agency, cabinet-level council which included private sector and non-governmental representatives. The ORMP sets forth guiding principles and recommendations for the State of Hawaii to achieve comprehensive and integrated ocean and coastal resources management. In addition to overall recommendations for a new governance structure and a comprehensive management system, the plan includes a series of specific policies and implementing actions for ten resource sectors. The State Legislature adopted the ORMP in 1994 and legislation was passed in 1995, which incorporated the plan into the CZM Program under OP. A review of the ORMP was conducted in 1998, revealing a need for a revised ORMP to address declining funds and personnel, changing priorities and new concerns relating to ocean resources management. Chapter 205A-62 of the Hawaii Revised Statutes charges OP with the review and periodic update of the ORMP, as well as coordination of overall implementation of the plan.

## **UPDATE PROCESS**

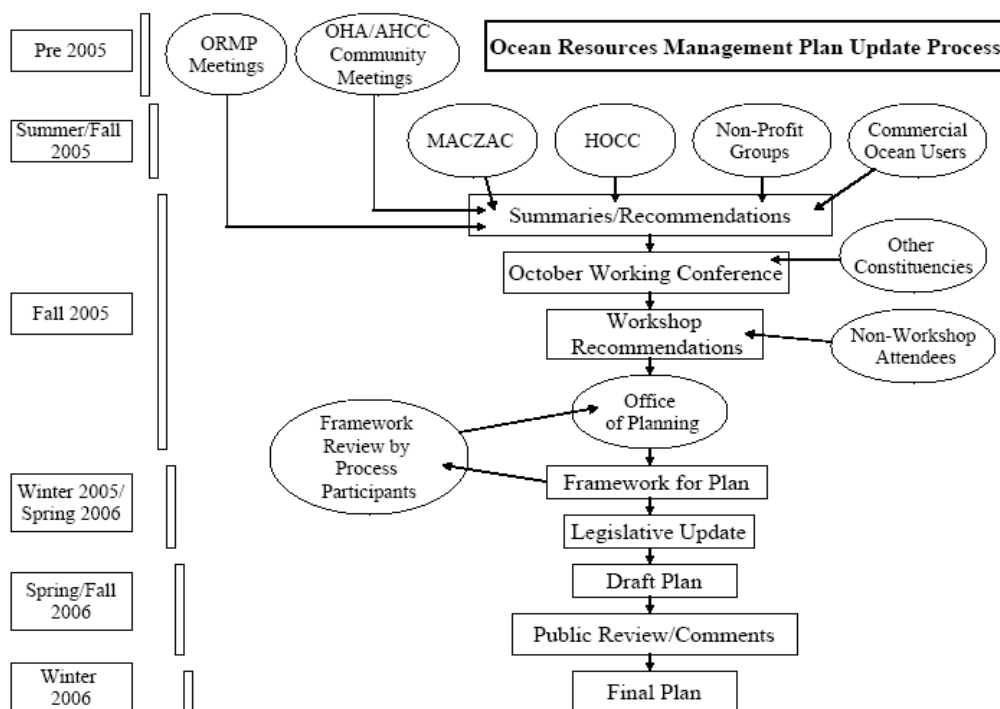
The 2006 update process is expected to be completed by December 2006. The chart on the following page outlines the various components and general time frame of the process. The process consists of gathering input from various groups, holding a working conference to streamline ideas and work toward a framework for the 2006 plan, creating drafts of the plan with the selected contractor, constantly reshaping the plan to accommodate recommendations and suggestions from various stakeholders and the public, and producing a final plan by the end of 2006.

## **GATHERING INPUT**

In 2005, OP sought input from a variety of groups regarding the issues, priorities and recommended actions that should be included in the updated ORMP. The Hawaii Ocean and Coastal Council (HOCC), the Marine and Coastal Zone Advocacy Council (MACZAC), the Office of Hawaiian Affairs (OHA), the Association of Hawaiian Civic

Clubs (AOHCC), various community groups, ocean users, environmental non-profits and members of the general public were asked to do the following:

1. Identify the uses, stresses and threats that are predicted to have the greatest negative impact on Hawaii's ocean resources over the next twenty years;
2. Prioritize the matters that the state, counties, and communities must address over the next five years;
3. Recommend specific actions by which the state, counties and community groups may resolve user conflict, relieve stresses or reduce/eliminate the prioritized matters; and
4. Provide recommendations on a framework for the updated ORMP.



**HOCC.** The HOCC was established by Executive Order 05 in January 2005. It is composed of approximately 30 members from federal, state and local government agencies, as well as Hawaiian cultural groups. HOCC held monthly facilitated meetings between May and October 2005 with a goal of providing recommendations to OP on the issues, priorities and specific action items to consider when updating the ORMP. HOCC submitted its final report to OP in October 2005, attached herein as Exhibit "A."

The report is organized into three themes:

1. Protection of Natural and Cultural Resources
2. Coastal Development and Recognition and Balance between Resources
3. Resource Users and the Conflicts that Arise

Within each theme, the HOCC identified long-term goals and prioritized tiers of short to mid-range goals. Nearly every goal is supported by a list of examples as possible objectives or implementation strategies.

MACZAC. MACZAC, the citizen advisory council to OP, is charged with facilitating implementation of the ORMP under Chapter 205A, HRS. The MACZAC working group prepared a brief draft position paper, a summary of which is attached herein as Exhibit "B," stating the issue or problem and proposing recommendations as follows: (1) change in the law; (2) change in administrative rules; and/or (3) change in policy. Their position papers focus on process rather than projects. The issues raised by the MACZAC ORMP working group are:

1. Resource Protection – Enforcement
2. Coastal Development and Activities - Public Shoreline Access
3. Balance of Resource Uses and Resource Protection - Support of a Sustainable Ocean Tourism Industry
4. Resource Protection - Streamlined Permitting
5. Coastal Development and Activities - Small Boat Harbor Issues
6. Resource Protection - Management of Unencumbered State Lands
7. Resource Protection - Inadequate Wastewater Treatment in Coastal Areas
8. Resource Protection - Marine Reserves
9. Coastal Development - Commercial Harbors

OHA. OHA has substantive constitutional and statutory mandates to protect the cultural and natural resources of Hawai'i for its beneficiaries, all Hawaiians. To assure the proper management of natural and cultural resources, OHA seeks ways to incorporate Native Hawaiian knowledge and management methods into the state's resource management policy and practices. In September and October of 2004, OHA held "Community Conversations" on each island to allow the Hawaiian community a chance to share their concerns and knowledge about ocean and coastal issues, which are often individual to each island, and sometimes individual to various parts of each island. Meetings were held in:

- West Kaua'i/Ni'ihau – Kekaha – Sept. 13, 2004
- East Kaua'i – Kapa'a – Sept. 14, 2004
- East Hawai'i – Hilo – Sept. 20, 2004
- West Hawai'i – Kona – Sept. 21, 2004
- Maui – Kahului – Sept. 22, 2004
- Moloka'i – Kaunakakai – Sept. 24, 2004
- Lana'i – Lana'i City – Sept. 29, 2004
- Windward O'ahu – Kaneohe – Oct. 4, 2004
- South O'ahu – Papakolea – Oct. 5, 2004
- Leeward O'ahu – Waianae – Oct. 7, 2004
- North O'ahu – Hale'iwa – Oct. 8, 2004

Common themes arose from these meetings. Hawaiians on each island spoke of the importance of ahupua'a and konohiki styles of resource management, including regional rules, management and enforcement; the woven integration of cultural and natural resources; the need to educate people who live and work in Hawai'i, resource managers and tourists; the inadequacy of enforcement of existing rules and laws; environmental impacts from current mismanagement and misunderstanding of the resources; and needs for access to ocean and coastal resources.

AOHCC. The AOHCC consists of 51 Hawaiian Civic Clubs nationwide and has been actively involved with State agencies through most of the ORMP update process. Between May and November 2005, AOHCC gave approximately 17 presentations to a variety of groups, such as the Community Conservation Network; Hawai'i state and county agencies; Belt Collins, Inc.; and the National Oceanic and Atmospheric Administration. These presentations included several key points:

1. The ahupua'a concept, which represents the integrated relationship between ocean activities and land activities
2. The need for ecosystem-based management
3. The negative impacts of overlapping jurisdictions and unclear demarcations among federal, state and county agencies
4. The need to include community members in the planning process

The ahupua'a concept is beginning to be reaffirmed by land and ocean use stakeholders, and the AOHCC has received numerous requests for its presentations.

Environmental Groups. OP held meetings to solicit input from representatives of a variety of non-profit organizations around the islands, including those with a focus on the environment and land use. OP met with them on June 15, 2005 to invite their participation, and held a follow-up meeting on August 18, 2005 to gather questions and comments from them. Attendees included representatives from the Ahupua'a Action Alliance, the Hawaii Audubon Society, Life of the Land and The Nature Conservancy of Hawaii. The groups expressed appreciation for the opportunity to participate in identifying priorities and a framework for the ORMP. While the groups did not generate a report or common recommendation, many took the opportunity to prepare for and participate in the October 2005 ORMP Working Conference and submit written recommendations following that event.

Ocean Users. In a similar fashion, OP met with representatives from a variety of ocean businesses, including both small and large business and recreational ocean users, on July 21, 2005 and September 9, 2005. Attendees included representatives of the Ocean Tourism Coalition, Maui Dive Shop, Lahaina Divers Inc. and Let's Surf Coalition. Some of the comments and questions raised included the need for an education component, with commercial operators disseminating information on resource protection; the need for a formal definition of "ocean resources"; and a concern questioning the assumption that public ocean users will protect the resources more than

commercial ocean users, as commercial users have a more vested interest in the resources.

In order to ensure that each stakeholder group was kept abreast of issues discussed by other groups, periodic e-mail updates were sent out to all groups with HOCC meeting minutes and directions to review the web site for further updates.

Web Site. OP/CZM has dedicated a section on its web site for the ORMP update process at [http://www.hawaii.gov/dbedt/czm/czm\\_initiatives/orm.html](http://www.hawaii.gov/dbedt/czm/czm_initiatives/orm.html). This page was created as a resource to all who desired access to the ongoing process to gather input. The web page contains documents for review, including the HOCC meeting agendas and minutes, as well as the 1991 ORMP, the 1998 Review, and other supporting documents.

## **DISCUSSION & FRAMEWORK DEVELOPMENT**

October Working Conference. In partnership with the Office of Hawaiian Affairs and the Department of Land and Natural Resources, OP planned and held an ORMP Working Conference on October 26, 2005 at the Hawaii Convention Center in Honolulu. 140 people attended the ORMP Working Conference from a wide base of stakeholders, including government agencies, non-profit organizations, community groups, small and large ocean user business owners, and community members. The intent of the Working Conference was to provide a chance for participants to develop and compare recommendations, look for consensus where it exists, and work toward a framework for the 2006 ORMP. Large and small break-out groups tackled the tasks of identifying resource opportunities and threats and strategies to address them. Each small group section prepared a brief summary back to the entire Working Conference.

The Working Conference break-out groups were divided into 12 categories:

1. Ocean Resource Extraction
2. Ocean Resource Protection
3. Invasive Species
4. Aquaculture
5. Education/Outreach
6. Cruise Ships
7. Water Quality
8. Coastal Public Access
9. Sustainable Coastal Development
10. Enforcement Alternatives
11. Ocean Recreation User Conflicts
12. Boating Facilities and Infrastructure

Working Conference Follow-Up. As a follow-up to the Working Conference, OP prepared and sent out evaluation forms summarizing the main topics discussed in each category. Participants were asked to assess the cost-effectiveness, complexity and

priority levels of each issue as "high," "medium" or "low." OP has compiled the results and has attached them as Exhibit "C."

A total of 38 evaluations were counted; 46 total evaluations were received, but 8 evaluations were not filled out according to the instructions for the survey. However, comments from all evaluations received are represented. Issues were ranked using two methods: 1) by point totals across all categories and 2) by only priority category totals. In assigning points to each issue, the following simple point system was used:

	High	Medium	Low	Blank
Cost-Effectiveness:	3 points	2 points	1 point	0 points
Complexity:	1 point	2 points	3 points	0 points
Priority:	3 points	2 points	1 point	0 points

The table titled "Rankings" in Exhibit "C" shows the rank order, from highest to lowest, according to point totals (taking into account cost-effectiveness, complexity and priority). The list titled "Priority Rankings" shows the rank order, from highest to lowest, based only upon priority category totals. The list titled "Numbers" displays the number of votes for each issue and the totals using the point system above.

Recommendations. Upon a review of the recommendations and priorities submitted by HOCC, MACZAC, the various community groups, environmental groups, the public and ORMP Working Conference evaluations, several issues and actions have become more apparent as consensus priorities among the groups.

The following general categories exhibit the highest combinations of priority and feasibility:

- Boating infrastructure and facilities
- Permitting
- Sustainable coastal development
- Invasive species
- Public access
- Ocean resource protection
- Enforcement

The recommended actions include the following:

- Increases in or better allocation of funding, personnel, resources and equipment
- Greater community involvement and input in the management of ocean resources
- More collaborative governmental efforts and procedures, including the permitting process
- Establishment of additional marine protected areas

- More education and integration of ahupua'a and/or place-based management concepts and resource protection measures

These responses are not conclusive as there may be gaps in data and feedback that have yet to be addressed, but OP will use them as initial indicators of pressing concerns that should be given important consideration when developing implementation actions for the ORMP.

Framework Development. OP is taking a comprehensive and integrative approach to the 2006 ORMP, utilizing the concept of the ahupua'a as a means to emphasize the interrelation of our oceans and ocean-related activities, as well as our land and land-based activities. As the guiding plan for ocean resources management in Hawaii, the ORMP should be broad enough to incorporate all main factors affecting the ocean and its resources but also thorough and carefully planned to elicit effective implementation. To this end, OP intends to work with a contractor to refine the ahupua'a approach toward the ORMP and make it workable within our governmental management scheme, making modifications to the approach as appropriate.

## **2006 ORMP PLAN WRITING**

OP has selected Tetra Tech EM Inc. as the contractor to help organize and write the 2006 ORMP. OP plans to work closely with Tetra Tech, governmental agencies and the various stakeholders to create a plan that integrates various management measures; encourages collaboration across state, federal and county agencies; and prescribes specific actions and projects to be implemented. In collaboration with Tetra Tech, OP will produce a first draft of the updated ORMP in the spring of 2006. The draft will then undergo a process of evaluation and revision based on input from the various stakeholders before preparing the final draft by December 2006. The ORMP will be completed and submitted to the Legislature for the 2007 session.

OP expects to work closely with the various federal, state and county agencies, especially agencies such as DLNR and the counties, which have large jurisdictions covered under the ORMP. Equally important are the various members of community, environmental and business groups and the public to be affected by the plan. Collaboration, strong political will and compromise will be vital to construct not just a thorough document, but one that sets a clear direction for effective implementation toward a healthier and more sustainable future for Hawaii and our oceans.



**EXHIBIT "A" - REPORT TO THE OFFICE OF PLANNING FROM THE  
HAWAII OCEAN AND COASTAL COUNCIL REGARDING REQUEST  
FOR DRAFT GOALS FOR THE UPDATING OF STATE OCEAN  
RESOURCES MANAGEMENT PLAN (10/03/05)**

**REPORT TO THE  
OFFICE OF PLANNING  
FROM THE  
HAWAII OCEAN AND COASTAL COUNCIL  
REGARDING REQUEST FOR  
DRAFT GOALS FOR THE UPDATING  
OF  
STATE OCEAN RESOURCES MANAGEMENT PLAN**

**OCTOBER 3, 2005**

# INTRODUCTION

The Hawaii Ocean and Coastal Council (HOCC) met between August and October to consider a request by the Office of Planning to provide input on draft goals for the update of the Ocean Resources Management Plan (ORMP). A List of the HOCC members is attached. The HOCC forwards via this report the outcomes of its discussions regarding draft goals. The short to mid-range goals were prioritized by the Council in recognition that often resources limit what can be accomplished and setting some priorities is a necessary step. The prioritization in no way implies that members of the Council do not feel strongly about all of the goals in this document.

Although the Council was asked to develop goals for the update of the ORMP the connection between ocean resource health and land based activities made it impossible to focus on one without reference to the other. The interrelationship of ocean health and land based activities is undeniable and as such a management principle that recognizes and provides for this interaction is essential to protect the health and well being of our coastal resources.

The Council will meet again after the October conference to continue its work around moving these goals forward. The Council sincerely hopes that its work is helpful in the amending of the ORMP.

## Document Organization

The document is organized around three themes: Protection of Natural and Cultural Resources, Coastal Development and Recognition and Balance between Resources, Resource Users and the Conflicts that Arise. Each theme has several long term goals and then several prioritized tiers of short to mid range goals. All goals within a specified tier have the same level of importance. The goals are often followed by examples that could be used as objectives or come into play in implementing actions as the plan moves forward.

## THEME I: PROTECTION OF NATURAL AND CULTURAL RESOURCES

### Long Range Goals

Maintenance and enhancement of natural and cultural resources. (Examples: watershed protection; wetland protection; etc.)

Continually integrate the impacts of global climate change into the ORMP (Examples: temperature changes; current changes; etc.)

### Short to Mid Range Goals

#### Tier 1

Provide for ease of permitting for activities that enhance the natural and cultural resources. (Examples: beach nourishment; invasive species removal; fish pond restorations; mooring pin installation; etc.)

#### Tier 2

Develop a system for assessing management needs and developing management practices that draw collectively on regulatory, science based, traditional and cultural, community based and political systems. (Examples: look at use of Hawaiian moon calendar; Konohiki concept; etc)

#### Tier 3

Establish appropriate transparent permitting requirements for the protection of natural and cultural resources. (Examples: streamlining the permit process where it would assist with the preservation of resources and getting more restrictive where activities would create risks to the health of the resources; etc.)

Develop and incorporate into all educational venues the message of the importance of the natural and cultural resources and man's role in protecting and preserving them through the adherence to and understanding of regulations, science, traditional and cultural practices and community involvement.

Implement multi-jurisdictional approaches to natural and cultural resource protection that are transparent. (Examples: Develop baseline maps of natural and cultural resources to be protected, use ahupua'a boundaries and clearly delineate jurisdictional issues needing to be addressed around the identified resources)

#### Tier 4

Facilitate the establishment of effective Marine Protective Areas based on best available knowledge and values.

Develop and encourage the use of fisheries management tools that enhance the protection of the natural and cultural resources. (Examples: reduce over fishing; establish kapu areas for fishing based on spawning/seasonal cycles; look at gear issues; etc.)

Tier 5

Improve our ability to analyze impacts of development on ocean resources.

Encourage the implementation of Hawaii's local action strategies developed through the U.S. Coral Reef Task Force.

Encourage research that is focused on natural and cultural resources management needs. (Examples: increase knowledge to provide adequate basis for species management, utilizing scientific, indigenous, etc forms of knowledge; etc.)

Tier 6

Protect Hawaii's coastline by reducing human induced erosion through encouraging soft approaches and discouraging shoreline armoring.

## THEME II: COASTAL DEVELOPMENT

### Long Range Goals

Encourage development/activities that decrease flooding and pollutant loading impacts on coastal areas

Protect and restore sensitive coastal ecosystems, habitats, open spaces and cultural sites (Examples: establish appropriate access and community management options)

Initiate sustainable coastal communities (Examples: cultural, economic, environmental, unified management of dune/beach communities and other closely related community elements)

Achieve a broader recognition that activities on the land cause significant impact on coastal/marine resources.

### Short to Mid Range Goals

#### Tier 1

Improve compliance with existing laws and rules. (Example: setting meaningful timely consequences, providing adequate resources, implementing community programs such as Makai Watch, etc.)

#### Tier 2

Adopt and implement consistent statutes, ordinances, and rules that support smart development. (Examples: revisit zoning, building, subdivision and grading permit areas to provide a better fit in encouraging and accommodating smart growth)

#### Tier 3

Minimize/mitigate impacts of the increase in impervious surfaces on coastal resources.

Enhance the SMA process to better address resource risks and preservation needs. (Examples: address such issues as proximity to drainage ditches, shoreline sensitive resources etc.)

Develop a publicly accessible data base system of current and historic conditions impacting coastal resources. (Examples: technology could be GIS, PDF, co-operative sharing of data bases or other technology, should include such elements as impervious surfaces, hardened shorelines, wetlands, ahupua'a district boundaries, etc.)

Establish coastal resource based criteria by which to measure the appropriateness of development in an area. The system should require that the criteria be met and should provide an opportunity to meet the criteria through mitigation efforts. (Example: activities such as grading may have very different impacts depending on topography and other factors)

Harbors and boat launching ramps should provide management regimes and facilities that minimize impacts to marine resources. (Examples: pump outs, hardening design considerations, run off capture, toxic materials handling, storm water runoff, waste disposal, etc.)

#### Tier 4

Develop long term monitoring and other tools to assess the condition of marine resources in waters adjacent to areas designated for growth and those already developed.

Support sustainable aquaculture and agriculture practices that are non-degrading and resource neutral. (Example: Should encompass both traditional and contemporary methodologies and should reflect a science based approach)

#### Tier 5

Ensure that coastal development has waste water treatment facilities designed to protect coastal and marine resources. (Example: Review existing rules to make sure they address coastal resources and not just drinking water resources)

Large capacity ships should provide management regimes and shipboard facilities that minimize impacts to marine resources. (Examples: depth of discharge of treated waste, take into account currents when discharging, also the impact of discharging in a channel even if it is three miles from a coastline)

## THEME III: RECOGNITION AND BALANCE BETWEEN RESOURCES, RESOURCE USERS AND THE CONFLICTS THAT ARISE

### Long Range Goals

Develop community based mechanisms for addressing potential user conflicts (Example: establish/set up systems, set up system to monitor and assess how and if various initiatives are working)

Identify trends in resources, resource uses and potential conflicts. (Examples: surfing schools, surf contests, near and off shore fisheries, commercial use of beaches)

Tie sustainability of resources to growth and the impacts of growth on the resources.

### Short to Mid Range Goals

#### Tier 1

Develop tools for determining sustainable levels of use for our natural coastal resources.

#### Tier 2

Develop guidelines for and educate people about human and wildlife interactions. (Examples: provide for public education about wise use and consequences of poor use to assist in enforcement)

Improve compliance with rules, laws and statutes regarding all aspects of ocean resource protection. (Examples: Makai Watch, boating regulations)

#### Tier 3

Develop systems to better manage recreational fisheries. (Examples: licensing, access to, subsistence [both general and native Hawaiian], data collection needs)

Encourage innovative alternative development options of ocean resource dependent industries, through the development of criteria designed to weigh the costs and benefits, and siting options for such industries while assuring maximum protection of natural and cultural resources and community input. (Examples: Wave energy, etc.)

Improve opportunities for community education, and mechanisms for community involvement regarding decision making where the government seeks to address public health and welfare. (Examples: Community Development Plans, Aha Councils, providing meaningful feedback loops to persons who engage in public processes, examining laws that make it hard to change plans after public review)

#### Tier 4



Protect and increase public access where appropriate and limit where resource endangerment would result from open access

#### Tier 5

Discourage activities that have negative impacts on ecological function, ecosystem health and cultural resources of coastal areas. (Example: using resources such as the salt ponds for airport use)

Mitigate the impact of visitor activities on the local community (Examples: hours of operation, days of operation)

## The Hawaii Ocean and Coastal Council Membership

Thorne Abbott - Coastal Resources Planner, County of Maui Planning Department

Lt. Col. Dave Anderson – Commander, U.S. Army Corps of Engineers

Leimana DaMate – Association of Hawaiian Civic Clubs

Dr. Charles Fletcher – School of Ocean and Earth Science and Technology, University of Hawaii

Dr. Jim Gaines – Vice President, Research, University of Hawaii

Dr. Gordon Grau – Director, Sea Grant College Program, University of Hawaii

Heidi Guth – Lead Advocate, Native Rights, Land and Culture, Office of Hawaiian Affairs

Rod Haraga – Director, Department of Transportation

Rebecca Hommon – Regional Council, Navy Region Hawaii

Gary Ishikawa – Civil Defense (for Major General Robert Lee)

Camille Kalama – PVY Policy Analyst, Polynesian Voyaging Society

Alice Kawaha – Planning Manager, County of Hawaii

Duane Okamoto – Department of Agriculture (for Sandy Kunimoto)

Laurence Lau – Deputy Director for Environmental Health – Department of Health (for Dr. Chiyomi Fukino)

Jerry Leinecke – Project Leader, Refuges Division, U.S. Fish and Wildlife

Professor Jo-Anne Leong – Director, Hawaii Institute of Marine Biology, University of Hawaii

Ted Liu – Director, Department of Business, Economic Development and Tourism

Sean Martin – Vice Chair, Western Pacific Regional Fishery Management Council

Bill Robinson – Regional Administrator, NOAA Fisheries, Pacific Islands Regional Office

Sue Sakai – Chairperson, Marine & Coastal Zone Advocacy Council

Capt. Tim Skuby – Commander, Sector Honolulu, U.S. Coast Guard

Christopher Smith – State Soil Scientist – USDA Natural Resources Conservation Service

Laura H. Thielen – Director, Office of Planning

Bill Thomas – Manager, NOAA Pacific Services Center

Allen Tom – Pacific Islands Region, NOAA - National Marine Sanctuary Program

Marsha Wienert – Tourism Liason, Office of Tourism

Larry Yamamoto – Manager, Natural Resource Conservation Service

Peter Young – Chairperson, Department of Land and Natural Resources

City and County of Honolulu representative

County of Kauai representative

**EXHIBIT "B" - SUMMARY REPORT OF THE MACZAC OCEAN  
RESOURCES MANAGEMENT PLAN WORKING GROUP (08/17/05)**

## **Report of the Ocean Resources Management Plan Working Group August 17, 2005**

The MACZAC ORMP working group decided to address the following issues. Several of these have been discussed at MACZAC meetings or addressed in MACZAC working groups. For each issue, we have written a one to two-page position paper, stating the issue or problem and proposing recommendations as follows: (1) change in the law; (2) change in administrative rules; and/or (3) change in policy. These papers focus on process rather than projects. We have adopted the broad categories proposed by the Hawaii Ocean & Coastal Council (HOCC).

1. **Resource Protection - Enforcement.** To be effective, enforcement needs to be community based similar to the neighborhood watch programs conducted by the police departments and the Makai Watch program initiated by DLNR. The idea is for the resource enforcement agency to have a mentoring program so that community members know and trust them and are willing to work with them. The emphasis should shift from policing only to community involvement and education. We are proposing a restructuring and consolidation of DLNR agencies currently engaged in resource enforcement in the coastal zone.
2. **Coastal Development and Activities - Public Shoreline Access.** We noted the "stealth construction" of guard rails and other impediments to parking for shoreline recreation users. A MACZAC working group prepared GIS maps identifying surf site parking areas and distributed these maps to DOT, DTS, DLNR, etc. It didn't help; guardrails were recently constructed on Kalaniana'ole Highway near Makai Range, a parking area identified by the MACZAC working group. As we learned with the Diamond Head bikeway project, many of these projects fall through the cracks in terms of agency and public review. To deal with this disconnect, we have recommend a public notification process for agencies proposing projects that impact shoreline access/parking.
2. **Balance of Resource Uses and Resource Protection - Commercial Recreational Boating.** There's a need to identify near shore/offshore areas for activities accessible by boat. Associated with this is the need for more day use moorings to prevent anchor damage to coral reefs. We will recommend a process for addressing this issue.
3. **Resource Protection – Streamlined Permitting.** We noted the need for an expedited approval process for certain beneficial activities such as mooring pin installations for day use moorings to prevent anchor damage to coral, mangrove and other invasive species removal, and Hawaiian fishpond repair and restoration. Also recommended is a streamlined process for minor uses and activities in the Conservation District.
5. **Coastal Development and Activities - Small Boat Harbor Issues.** DLNR has not done a good job in managing the small boat harbors. There appears to be a lack of accountability. Facilities are in disrepair, wastewater disposal is a problem, and as

we learned at our MACZAC meeting on Lanai, there's a disconnect between the users and the department during the planning and design of projects.

6. Resource Protection – Management of Unencumbered State Lands. An example of this was the issue of cultural resources on UH land on the island of Hawaii, raised at a MACZAC meeting in Hilo. UH lacks the organizational capacity and the Historic Preservation Division lacks the resources to manage these burials. Kaena Point was once in this situation, with trash and damage to the dune ecosystem by offroaders, before its designation as a Natural Area Reserve. Given the low likelihood of adequate funding for management of these lands is low, we are proposing partnerships with community groups and nonprofit resource organizations.
7. Resource Protection - Inadequate Wastewater Treatment in Coastal Areas. MACZAC discussed this issue and learned that this is a problem statewide, adversely affecting near shore water quality. We are recommending a process for identifying priority areas that need wastewater treatment upgrades, considering proximity to beach parks and impaired waters, as well as practicality. Upgrades should not be limited to large wastewater treatment plants; smaller system should be considered as well.
8. Resource Protection – Marine Reserves. For an island state, Hawaii has very few no-take marine reserves/marine protected areas. For example, there are only nine Marine Life Conservation Districts (MLCDs). The benefits of such reserves are evident. An assessment conducted in 2000 revealed that average reef fish biomass was 260 percent higher in the Northwest Hawaiian Islands National Wildlife Refuge than in the main Hawaiian Islands. Furthermore, a much higher level of apex predators was found in the NWHI compared to the main islands, where the bulk of fish biomass consists of herbivores and small, low-level carnivores. The primary opposition to designating more marine reserves comes from the fishing community. Recommendations are made to overcome this opposition.
9. Coastal Development – Commercial Harbors, DOT Harbors should update the 2020 harbor plans by engaging users and factoring in new security requirements and the pressures of the state's growth on the maritime industry. Infrastructure and enforcement improvements are critical needs. Those areas where commercial and recreational harbor uses intersect must be addressed. The update will require collaboration between DOT Harbors, DLNR-DOBOR, U.S. Coast Guard, and users.

**EXHIBIT "C" - RANKINGS & COMPILED RESULTS OF ORMP  
OCTOBER WORKING CONFERENCE EVALUATION FORM**

## Ranking

Rank	Category	Project/Initiative	Total Pts.
1	BOAT	Develop functional pump-out facilities in all harbors.	209
2	CPAC	Insure that shoreline is accessible at regular intervals across private lands.	202
3	INVS	Increase personnel and resources.	201
4	BOAT	Insure funds generated by a facility are used to support that facility.	199
5	BOAT	Insure port/harbor fees go to facilities maintenance and upgrading.	196
6	INVS	Increase resources for inspections.	191
7	ORPR	Set aside fishery replenishment areas that can repopulate other areas.	188
8	EDUC	Develop content and updated culturally-based curriculum with emphasis on <i>ahupua'a</i> .	186
9	INVS	Develop county-based response teams.	184
9	ENFR	Increase enforcement power * Use fines for hiring enforcement officers * Empower citizens to educate and enforce (makai watch) * Develop revenue generating mechanism for enforcement modeled after Pitmann-Robinson Act	184
11	INVS	Increase state, federal and county cooperative efforts.	182
12	CDEV	Streamline permit review process.	180
13	USER	Insure that there is community input in management decisions.	175
14	BOAT	Develop comprehensive master plans for the boating program and for individual harbors * Need fee schedules and accountability * Increase community stewardship (harbor advisory groups) * Need more haul-out facilities on each island * Reduce conflict among commercial and recreational users	173
15	EDUC	Develop infrastructure, including a website, for delivery of education and outreach programs.	172
16	OREX	Create General Guidelines for Resource Extraction. * Provide mechanisms for greater native community input/collaboration. * Recognize unique environmental character of sites with more place-based management. * Integrate ahupua'a concepts and practices. * Build accountability into management plans. * Design strategies for restoration.	170
17	OREX	Improve fisheries management. * Organize management by moku. * Implement management on the basis of moon calendar and other traditional techniques.	165
17	ORPR	Design more inclusive participation strategies that begin earlier in the planning process.	165
19	INVS	Disseminate information on invasive species to boating, fishing and tourism communities.	163
20	WQLT	Create partnerships among agencies, public, visitors and user groups.	160
20	WQLT	Increase effectiveness of conservation plans/BMPs to reduce agricultural runoff.	160
22	ORPR	Educate agency heads, officials and other stakeholders in Hawaiian cultural and resource use concepts.	159

## Ranking

Rank	Category	Project/Initiative	Total Pts.
22	ENFR	Outreach for voluntary compliance * Require education programs as part of obtaining permits for ocean use * Establish incentives programs for promoting best practices * Develop community watch/hotline and reporting form modeled after Crime Stoppers.	159
22	CDEV	Insure that SMA permit conditions are followed.	159
25	USER	Install a complaints hotline for user conflicts.	158
26	USER	Determine site-based "limits of acceptable change."	156
27	INVS	Designate environmental coordinators for outreach/community detection/monitoring and reporting.	155
28	INVS	Community grants for invasive species programs.	154
28	CDEV	Insure that development requirements in hazard-prone coastal areas are enforced.	154
30	CDEV	Provide incentives to developers to encourage sustainable practices.	153
31	AQUA	Encourage appreciation and respect of traditional uses and practices for new and existing users.	150
32	BOAT	Allocate % of G.E.T. to establish special boating fund.	149
33	CPAC	Map traditional usage access rights and cultural lands.	147
33	INVS	Target companies actively selling species to educate sellers.	147
33	WQLT	Invest more resources in diversified public outreach and education.	147
36	WQLT	Create water quality "Neighborhood Watches" to protect water quality.	145
37	CRUI	Convene independent task force to address issues such as port scheduling and carry capacity of each port (facilities, personnel, community impact).	144
37	USER	Establish site-based carrying capacities based on quantitative and qualitative analysis.	144
37	WQLT	Improve waste water system infrastructure.	144
40	ENFR	Integrate customary management practices * Ahupua'a governance * Use of moon calendar to regulate fisheries and other resource use	142
41	CRUI	Review concept of port authority for possible use in Hawaii.	141
42	INVS	Develop culturally based curriculum into schools, organizations and clubs.	140
43	WQLT	Increase staff associated with conservation both for creating plans and maintenance programs.	139
44	ENFR	Establish natural resources 'court' * Specially trained prosecutors * Power to fine * Allow for citizen 'cause of action'	137
45	CRUI	Mandate independent task force to prepare long-term strategic plan.	136
45	CDEV	Improve collaboration among community groups (Hawaiian Civic Clubs, NBs) and agencies.	136
45	WQLT	Offer grants to upgrade cesspools and septic tanks. Keep maintenance records.	136
48	ORPR	Design new governance structures that include all stake-holders, councils, agencies—and provide more opportunities for collaborative governance.	135



## Ranking

Rank	Category	Project/Initiative	Total Pts.
49	USER	Educate commercial operators in how to work effectively with each other and community.	134
50	AQUA	Develop one-stop permit acquisition.	133
51	AQUA	Designate someone to help facilitate individuals and companies through the regulatory processes.	131
51	AQUA	Increase stewardship immersion programs (modeled after Windward six-week high school program focusing on ahupua'a project).	131
51	INVS	Fund environmental centers that would educate and reform.	131
54	CRUI	Organize educational efforts to insure public is aware of impacts of maritime commerce.	130
55	CPAC	Develop policy for shoreline access (including parking) for disabled.	129
55	CDEV	Require EIS provisions focusing on shoreline impacts.	129
57	WQLT	Prioritize water quality areas of the state and allocate resources accordingly.	128
58	AQUA	Educate about open ocean aquaculture.	125
58	AQUA	Implement fish pond curriculum.	125
60	AQUA	Disseminate information about new technologies through demonstration projects, workshops, publications, manuals and site visits.	118
61	CDEV	Analyze performance zoning for possible adoption.	117
62	WQLT	Create smaller waste water treatment facilities and bolster inspection requirements.	115
63	AQUA	Provide state incentives to local individuals and companies in the industry.	107
64	WQLT	Limit commercial motorized activities in near-shore areas.	106
65	CDEV	Encourage only water-dependent development.	101
66	AQUA	Make aquaculture attractive to landowners.	100
67	WQLT	Move wastewater plants away from residential areas.	97

AQUA	Aquaculture	ENFR	Enforcement Alternatives
BOAT	Boating Infrastructure & Facilities	INVS	Invasive Species
CDEV	Sustainable Coastal Development	OREX	Ocean Resource Extraction
CPAC	Coastal Public Access	ORPR	Ocean Resource Protection
CRUI	Cruise Ships	USER	Ocean Recreation User Conflicts
EDUC	Education	WQLT	Water Quality

## Priority Ranking

Rank	Category	Project/Initiative	Total Pts.
1	BOAT	Develop functional pump-out facilities in all harbors.	75
2	CPAC	Insure that shoreline is accessible at regular intervals across private lands.	69
2	INVS	Increase personnel and resources.	69
4	ENFR	Increase enforcement power * Use fines for hiring enforcement officers * Empower citizens to educate and enforce (makai watch) * Develop revenue generating mechanism for enforcement modeled after Pitmann-Robinson Act	67
5	OREX	Create General Guidelines for Resource Extraction. * Provide mechanisms for greater native community input/collaboration. * Recognize unique environmental character of sites with more place-based management. * Integrate ahupua'a concepts and practices. * Build accountability into management plans. * Design strategies for restoration.	65
6	BOAT	Insure funds generated by a facility are used to support that facility.	63
6	ORPR	Set aside fishery replenishment areas that can repopulate other areas.	63
6	BOAT	Insure port/harbor fees go to facilities maintenance and upgrading.	63
9	BOAT	Develop comprehensive master plans for the boating program and for individual harbors * Need fee schedules and accountability * Increase community stewardship (harbor advisory groups) * Need more haul-out facilities on each island * Reduce conflict among commercial and recreational users	62
10	EDUC	Develop content and updated culturally-based curriculum with emphasis on <i>ahupua'a</i> .	61
11	CDEV	Streamline permit review process.	60
11	INVS	Increase resources for inspections.	60
13	INVS	Develop county-based response teams.	59
14	INVS	Increase state, federal and county cooperative efforts.	58
15	USER	Insure that there is community input in management decisions.	57
16	OREX	Improve fisheries management. * Organize management by moku. * Implement management on the basis of moon calendar and other traditional techniques.	56
16	ORPR	Design more inclusive participation strategies that begin earlier in the planning process.	56
18	WQLT	Improve waste water system infrastructure.	55
19	EDUC	Develop infrastructure, including a website, for delivery of education and outreach programs.	54
20	CDEV	Insure that SMA permit conditions are followed.	53
20	USER	Establish site-based carrying capacities based on quantitative and qualitative analysis.	53
22	WQLT	Create partnerships among agencies, public, visitors and user groups.	52
22	USER	Determine site-based "limits of acceptable change."	52

## Priority Ranking

Rank	Category	Project/Initiative	Total Pts.
22	WQLT	Increase effectiveness of conservation plans/BMPs to reduce agricultural runoff.	52
25	ORPR	Educate agency heads, officials and other stakeholders in Hawaiian cultural and resource use concepts.	51
25	CPAC	Map traditional usage access rights and cultural lands.	51
25	CDEV	Insure that development requirements in hazard-prone coastal areas are enforced.	51
28	CRUI	Convene independent task force to address issues such as port scheduling and carry capacity of each port (facilities, personnel, community impact).	50
28	ENFR	Outreach for voluntary compliance * Require education programs as part of obtaining permits for ocean use * Establish incentives programs for promoting best practices * Develop community watch/hotline and reporting form modeled after Crime Stoppers.	50
28	CDEV	Provide incentives to developers to encourage sustainable practices.	50
28	ENFR	Establish natural resources 'court' * Specially trained prosecutors * Power to fine * Allow for citizen 'cause of action'	50
32	INVS	Community grants for invasive species programs.	49
33	INVS	Disseminate information on invasive species to boating, fishing and tourism communities.	48
33	INVS	Designate environmental coordinators for outreach/community detection/monitoring and reporting.	48
35	BOAT	Allocate % of G.E.T. to establish special boating fund.	46
35	AQUA	Encourage appreciation and respect of traditional uses and practices for new and existing users.	46
35	AQUA	Develop one-stop permit acquisition.	46
35	CRUI	Mandate independent task force to prepare long-term strategic plan.	46
35	ORPR	Design new governance structures that include all stake-holders, councils, agencies—and provide more opportunities for collaborative governance.	46
35	WQLT	Offer grants to upgrade cesspools and septic tanks. Keep maintenance records.	46
41	CRUI	Review concept of port authority for possible use in Hawaii.	45
41	USER	Install a complaints hotline for user conflicts.	45
43	WQLT	Prioritize water quality areas of the state and allocate resources accordingly.	44
43	WQLT	Invest more resources in diversified public outreach and education.	44
43	WQLT	Increase staff associated with conservation both for creating plans and maintenance programs.	44
46	AQUA	Designate someone to help facilitate individuals and companies through the regulatory processes.	43
46	ENFR	Integrate customary management practices * Ahupua'a governance * Use of moon calendar to regulate fisheries and other resource use	43
46	WQLT	Create water quality "Neighborhood Watches" to protect water quality.	43

## Priority Ranking

Rank	Category	Project/Initiative	Total Pts.
46	CDEV	Require EIS provisions focusing on shoreline impacts.	43
50	INVS	Target companies actively selling species to educate sellers.	42
50	INVS	Develop culturally based curriculum into schools, organizations and clubs.	42
52	CRUI	Organize educational efforts to insure public is aware of impacts of maritime commerce.	41
52	CDEV	Improve collaboration among community groups (Hawaiian Civic Clubs, NBs) and agencies.	41
54	AQUA	Increase stewardship immersion programs (modeled after Windward six-week high school program focusing on ahupua'a project).	40
54	AQUA	Educate about open ocean aquaculture.	40
54	CPAC	Develop policy for shoreline access (including parking) for disabled.	40
57	WQLT	Create smaller waste water treatment facilities and bolster inspection requirements.	39
58	AQUA	Disseminate information about new technologies through demonstration projects, workshops, publications, manuals and site visits.	38
58	AQUA	Provide state incentives to local individuals and companies in the industry.	38
58	INVS	Fund environmental centers that would educate and reform.	38
61	AQUA	Implement fish pond curriculum.	37
61	CDEV	Analyze performance zoning for possible adoption.	37
61	USER	Educate commercial operators in how to work effectively with each other and community.	37
64	WQLT	Limit commercial motorized activities in near-shore areas.	36
65	WQLT	Move wastewater plants away from residential areas.	31
65	CDEV	Encourage only water-dependent development.	31
67	AQUA	Make aquaculture attractive to landowners.	29

AQUA	Aquaculture	ENFR	Enforcement Alternatives
BOAT	Boating Infrastructure & Facilities	INVS	Invasive Species
CDEV	Sustainable Coastal Development	OREX	Ocean Resource Extraction
CPAC	Coastal Public Access	ORPR	Ocean Resource Protection
CRUI	Cruise Ships	USER	Ocean Recreation User Conflicts
EDUC	Education	WQLT	Water Quality

**Numbers**

Ocean Resource Extraction																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals	Comments		
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Improve fisheries management. * Organize management by moku. * Implement management on the basis of moon calendar and other traditional techniques.	16	5	4	62	7	14	4	47	10	11	4	56	165			
Create General Guidelines for Resource Extraction. * Provide mechanisms for greater native community input/collaboration. * Recognize unique environmental character of sites with more place-based management. * Integrate ahupua'a concepts and practices. * Build accountability into management plans. * Design strategies for restoration.	14	10	1	63	11	14	1	42	16	8	1	65	170			
														Do limited entry fishing permits. Manage and control fishing		
Ocean Resource Protection																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals	Comments		
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Design more inclusive participation strategies that begin earlier in the planning process.	15	7	1	60	6	8	9	49	11	10	3	56	165			
Educate agency heads, officials and other stakeholders in Hawaiian cultural and resource use concepts.	12	9	2	56	1	12	9	52	8	12	3	51	159			
Design new governance structures that include all stake-holders, councils, agencies—and provide more opportunities for collaborative governance.	12	6	4	52	10	9	3	37	4	16	2	46	135			
Set aside fishery replenishment areas that can repopulate other areas.	17	8	1	68	3	15	8	57	13	11	2	63	188	This should be at least 50% of coastal areas		

**Numbers**

Project/Initiative	Invasive Species												Totals				
	Cost-effectiveness				Complexity				Priority								
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total					
Increase personnel and resources.	14	12	4	70	3	19	7	62	13	13	4	69	201	Should include "increase resources for inspections" - they are one and the same, not two separate issues			
Increase state, federal and county cooperative efforts.	17	8	1	68	7	8	11	56	10	12	4	58	182				
Develop county-based response teams.	11	16	1	66	4	17	7	59	5	20	4	59	184				
Develop culturally based curriculum into schools, organizations and clubs.	11	7	3	50	1	13	7	48	4	13	4	42	140				
Disseminate information on invasive species to boating, fishing and tourism communities.	9	12	3	54	1	9	14	61	2	19	4	48	163				
Target companies actively selling species to educate sellers.	9	10	3	50	3	5	14	55	2	16	4	42	147				
Fund environmental centers that would educate and reform.	2	15	6	42	2	14	7	51	0	15	8	38	131				
Community grants for invasive species programs.	7	14	3	52	2	15	7	53	4	17	3	49	154				
Designate environmental coordinators for outreach/community detection/monitoring and reporting.	9	13	1	54	1	14	8	53	3	19	1	48	155	And fund them			
Increase resources for inspections.	16	8	3	67	2	13	12	64	9	15	3	60	191	And restoration			
														Coordinate effort among existing entities; esp. Alien Aquatic Organism Task Force, under DLNR-DAR, formulated suggested Admin. Rules for ballast water & hull fouling	Enforcement of policy at community levels, adding the responsibility and rights of the nearby community to an identified area into the hierarchy of management	What about endangered species? Also, Marine Mammal regulations: Prohibit and enforce "Swim with Dolphins Tours"	

**Numbers**

Aquaculture																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals			
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Disseminate information about new technologies through demonstration projects, workshops, publications, manuals and site visits.	2	12	7	37	3	11	6	43	1	15	5	38	118			
Implement fish pond curriculum.	7	9	4	43	0	15	5	45	2	14	3	37	125			
Make aquaculture attractive to landowners.	3	10	5	34	3	11	4	37	0	11	7	29	100			
Increase stewardship immersion programs (modeled after Windward six-week high school program focusing on ahupua'a project).	12	5	2	48	1	12	6	43	4	13	2	40	131			
Educate about open ocean aquaculture.	3	12	5	38	1	14	6	47	3	13	5	40	125			
Encourage appreciation and respect of traditional uses and practices for new and existing users.	13	5	3	52	0	11	10	52	7	11	3	46	150			
Develop one-stop permit acquisition.	11	7	3	50	7	12	2	37	8	9	4	46	133			
Provide state incentives to local individuals and companies in the industry.	2	10	8	34	7	11	2	35	4	10	6	38	107			
Designate someone to help facilitate individuals and companies through the regulatory processes.	7	12	2	47	6	10	5	41	6	10	5	43	131	This is true for ALL commercial operations in DOBOR		

**Numbers**

Education/Outreach																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals			
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Develop content and updated culturally-based curriculum with emphasis on <i>ahupua'a</i> .	16	9	2	68	3	18	6	57	11	13	2	61	186			
Develop infrastructure, including a website, for delivery of education and outreach programs.	8	15	3	57	1	18	8	61	5	18	3	54	172			
														Raise public awareness of Hawaii's inshore marine resources → public demand for more effective mgmt. → empower public officials to make culturally and environmentally responsible decisions → public "buy-in"	Develop better signage in all public coastal areas: 1) warn of danger, 2) inform & educate in pleasant manner with attractive signs	
Cruise Ships																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals			
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Convene independent task force to address issues such as port scheduling and carry capacity of each port (facilities, personnel, community impact).	8	11	5	51	7	15	2	43	8	10	6	50	144	Any task forces must be objective and include input from cruise industry. Maui Cruise Ship Task Force did not; released error-filled report. Cruise industry welcomes scientific, non-biased study of impacts		
Mandate independent task force to prepare long-term strategic plan.	6	12	5	47	7	12	4	43	4	15	4	46	136			
Insure port/harbor fees go to facilities maintenance and upgrading.	18	7	1	69	1	12	13	64	11	14	2	63	196			
Review concept of port authority for possible use in Hawaii.	7	14	2	51	6	15	3	45	3	16	4	45	141			
Organize educational efforts to insure public is aware of impacts of maritime commerce.	6	13	1	45		16	4	44	1	17	4	41	130			
														Strongly favors port authority; only Honolulu Harbor equipped to handle containerized freighters in Hawaii; we are not prepared if one channel to Honolulu Harbor compromised; HCDA bridge across Kewalo Basin limits harbor use	Charge cruise ships more. Let public see what they are doing to mitigate their environmental damage. What is the extent of it?	Address environmental issues within port/harbor



**Numbers**

Water Quality																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals			
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Create partnerships among agencies, public, visitors and user groups.	13	9	2	59	3	17	4	49	6	16	2	52	160			
Invest more resources in diversified public outreach and education.	9	11	3	52	0	18	5	51	1	19	3	44	147			
Create water quality "Neighborhood Watches" to protect water quality.	12	8	3	55	4	14	5	47	1	18	4	43	145			
Offer grants to upgrade cesspools and septic tanks. Keep maintenance records.	5	11	8	45	6	15	3	45	4	14	6	46	136			
Create smaller waste water treatment facilities and bolster inspection requirements.	5	9	6	39	4	15	1	37	4	11	5	39	115			
Improve waste water system infrastructure.	14	4	5	55	12	11	0	34	11	10	2	55	144			
Prioritize water quality areas of the state and allocate resources accordingly.	8	9	4	46	6	13	2	38	4	14	4	44	128			
Limit commercial motorized activities in near-shore areas.	2	11	6	34	5	11	3	36	3	11	5	36	106	Study what pollution is actually caused by boats		
Increase effectiveness of conservation plans/BMPs to reduce agricultural runoff.	13	9	2	59	3	17	4	49	5	18	1	52	160			
Move wastewater plants away from residential areas.	2	7	12	32	9	11	1	34	0	10	11	31	97			
Increase staff associated with conservation both for creating plans and maintenance programs.	4	13	6	44	2	14	7	51	4	13	6	44	139			
													Proper analysis should be done that reveals major threats to Hawaii's waters; that info should be disseminated to public and policy makers, and action taken in accordance with level of threat	Modernize and update the location classifications for Class A and Class AA waters, statewide (Med., High, High)		

**Numbers**

Coastal Public Access																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals			
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Develop policy for shoreline access (including parking) for disabled.	6	10	8	46	7	15	2	43	1	16	5	40	129			
Map traditional usage access rights and cultural lands.	7	14	3	52	8	12	4	44	6	15	3	51	147	And trails		
Insure that shoreline is accessible at regular intervals across private lands.	17	11	2	75	7	18	5	58	11	17	2	69	202			
														Lateral shoreline access retarded due to beach erosion and shoreline hardening. The shoreline must be defined for public access rights so private property rights not threatened. Shoreline variability must be addressed since highly variable areas tend to be those without adequate access. More money into regulation of shoreline boundary issues and access, part and parcel	Develop policy for lateral shoreline access as perpetual, including as shoreline moves due to erosion	Develop more camping parks, day use parks, and "Marine Trails" where canoes, kayaks and fisher people in small boats can pull in and camp
Sustainable Coastal Development																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals			
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Insure that SMA permit conditions are followed.	13	9	1	58	3	15	5	48	6	17	1	53	159			
Insure that development requirements in hazard-prone coastal areas are enforced.	10	11	2	54	2	16	5	49	7	14	2	51	154			
Encourage only water-dependent development.	2	8	10	32	3	13	3	38		11	9	31	101	Unclear: only ocean access dependent development should occur near the shoreline?	SMA's are too broad to adopt this as a blanket policy	
Improve collaboration among community groups (Hawaiian Civic Clubs, NBs) and agencies.	11	6	5	50	6	9	7	45	4	12	5	41	136			
Require EIS provisions focusing on shoreline impacts.	7	10	4	45	4	14	3	41	3	15	4	43	129			
Provide incentives to developers to encourage sustainable practices.	13	7	3	56	6	13	5	47	4	19	0	50	153			

**Numbers**

Streamline permit review process.	15	12	1	70	9	16	3	50	10	13	4	60	180			
Analyze performance zoning for possible adoption.	5	12	2	41	2	14	3	39	2	14	3	37	117			
														Minimize coastal development		
<b>Enforcement Alternatives</b>																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals			
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Establish natural resources 'court' * Specially trained prosecutors * Power to fine * Allow for citizen 'cause of action'	10	9	7	55	18	7	0	32	7	10	9	50	137			
Increase enforcement power * Use fines for hiring enforcement officers * Empower citizens to educate and enforce (makai watch) * Develop revenue generating mechanism for enforcement modeled after Pitmann-Robinson Act	18	5	4	68	10	12	5	49	14	10	5	67	184			
Outreach for voluntary compliance * Require education programs as part of obtaining permits for ocean use * Establish incentives programs for promoting best practices * Develop community watch/hotline and reporting form modeled after Crime Stoppers.	13	10	2	61	2	23	0	48	2	21	2	50	159			
Integrate customary management practices * Ahupua'a governance * Use of moon calendar to regulate fisheries and other resource use	11	8	3	52	2	15	5	47	5	11	6	43	142	Ahupua'a are too small & narrow to use as management areas		
														Work with Makai Watch & commercial operators who usually care more about area than is given credit for	Enforcement needs to be a priority in political will to fund and train enforcers of existing laws	Mandate DOCARE to implement Volunteer Officer program in all districts

**Numbers**

Ocean Recreation User Conflicts																	
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals				
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total					
Establish site-based carrying capacities based on quantitative and qualitative analysis.	8	10	7	51	12	11	2	40	5	17	4	53	144	"Carrying capacity" is not usually objectively determinable in a user context. It is often unacceptably high relative to enjoyment level. LAC is better model			
Determine site-based "limits of acceptable change."	8	13	6	56	8	17	2	48	3	19	5	52	156				
Insure that there is community input in management decisions.	15	7	3	62	3	13	9	56	6	19	1	57	175				
Install a complaints hotline for user conflicts.	8	9	8	50	2	8	15	63	1	18	6	45	158	What and who comes next?			
Educate commercial operators in how to work effectively with each other and community.	8	9	6	48	4	12	7	49		14	9	37	134				
													Small focus groups, rather than large screaming matches, led by skilled facilitator, clearly delineated time frame	Update DLNR's 1998 Ocean Recreation Management Plan to address current recreational issues, like user conflicts			

**Numbers**

Boating Facilities and Infrastructure																
Project/Initiative	Cost-effectiveness				Complexity				Priority				Totals			
	High	Med	Low	Total	High	Med	Low	Total	High	Med	Low	Total				
Insure funds generated by a facility are used to support that facility.	15	11	3	70	2	17	10	66	8	18	3	63	199			
Allocate % of G.E.T. to establish special boating fund.	8	7	8	46	2	8	13	57	7	8	9	46	149	Maui is only county lacking vital haul out facilities for commercial fleet; % of G.E.T. should go into DOBOR's boating special fund, which is already established	We need to better manage the money they have now.	
Develop comprehensive master plans for the boating program and for individual harbors * Need fee schedules and accountability * Increase community stewardship (harbor advisory groups) * Need more haul-out facilities on each island * Reduce conflict among commercial and recreational users	11	14	2	63	8	17	2	48	9	16	3	62	173	Haul-out facilities: HIGH COST but there is a need		
Develop functional pump-out facilities in all harbors.	16	10	3	71	5	14	10	63	16	13	1	75	209	Sewer headers at each berth location instead of pump out facilities; use CamLok valve (cheap, requires shutoff to disconnect boat's hose to prevent spills, owned & maintained by boat owner/operator, federal funding available)	Cruise ships with advanced wastewater treatment systems process sewage to a higher degree than current land-based municipal systems, so pumpout facilities for such vessels not required	Need more
														State has been aware of harbors reaching critical levels of traffic and occupancy; legislators need to be reminded of severity, and monies must be allocated for infrastructure improvements	Increase boating officers, DOBOR personnel, in awareness in how to deal with public; require training sessions; get public input on DOBOR administrators and top DLNR people to listen to feedback from public	Consider privatizing harbors/ramps or giving them to counties; the state seems overwhelmed with the responsibility