

# **Hawai'i Ocean Resources Management Plan:**

## **Consolidated State Work Plan**

**July 2007 – June 2009**

**Submitted to the ORMP Policy Group by the ORMP Working Group  
April 2008**

## Hawai'i Ocean Resources Management Plan Work Plan Summary: July 2007 – June 2009

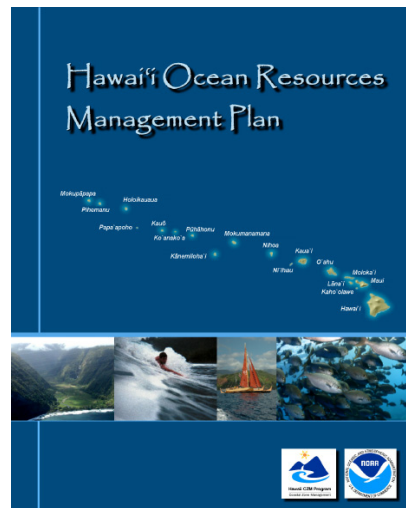
The Hawai'i Ocean Resources Management Plan (ORMP) describes the management goals and strategic actions that the State will pursue through its ORMP Policy Group and Working Group, as well as with other partners and communities during the time period of 2007-2011.

The ORMP Working Group has developed a two-year work plan for the time period of July 2007 to June 2009 with 137 activities toward the outcomes and goals of the ORMP. The Working Group is working in partnership with other agencies, organizations and community groups to complete work plan activities. Basically, the work plan represents an idealized list of activities that the entities of the Working Group hope to implement, but they are ultimately contingent upon the availability of human and fiscal resources, and the public and private approval processes to do so. County activities are also contingent on Community Development Plans, therefore it is important to note that the work plan represents an idealized situation of support and collaboration for agency efforts, but some items listed may not survive the adoption and review process.

The final Work Plan indicates that 69 out of the 113 ORMP strategic actions, or 61%, are currently being implemented by agency Working Group members. This Work Plan Summary provides a brief listing of the management goals and strategic actions being implemented through 2009 from the following agencies:

- County Planning Departments: Hawai'i, Kaua'i and Maui;
- Department of Agriculture, Aquaculture Development Program;
- Department of Health;
- Department of Land and Natural Resources;
- Department of Transportation, Harbors Division;
- Office of Planning;
- University of Hawai'i, School of Ocean and Earth Science and Technology; and
- U.S. Coast Guard.

For more information, please see the ORMP and the complete Work Plan. They are available on the Hawai'i CZM Program's website at: <http://www.state.hi.us/dbedt/czm/>.



### Perspective 1: Connecting Land and Sea

***Management Goal 1.1 - Improve coastal water quality by reducing land-based sources of pollution and restoring natural habitats.***

**Strategic Action 1: Reduce soil erosion from upland forest ecosystems and conservation lands.**

- Implement and monitor best management practices to reduce upland soil erosion caused by feral animals, loss of native forest species, and other anthropogenic factors.

- Expand watershed partnerships and similar public-private partnerships to improve management of upland forest ecosystems and conservation lands.
- Leverage State, federal and private sector funding to implement best management practices.

**Strategic Action 2: Reduce pollutant loads from residential, agricultural, and commercial land uses in priority watersheds.**

- Identify priority watersheds, major land covers, land uses, and polluting activities.
- Characterize pollutant loads from surface runoff, point sources, and groundwater discharge.
- Implement watershed implementation plans, total maximum daily load implementation plans, and local action strategies to address land-based pollution threats.
- Implement best practices to reduce pollutant loads.
- Increase water quality monitoring in identified areas of concern.

**Strategic Action 3: Restore and protect wetlands, streams and estuaries.**

- Improve interagency coordination, effectiveness and efficiency in watershed management through the creation of a watershed coordinating committee to ensure ecological function is maintained to the greatest extent practicable.

***Management Goal 1.2 - Protect beaches, wetlands and coastal communities from shoreline erosion and other coastal hazards.***

**Strategic Action 4: Develop and implement a comprehensive and integrated shoreline policy that addresses the impacts of chronic and episodic coastal hazards.**

- Establish a consensus on issues, management strategies and remedial actions to address shoreline erosion and coastal hazards.
- Develop comprehensive policies adopted through interagency agreements that treat shoreline management as a single integrated administrative unit and provide agencies with practical tools and skills necessary to improve management minimize shoreline erosion and protect communities from coastal hazards.
- Encourage permitting authorities to analyze shoreline erosion, coastal hazards and other risks, such as impacts to natural and cultural resources prior to any zoning changes, Special Management Area/Shoreline setback variance permits or building permits.
- Conduct training programs utilizing practical tools to build capacity of government agencies and private sector to plan for and implement integrated shoreline management.

**Strategic Action 5: Develop a Hawai'i beach and shoreline management plan with specific management measures to address coastal erosion and other hazards in priority coastal areas.**

- Conduct statewide beach and shoreline assessment to identify priority areas based on risk of coastal erosion and hazards, vulnerability of coastal communities, and presence of coastal resources and recreational areas.
- Develop and implement coastal erosion and hazard mitigation management measures in priority areas.
- Identify and implement innovative mechanisms for coastal land acquisition and funding as an effective measure to preserve beaches and other coastal areas.

**Strategic Action 6: Encourage appropriate coastal-dependent development that reduces risk from coastal hazards and protects coastal and cultural resources.**

- Conduct coastal hazard and resource assessment and risk analysis for any proposed coastal development.

- Require all new coastal development projects and plans as part of permit process to identify specific measures to mitigate risks associated with coastal erosion and hazards, and to protect sensitive coastal and cultural resources, and ensure public access.
- Develop an on-line statewide shoreline information management system on coastal hazards and risks in coastal areas.
- Research, develop and institutionalize a methodology for assessing what proportion of a region's surface water runoff and erosion impacts are generated by any given development project.

***Management Goal 1.3 - Improve and ensure maintenance and appropriate use of environmental infrastructure.***

**Strategic Action 7: Inspect and maintain sewer collection systems including the detection of leaks.**

- Repair leaking sewers in priority watersheds.
- Develop long-term infrastructure plan to ensure complete hookup to and adequate capacity and maintenance of wastewater systems.

**Strategic Action 8: Reduce the number of individual wastewater systems and improve the operation of existing systems in the coastal environment.**

- Conduct an inventory of individual wastewater disposal systems in coastal areas.
- Develop appropriately scaled wastewater treatment systems in coastal areas with planned growth.

**Perspective 2: Preserving Our Ocean Heritage**

***Management Goal 2.1 - Improve coastal water quality by reducing marine sources of pollution.***

**Strategic Action 10: Minimize the introduction and spread of marine alien and invasive species (AIS) into and throughout archipelagic waters.**

- Organize technical, financial, and management resources for effective prevention; monitoring and early detection; and response, eradication, and control for high-risk species and areas.
- Organize and train local action teams for the monitoring and control of marine AIS.

**Strategic Action 11: Establish wastewater-discharge restricted zones and conditions for commercial vessels in archipelagic waters.**

- Enforce existing federal and State regulations on wastewater-discharge restricted zones in archipelagic waters with a monitoring and enforcement plan.

**Strategic Action 12: Provide appropriate waste management infrastructure to support commercial and recreational marine facilities.**

- Provide temporary pump-out facilities, such as pump trucks and encourage boaters to use them while permanent pump-out facilities are constructed for recreational boat and commercial harbors.
- Increase the frequency of inspection of marine sanitation devices for commercial and recreational vessels.
- Increase user fees for infrastructure improvements and maintenance.
- Ensure the State's commercial harbor system meets existing and future needs for maritime commerce in an environmentally and economically sustainable manner.

***Management Goal 2.2 - Improve the health of coastal and ocean resources for sustainable traditional, subsistence, recreational, and commercial uses.***

**Strategic Action 14: Develop ecosystem-based approaches for nearshore fisheries management.**

- Develop and promote public- and private-sector hatchery culture and release programs to increase standing stock biomass of economically important reef and ocean species.

**Strategic Action 15: Establish and institutionalize approaches for restoring, operating, and preserving ancient Hawaiian coastal fishponds and salt ponds for the benefit of coastal communities around the State.**

- Provide support and incentives for individuals and communities to facilitate restoration and operation of ancient Hawaiian coastal fishponds and salt ponds.

**Strategic Action 16: Improve enforcement capacity and voluntary compliance with existing rules and regulations for ocean resource protection.**

- Conduct education and outreach campaigns on underlying rationale for existing rules and regulations related to ocean resource use.
- Increase the presence of conservation and resources enforcement officers and natural resource rangers to increase educational opportunities, deter infractions, and improve compliance.
- Employ community-based partnership programs, including the Mauka-Makai Watch Program.
- Improve enforcement capabilities through the use of administrative and civil penalties.

**Strategic Action 17: Enhance the conservation of Hawaii's marine protected species, unique habitats and biological diversity.**

- Develop public outreach, educational materials and interpreter training for appropriate interaction with protected species.
- Conduct a survey of statewide anchialine ponds.
- Incorporate information on location of anchialine ponds into parcel information and integrate protection measures into SMA permits.

***Management Goal 2.3 - Enhance public access and appropriate coastal dependent uses of the shoreline.***

**Strategic Action 18: Enhance and restore existing public shoreline areas and scenic vistas.**

- Develop enhancement and restoration plans to increase public access and restore priority beaches and scenic vistas.
- Establish funding priorities for priority beach restoration projects.
- Develop interagency agreements and public-private partnerships to implement enhancement plans.
- Implement shoreline enhancement and restoration plans in priority areas.
- Identify and implement innovative mechanisms for coastal land acquisition and funding as an effective measure to preserve beaches.

**Strategic Action 19: Establish new shoreline areas for public and appropriate coastal dependent uses.**

- Conduct an inventory of beaches, shoreline areas and scenic vistas requiring protection as open space.
- Develop interagency agreements and public-private partnerships to acquire, preserve, and restore priority areas.
- Establish criteria for identifying priority coastal areas for public acquisition and appropriate coastal dependent uses.
- Establish new beach and shoreline areas, and scenic vistas as open space for public access.

*Management Goal 2.4 -Promote appropriate and responsible ocean recreation and tourism that provide culturally informed and environmentally sustainable uses for visitors and residents.*

**Strategic Action 20: Develop community-based frameworks and practices for identifying and mitigating ocean recreational use conflicts.**

- Conduct a baseline study of ocean recreation and tourism, building on existing information and data that focuses on user conflict and potential impacts from threats to the ocean environment.
- Encourage community-based, culturally informed environmental education and outreach programs promoting responsible ocean recreation.

*Management Goal 2.5 - Encourage cutting edge and appropriate ocean science and technology with safeguards for ocean resource protection.*

**Strategic Action 23: Plan and develop sustainable commercial aquaculture in coastal areas and ocean waters to diversify and expand Hawaii's economy and provide locally produced sources of seafood.**

- Develop a streamlined, one-stop approach to permitting coastal and ocean aquaculture projects that include guidelines for sustainable operations that ensures the conservation of ocean and coastal ecosystems.
- Establish a Geographic Information System (GIS)-based site identification database to locate coastal and ocean aquaculture projects in environmentally suitable sites.
- Provide State financial incentives to landowners and investors to encourage their participation in commercial aquaculture development.
- Provide opportunities to obtain space at State commercial harbors for support activities and infrastructure needed by ocean aquaculture companies.

**Strategic Action 24: Expand ocean science and technology.**

- Facilitate appropriate research and innovation in energy, ocean leasing, and other marine technologies and ocean uses.
- Develop and promote Hawai'i as a learning destination for ocean science, technology, and management applications in the Pacific and globally.

### **Perspective 3: Promoting Collaborative Governance and Stewardship**

*Management Goal 3.1: Apply integrated and place-based approaches to the management of natural and cultural resources.*

**Strategic Action 25: Develop integrated natural and cultural resource planning process and standardized tools.**

- Facilitate integrated natural resource management in demonstration ahupua'a and moku with collaborative governance and financing mechanisms for plan implementation.
- Establish a moku support network to increase community dialogue, develop a framework for education, and build partnerships among various stakeholders.

**Strategic Action 26: Build capacity for community participation in natural and cultural resources management.**

- Develop education and outreach programs through interagency agreements and in partnership with community groups and relevant nonprofit organizations to educate residents and visitors on natural and cultural resource values, regulations, and best practices.

- Identify existing networks, community groups and organizations to work with to establish responsible management entities for each ahupua'a and moku to implement the ORMP.
- Undertake and coordinate outreach and educational efforts, with community input, to raise awareness of program efforts to develop integrated planning approach in each ahupua'a or moku.

***Management Goal 3.2: Institutionalize integrated natural and cultural resources management.***

**Strategic Action 27: Develop legislation and administrative proposals to improve management of natural resources.**

- Develop the principles for an ahupua'a/moku management framework for the further development and implementation of the ORMP.
- Advocate for changes to State statutes, State and County rules, or administrative policies that will equip the CZM program entities to incorporate ahupua'a and moku concept into policies.

**Strategic Action 28: Monitor and evaluate Ocean Resource Management Plan implementation.**

- Establish multisectoral ORMP implementation and monitoring group.
- Establish public advisory group to help assess and monitor ahupua'a or moku issues and maintain a dialogue at the community level to learn about each ahupua'a or moku.
- Convene workshop to continue discussion of the integrated planning approach.
- Conduct ORMP monitoring and evaluation by multisectoral implementation and monitoring group.
- Adjust strategic actions as needed based on monitoring and evaluation.

## **Introduction**

The Ocean Resources Management Plan (ORMP) consolidated state work plan is the product of a multi-agency ORMP Working Group, which was established in August of 2007 to implement and further develop the ORMP. There are a total of 113 strategic actions in the ORMP, each of which recommends lead agencies for implementation. Since agencies could not be expected to implement all 113 actions all at once, Working Group members with responsibility to implement these actions went through the ORMP and identified which ones their respective agency was actively implementing or intending to implement between July 2007 to June 2009. Once final agency work plans had been received, they were consolidated into one work plan. This final ORMP work plan for years 2007-2009 indicates that 69 out of the 113 ORMP strategic actions, or 61%, are currently being implemented by over 130 different projects and tasks.

### ***How to Read the Work Plan***

The work plan is separated by specific ORMP management goals and strategic actions. Each implementation project or activity is then listed under the strategic actions, listed by agency. Work plans include the following information, to the extent available:

- Division/department
- Other partners
- Project description and tasks
- Results indicators
- Status of project
- Anticipated completion date
- Budget (actual and needed)
- Other needs identified to complete project

Since not all management goals and strategic actions are being implemented at this time, only the information that was submitted by agencies is represented in this work plan. The work plan will be updated as needed in the future in order to monitor and report on implementation activities as well as to reflect new priorities.



## Perspective 1: Connecting Land and Sea

### Management Goal 1.1

Improve coastal water quality by reducing land-based sources of pollution and restoring natural habitats.

### Strategic Action 1

Reduce soil erosion from upland forest ecosystems and conservation lands.

**Strategic Action 1a:** Implement and monitor best management practices to reduce upland soil erosion caused by feral animals, loss of native forest species, and other anthropogenic factors.

#### **AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. to assist Hilo Bay Watershed Advisory Group in obtaining funding to conduct water quality monitoring throughout streams in Hilo Bay watershed
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Complete
  - Anticipated Completion Date: Dec -07
  - Budget - Actual: \$11647 Needed: \$5020
- FY08: Community group (Hilo Bay Watershed Advisory Group) to carry out water quality monitoring project
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: June -08
- FY08-09: Planning Dept. and community group collaborate to secure additional funding for continued and/or expanded monitoring of water quality
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Not started
  - Anticipated Completion Date: 2009
- FY08-09: Community group carry out additional monitoring of water quality
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: 2009
- FY08-09: Kona CDP Policy ENV-1.3: Publicly-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are managed with a holistic approach to habitat preservation, groundwater source protection, and stormwater management
  - Status: Not started

Anticipated Completion Date: 2009

- FY08-18: Kona CDP Policy ENV-1.4: Privately-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are eligible for ecosystem services incentives including groundwater source protection, property tax credits, grants, and government approval assistance
  - Status: Not started
  - Anticipated Completion Date: 2018

### **AGENCY: University of Hawaii**

Division: SOEST

Other Partners: NOAA-Ocean Observing, USGS

Agency Work Plan Description & Tasks:

- Ben Brooks (SOEST) - Ridge to Reef project based on Molokai watershed to monitor and measure watershed erosion, discharge, sediment sources, and related processes.
  - Results Indicator: change in sediment cover elevation, discharge data
  - Status: In progress
    - ongoing work part of large science community effort led by USGS
  - Anticipated Completion Date: ongoing
  - Budget: \$50K

**Strategic Action 1b: Expand watershed partnerships and similar public-private partnerships to improve management of upland forest ecosystems and conservation lands.**

### **AGENCY: County of Hawaii**

Division: Planning

Other Partners: Community Groups

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. assist Hilo Bay Watershed Advisory Group obtain funding to create a web site to facilitate internal and community networking and to offer educational outreach programs
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Complete
  - Anticipated Completion Date: Dec 07
  - Budget: - Actual: \$10K    Needed: \$5K
- FY08: Community group (Hilo Bay Watershed Advisory Group) to create web site
  - Results Indicator: Completed live web site
  - Status: Not started
  - Anticipated Completion Date: Jun -08
- FT08-09: Begin the process of creating Planning Dept/Community-based watershed partnerships with other communities in the County
  - Results Indicator: Potential community partners identified
  - Status: Not started
  - Anticipated Completion Date: 2009
- FT08-09: Identify potential points of collaboration for the Planning Dpt and community-based watershed groups
  - Results Indicator: Future watershed projects planned
  - Status: Not started

- Anticipated Completion Date: 2009
- FY08-09: Kona CDP Policy ENV-1.2: Organize the Kona Mauka Watershed Partnership, budget and hire contractor to prepare the plan, and implement the Kona Mauka Watershed Management Plan which assess existing watershed conditions, values, threats and devises a management program
  - Results Indicator: Creation and implementation of the Kona Mauka Watershed Management Plan
  - Status: Not started
  - Anticipated Completion Date: 2009
- FY08-18: Kona CDP Policy ENV-1.4: Privately-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are eligible for ecosystem services incentives including groundwater source protection, property tax credits, grants, and government approval assistance
  - Status: Not started
  - Anticipated Completion Date: 2018

**Strategic Action 1c: Leverage State, federal and private sector funding to implement best management practices.**

**AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-18: Kona CDP Policy ENV-1.4: Privately-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are eligible for ecosystem services incentives including groundwater source protection, property tax credits, grants, and government approval assistance
  - Status: Not started
  - Anticipated Completion Date: 2018

**Strategic Action 2**

Reduce pollutant loads from residential, agricultural, and commercial land uses in priority watersheds.

**Strategic Action 2a: Identify priority watersheds, major land covers, land uses, and polluting activities.**

**AGENCY: DOH**

Division: PRC Program; EPO/TMDLs

Agency Work Plan Description & Tasks:

- In order to characterize water quality problems on a watershed basis, DOH will utilize the Polluted Runoff Control Program's activities and Section 319 funding as well as the efforts of the Environmental Planning Office to develop of total maximum daily loads.
  - Results Indicator: Watershed plans and/or TMDLs which characterize water quality problems on a watershed basis
  - Anticipated Completion Date: 2010; most tasks will extend beyond 2010 but will be revisited to determine progress and evaluate priorities
  - Other Needs: state funds to aid with nonfed match

Division: CWB, EPO, PRC

Agency Work Plan Description & Tasks:

- FY07-08: Currently, West Maui, Hanalei, and Waimanalo watersheds have been identified as priority watersheds. The Polluted Runoff Control Program will identify other priority watersheds based primarily upon eligibility for Section 319 funding provided by EPA but also areas with documented water quality problems and local stakeholders interested in addressing these problems.
  - Results Indicator: Priority watersheds identified in DOH-Polluted Runoff Control Program Request for Proposals
  - Status: Complete
  - Comment: Priority watersheds identified, but may be modified based upon outcome of tasks in Strategic Action 3b
  - Budget: - Needed: none; primarily staff time

Division: EPO

Agency Work Plan Description & Tasks:

- FY07-08: A prioritization for the development of Total Maximum Daily Loads will be based upon overlap of impaired waters identified in DOH's 2006 Integrated Water Quality Report and priority watersheds.
  - Results Indicator: Priority list for TMDL development
  - Status: Complete
  - Comment: completed; included in 2006 Integrated Report
  - Budget: - Needed: none; primarily staff time
- FY07-09: TMDLs developed to characterize pollutant loads and load reductions required to meet water quality standards. These areas include: Hanalei, Kaneohe, Nawiliwili, Hilo, Pearl Harbor, Kaukonahua/Wahiawa, Kalihi.
  - Results Indicator: Draft and Approved TMDLs
  - Status: In progress
  - Comment: current list of priority TMDLs to be developed
  - Budget: - Needed: Clean Water Act, Section 106 funds from EPA

Division: PRC

Agency Work Plan Description & Tasks:

- FY07-09: Watershed plans will be developed in priority watersheds (Hanalei and West Maui) to identify major land use activities, pollutant sources and characterize pollutant loads.
  - Results Indicator: watershed plans eligible for implementation funding
  - Status: In progress
  - Comment: 15% complete; discussions have been initiated with appropriate watershed organizations
  - Anticipated Completion Date: 2009; Contingent upon DOH receiving eligible funding proposal which meets RFP evaluation criteria
  - Budget: - Actual: \$150K    Needed: staff oversight; plans developed by contractor
- FY08-09: DOH will consider information generated through joint effort with Office of Planning outlined in Strategic Action 3b to revisit listing of priority watersheds
  - Results Indicator: Modified list of priority watersheds, if appropriate
  - Status: Not Started
  - Budget: - Needed: staff time and contractor support

## **AGENCY: County of Hawaii**

Division: Planning

Other Partners: DOH, UH, Developers

Agency Work Plan Description & Tasks:

- FY07-08: Planning Dept. begin planning 2-day water quality monitoring conference to standardize water quality monitoring procedures in West Hawaii. Participants to include SMA permit holders, regulatory agencies (DOH, Planning Dept), and monitoring consultants and University researchers
  - Results Indicator: West Hawaii Water Quality Monitoring Conference conducted
  - Status: In progress
  - Comment: 10% complete; Reviewing prior SMA requirements and reported water quality monitoring in West Hawaii
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$10K    Needed: N/A
  
- FY08: Planning Dept. host West Hawaii Water Quality Monitoring Conference
  - Results Indicator: Formalized water quality monitoring procedures; possibly creation of umbrella monitoring body
  - Status: Not Started
  - Anticipated Completion Date: 2008

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY08-12 Puna CDP Objective 3.1.3(I) - Conduct a study on the impacts from subdivision build-out based on predictions related to: native ecosystems; water quality, comparing septic to aerobic systems; and rainfall reduction due to loss of forest
  - Results Indicator: Native vegetation, coastal and historic resources are provided new forms of protection
  - Status: Not Started
  - Anticipated Completion Date: 2012
  
- Kona CDP Policy ENV-1.1 - Prepare an Environmental Resources Map identifying coastal areas, mauka lands, anchialine ponds and water quality monitoring station site, with amendments made through Resolution approved by the Planning Commission
  - Results Indicator: Minimization of impacts on land by increased use of BMPs in planning process
  - Status: Not Started
  - Anticipated Completion Date: beginning 2008, ongoing
  
- FY08-09: Kona CDP Policy ENV-1.2: Organize the Kona Mauka Watershed Partnership, budget and hire contractor to prepare the plan, and implement the Kona Mauka Watershed Management Plan which assess existing watershed conditions, values, threats and devises a management program
  - Results Indicator: Creation and implementation of the Kona Mauka Watershed Management Plan
  - Status: Not Started
  - Anticipated Completion Date: 2009
  
- FY08-09: Kona CDP Policy ENV-1.3: Publicly-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are managed with a holistic approach to habitat preservation, groundwater source protection, and stormwater management
  - Status: Not Started
  - Anticipated Completion Date: 2009

**Strategic Action 2b: Characterize pollutant loads from surface runoff, point sources, and groundwater discharge.**

## **AGENCY: DOH**

Division: PRC Program; EPO/TMDLs

Agency Work Plan Description & Tasks:

- In order to characterize water quality problems on a watershed basis, DOH will utilize the Polluted Runoff Control Program's activities and Section 319 funding as well as the efforts of the Environmental Planning Office to develop of total maximum daily loads.
  - Results Indicator: watershed plans and/or TMDLs which characterize water quality problems on a watershed basis
  - Anticipated Completion Date: 2010; most tasks will extend beyond 2010 but will be revisited to determine progress and evaluate priorities
  - Other Needs: state funds to aid with nonfed match

Division: CWB, EPO, PRC

Agency Work Plan Description & Tasks:

- FY07-08: Currently, West Maui, Hanalei, and Waimanalo watersheds have been identified as priority watersheds. The Polluted Runoff Control Program will identify other priority watersheds based primarily upon eligibility for Section 319 funding provided by EPA but also areas with documented water quality problems and local stakeholders interested in addressing these problems.
  - Results Indicator: Priority watersheds identified in DOH-Polluted Runoff Control Program Request for Proposals
  - Status: Complete
  - Comment: Priority watersheds identified, but may be modified based upon outcome of tasks in Strategic Action 3b
  - Budget: - Needed: none; primarily staff time

Division: EPO

Agency Work Plan Description & Tasks:

- FY07-08: A prioritization for the development of Total Maximum Daily Loads will be based upon overlap of impaired waters identified in DOH's 2006 Integrated Water Quality Report and priority watersheds.
  - Results Indicator: Priority list for TMDL development
  - Status: Complete
  - Comment: completed; included in 2006 Integrated Report
  - Budget: - Needed: none; primarily staff time
- FY07-09: TMDLs developed to characterize pollutant loads and load reductions required to meet water quality standards. These areas include: Hanalei, Kaneohe, Nawiliwili, Hilo, Pearl Harbor, Kaukonahua/Wahiawa, Kalihi.
  - Results Indicator: Draft and Approved TMDLs
  - Status: In progress
  - Comment: current list of priority TMDLs to be developed
  - Budget: - Needed: Clean Water Act, Section 106 funds from EPA

Division: PRC

Agency Work Plan Description & Tasks:

- FY07-09: Watershed plans will be developed in priority watersheds (Hanalei and West Maui) to identify major land use activities, pollutant sources and characterize pollutant loads.
  - Results Indicator: watershed plans eligible for implementation funding
  - Status: In progress
  - Comment: 15% complete; discussions have been initiated with appropriate watershed organizations
  - Anticipated Completion Date: 2009; Contingent upon DOH receiving eligible funding proposal which meets RFP evaluation criteria
  - Budget: - Actual: \$150K    Needed: staff oversight; plans developed by contractor

- FY08-09: DOH will consider information generated through joint effort with Office of Planning outlined in Strategic Action 3b to revisit listing of priority watersheds
  - Results Indicator: Modified list of priority watersheds, if appropriate
  - Status: Not Started
  - Budget: - Needed: staff time and contractor support

**AGENCY: County of Hawaii**

Division: Planning

Other Partners: DOH, UH, Developers

Agency Work Plan Description & Tasks:

- FY07-08: Planning Dept. begin planning 2-day water quality monitoring conference to standardize water quality monitoring procedures in West Hawaii. Participants to include SMA permit holders, regulatory agencies (DOH, Planning Dept), and monitoring consultants and University researchers
  - Results Indicator: West Hawaii Water Quality Monitoring Conference conducted
  - Status: In progress
  - Comment: 10% complete; Reviewing prior SMA requirements and reported water quality monitoring in West Hawaii
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$10K    Needed: N/A
  
- FY08: Planning Dept. host West Hawaii Water Quality Monitoring Conference
  - Results Indicator: Formalized water quality monitoring procedures; possibly creation of umbrella monitoring body
  - Status: Not Started
  - Anticipated Completion Date: 2008

Other Partners: Community, UH Sea Grant, DOH

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-1.13: Set up water quality monitoring stations, and organize and train community-based water quality team.
  - Results Indicator: Creation of a comprehensive water quality monitoring program to protect public and ecosystem health
  - Status: Not Started
  - Anticipated Completion Date: 2013

**AGENCY: UH**

Division: SOEST/ NOAA-Ocean Observing

Other Partners: USGS, National Park Service, DLNR-DAR, DOH, EPA, UH-Sea Grant

Agency Work Plan Description & Tasks:

- SOEST HI Ocean Observing Project:
  - 1) CGlennMonitoring and modeling the flow and biogeochemistry of groundwater discharge to the coastal zone both on Oahu (Kahana, North Kaneohe Bay, Waikiki) and on the Big Island (Kelakekua, North Kona) at selected sites. Ongoing over next 5 years.
  - 2) DeCarlo/ MacKenzie/ McManus: Monitoring streams/plumes in Kaneohe Bay in response to storms.
  - 3) Kathleen Ruttenburg, Brian Glazer, Margaret McManus - Monitoring Haeia Fishpond sediment storage and biogeochemistry in response to storms.
    - Results Indicator: Infrared mapping of surface waters, thermal characteristics, dissolved gas content (radon), water turbidity, chlorophyll, pH, temperature, conductivity, dissolved oxygen, salinity, nutrient level (?)
    - Status: 50-90% Complete
    - Anticipated Completion Date: ongoing
    - Budget: - Actual: \$100K

Other Partners: Kailua Bay Advisory Council - C&C Honolulu

Agency Work Plan Description & Tasks:

- 1) Eric DeCarlo Field Evaluation of Hydrodynamic Separators for Treating Storm Water. Kailua Bay Advisory Council/Center for a Sustainable Future. Contract period: Jan 15, 2006-July 30, 2008. This project, in collaboration with C&C Honolulu, DES, is examining how BMP implemented by the city affect the water quality of storm runoff entering Kaneohe Bay. The study focus is the Kahuhipa light industrial area of Kaneohe and Kealahala Stream.
  - Results Indicator: water turbidity, discharge, dissolved O, salinity, nutrient load.
  - Status: 90% Complete
  - Anticipated Completion Date: July 2008
  - Budget: - Actual: \$100K

Division: SOEST/ NOAA-Ocean Observing

Other Partners: NOAA, Sea Grant

Agency Work Plan Description & Tasks:

- Eric DeCarlo Impact of coastal zone productivity driven by land derived inputs on carbon dioxide exchange between Kaneohe Bay and the atmosphere. NOAA/UH Sea Grant College Program, Contract Period: Mar 1, 2007-Feb 28, 2009. P.I. Eric H. De Carlo, Co-I: F.T. Mackenzie, M.A. McManus.  
<http://www.pmel.noaa.gov/co2/coastal/kbay/>
  - Results Indicator: dissolved carbon dioxide, oxygen
  - Status: In progress
  - Anticipated Completion Date: February 2009
  - Budget: - Actual: \$75K

Other Partners: National Science Foundation

Agency Work Plan Description & Tasks:

- Eric DeCarlo Collaborative Research: Benthic Boundary Layer Geochemistry and Physics at the Kilo Nalu Observatory. NSF-OCE. Contract Period: Sept 1, 2005-Aug 31, 2008. P.I. Geno Pawlak, Co-I, M. McManus, E.H. De Carlo, F.S. Sansone : Goal of study is to understand carbon dioxide cycling through upper water column by studying internal waves, surface waves and currents, mixing and air-sea exchange.
  - Results Indicator: dissolved oxygen, carbon dioxide, temperature, salinity, and velocity to track internal wave mixing with coastal zone
  - Status: In progress
  - Anticipated Completion Date: August 2009
  - Budget: - Actual: \$2.2M

**Strategic Action 2c: Implement watershed implementation plans, total maximum daily load implementation plans, and local action strategies to address land-based pollution threats.**

### **AGENCY: DOH**

Agency Work Plan Description & Tasks:

- DOH will work with partner agencies and organizations to utilize Section 319 funding and the Coastal Nonpoint Pollution Control to implement plans intended to address land-based pollution.
  - Results Indicator: Implementation of multiple projects in specific watersheds to address water quality problems identified in watershed plans and/or TMDLs
  - Anticipated Completion Date: 2010

Other Partners: OP/CZM

Agency Work Plan Description & Tasks:

- FY08-09: DOH will work with OP/CZM on activities identified in Strategic Action 3b to improve foundation for getting more implementation of watershed plans and TMDLs. Implementation of the Strategy for Addressing Remaining Management Measures including the development of a watershed guidance, holding a watershed summit, and establishing an interagency watershed coordinating committee should aid considerably in identifying implementation opportunities.



- Status: In progress
- Comment: Initial efforts toward implementation of Strategic Action 3b have begun
- Budget: - Needed: OP and DOH staff time; contractor assistance will probably be required to complete all of strategic action 3b.

Division: PRC

Agency Work Plan Description & Tasks:

- FY08: DOH will issue a Request for Proposals to support the implementation of approved total maximum daily loads and existing watershed plans that meet appropriate EPA requirements
  - Results Indicator: Contracts to implement portions of watershed plans and/or TMDLs
  - Status: Not started
  - Anticipated Completion Date: Sept 2008; Contingent upon DOH receiving eligible funding proposal which meets RFP evaluation criteria
  - Other needs: technical capacity bldg efforts to aid in getting more/better proposals to implement these plans

Agency Work Plan Description & Tasks:

- FY09: DOH will issue a Request for Proposals to support the implementation of approved total maximum daily loads and existing watershed plans that meet appropriate EPA requirements
  - Results Indicator: Contracts to implement portions of watershed plans and/or TMDLs
  - Status: Not started
  - Anticipated Completion Date: Sept 2009; Contingent upon DOH receiving eligible funding proposal which meets RFP evaluation criteria

## **AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-1.2: Organize the Kona Mauka Watershed Partnership, budget and hire contractor to prepare the plan, and implement the Kona Mauka Watershed Management Plan which assess existing watershed conditions, values, threats and devises a management program
  - Results Indicator: Creation and implementation of the Kona Mauka Watershed Management Plan
  - Status: Not started
  - Anticipated Completion Date: 2009
- FY08-09: Kona CDP Policy ENV-1.3: Publicly-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are managed with a holistic approach to habitat preservation, groundwater source protection, and stormwater management
  - Status: Not started
  - Anticipated Completion Date: 2009

## **AGENCY: UH**

Division: SOEST/ NOAA-Ocean Observing

Other Partners: USGS, National Park Service, DLNR-DAR, DOH, EPA, UH-Sea Grant

Agency Work Plan Description & Tasks:

- SOEST HI Ocean Observing Project:
  - 1) CGlennMonitoring and modeling the flow and biogeochemistry of groundwater discharge to the coastal zone both on Oahu (Kahana, North Kaneohe Bay, Waikiki) and on the Big Island (Kelakekua, North Kona) at selected sites. Ongoing over next 5 years.
  - 2) DeCarlo/ MacKenzie/ McManus: Monitoring streams/plumes in Kaneohe Bay in response to storms.
  - 3) Kathleen Ruttenburg, Brian Glazer, Margaret McManus - Monitoring Haeia Fishpond sediment storage and biogeochemistry in response to storms.

- Results Indicator: Infrared mapping of surface waters, thermal characteristics, dissolved gas content (radon), water turbidity, chlorophyll, pH, temperature, conductivity, dissolved oxygen, salinity, nutrient level (?)
- Status: 50-90% Complete
- Anticipated Completion Date: ongoing
- Budget: - Actual: \$100K

Other Partners: Kailua Bay Advisory Council - C&C Honolulu

Agency Work Plan Description & Tasks:

- 1) Eric DeCarlo Field Evaluation of Hydrodynamic Separators for Treating Storm Water. Kailua Bay Advisory Council/Center for a Sustainable Future. Contract period: Jan 15, 2006-July 30, 2008. This project, in collaboration with C&C Honolulu, DES, is examining how BMP implemented by the city affect the water quality of storm runoff entering Kaneohe Bay. The study focus is the Kahuhipa light industrial area of Kaneohe and Keaahala Stream.
  - Results Indicator: water turbidity, discharge, dissolved O, salinity, nutrient load.
  - Status: 90% Complete
  - Anticipated Completion Date: July 2008
  - Budget: - Actual: \$100K

Division: SOEST/ NOAA-Ocean Observing

Other Partners: NOAA, Sea Grant

Agency Work Plan Description & Tasks:

- Eric DeCarlo Impact of coastal zone productivity driven by land derived inputs on carbon dioxide exchange between Kaneohe Bay and the atmosphere. NOAA/UH Sea Grant College Program, Contract Period: Mar 1, 2007-Feb 28, 2009. P.I. Eric H. De Carlo, Co-I: F.T. Mackenzie, M.A. McManus. <http://www.pmel.noaa.gov/co2/coastal/kbay/>
  - Results Indicator: dissolved carbon dioxide, oxygen
  - Status: In progress
  - Anticipated Completion Date: February 2009
  - Budget: - Actual: \$75K

Other Partners: National Science Foundation

Agency Work Plan Description & Tasks:

- Eric DeCarlo Collaborative Research: Benthic Boundary Layer Geochemistry and Physics at the Kilo Nalu Observatory. NSF-OCE. Contract Period: Sept 1, 2005-Aug 31, 2008. P.I. Geno Pawlak, Co-I, M. McManus, E.H. De Carlo, F.S. Sansone : Goal of study is to understand carbon dioxide cycling through upper water column by studying internal waves, surface waves and currents, mixing and air-sea exchange.
  - Results Indicator: dissolved oxygen, carbon dioxide, temperature, salinity, and velocity to track internal wave mixing with coastal zone
  - Status: In progress
  - Anticipated Completion Date: August 2009
  - Budget: - Actual: \$2.2M

## Strategic Action 2d: Implement best practices to reduce pollutant loads.

### AGENCY: County of Kauai

Division: Planning

Agency Work Plan Description & Tasks:

- Planning Department is currently updating the Comprehensive zoning ordinance. Several elements of this can be incorporated into the CZO update. Tasks that would have to be done include:
  - Budget: Staff and existing contract

- Ongoing: Collection and evaluation of existing BMP's and emerging techniques including regulatory practices in other cities and counties.
  - Status: In progress
  - Budget: staff time
- 6 months: Evaluate existing lot coverage vs. zoning to see if standards need revision
  - Results Indicator: Maps prepared
  - Status: Not started
  - Budget: staff time
- 6 months: Compare areas of high lot coverage with impaired waterways
  - Status: Not started
  - Budget: staff time
- 1 year: Revise standards based on findings
  - Results Indicator: Completion of CZO Revision
  - Status: Not started
  - Anticipated completion date: Sept. 2008
  - Budget: Staff and existing time
- To truly maximize this effort the public works department would need to be involved in revision of their standards and practices to incorporate green infrastructure and BMP's.
  - Results Indicator: Physical Implementation of new water management techniques by both private entities and county.
  - Status: Not started

**AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-30: Puna CDP Objective 3.2.3(P) - Encourage organic farming and gardening by establishing a Puna agriculture scholarship with HCC and UH Hilo
  - Results Indicator: Puna's agricultural production emphasizes environmentally-friendly methods
  - Status: Not started
  - Anticipated Completion Date: 2030
  - Budget: - Actual: \$10K Needed: N/A

Other Partners: UH

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-1.2: Organize the Kona Mauka Watershed Partnership, budget and hire contractor to prepare the plan, and implement the Kona Mauka Watershed Management Plan which assess existing watershed conditions, values, threats and devises a management program
  - Results Indicator: Creation and implementation of the Kona Mauka Watershed Management Plan
  - Status: Not started
  - Anticipated Completion Date: 2009

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-1.3: Publicly-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are managed with a holistic approach to habitat preservation, groundwater source protection, and stormwater management
  - Status: Not started
  - Anticipated Completion Date: 2009

## AGENCY: UH

Division: SOEST/ NOAA-Ocean Observing

Other Partners: USGS, National Park Service, DLNR-DAR, DOH, EPA, UH-Sea Grant

Agency Work Plan Description & Tasks:

- SOEST HI Ocean Observing Project:
  - 1) CGlenn Monitoring and modeling the flow and biogeochemistry of groundwater discharge to the coastal zone both on Oahu (Kahana, North Kaneohe Bay, Waikiki) and on the Big Island (Kelakekua, North Kona) at selected sites. Ongoing over next 5 years.
  - 2) DeCarlo/ MacKenzie/ McManus: Monitoring streams/plumes in Kaneohe Bay in response to storms.
  - 3) Kathleen Ruttenburg, Brian Glazer, Margaret McManus - Monitoring Haeia Fishpond sediment storage and biogeochemistry in response to storms.
    - Results Indicator: Infrared mapping of surface waters, thermal characteristics, dissolved gas content (radon), water turbidity, chlorophyll, pH, temperature, conductivity, dissolved oxygen, salinity, nutrient level (?)
    - Status: 50-90% Complete
    - Anticipated Completion Date: ongoing
    - Budget: - Actual: \$100K

Other Partners: Kailua Bay Advisory Council - C&C Honolulu

Agency Work Plan Description & Tasks:

- 1) Eric DeCarlo Field Evaluation of Hydrodynamic Separators for Treating Storm Water. Kailua Bay Advisory Council/Center for a Sustainable Future. Contract period: Jan 15, 2006-July 30, 2008. This project, in collaboration with C&C Honolulu, DES, is examining how BMP implemented by the city affect the water quality of storm runoff entering Kaneohe Bay. The study focus is the Kahuhipa light industrial area of Kaneohe and Keaahala Stream.
  - Results Indicator: water turbidity, discharge, dissolved O, salinity, nutrient load.
  - Status: 90% Complete
  - Anticipated Completion Date: July 2008
  - Budget: - Actual: \$100K

Division: SOEST/ NOAA-Ocean Observing

Other Partners: NOAA, Sea Grant

Agency Work Plan Description & Tasks:

- Eric DeCarlo Impact of coastal zone productivity driven by land derived inputs on carbon dioxide exchange between Kaneohe Bay and the atmosphere. NOAA/UH Sea Grant College Program, Contract Period: Mar 1, 2007-Feb 28, 2009. P.I. Eric H. De Carlo, Co-I: F.T. Mackenzie, M.A. McManus.  
<http://www.pmel.noaa.gov/co2/coastal/kbay/>
  - Results Indicator: dissolved carbon dioxide, oxygen
  - Status: In progress
  - Anticipated Completion Date: February 2009
  - Budget: - Actual: \$75K

Other Partners: National Science Foundation

Agency Work Plan Description & Tasks:

- Eric DeCarlo Collaborative Research: Benthic Boundary Layer Geochemistry and Physics at the Kilo Nalu Observatory. NSF-OCE. Contract Period: Sept 1, 2005-Aug 31, 2008. P.I. Geno Pawlak, Co-I, M. McManus, E.H. De Carlo, F.S. Sansone : Goal of study is to understand carbon dioxide cycling through upper water column by studying internal waves, surface waves and currents, mixing and air-sea exchange.
  - Results Indicator: dissolved oxygen, carbon dioxide, temperature, salinity, and velocity to track internal wave mixing with coastal zone
  - Status: In progress
  - Anticipated Completion Date: August 2009
  - Budget: - Actual: \$2.2M

## Strategic Action 2e: Increase water quality monitoring in identified areas of concern.

### AGENCY: DOH

Division: CWB Monitoring Branch

Agency Work Plan Description & Tasks:

- CWB-Monitoring Section will conduct water quality monitoring in priority watersheds as identified in Strategic Action 2a in conjunction with BEACH Act bacteria monitoring.
  - Results Indicator: Additional water quality data for coastal waters of several watersheds to aid in watershed characterization efforts as well as evaluation of implementation activities
  - Comments: A total of 243 samples were taken at 9 sites during federal fiscal year 2007 and lab analysis was conducted for 7 parameters (TSS, Ammonia, nitrate+nitrite, TN, TP, Filtered Silica, and chlorophyll a).
- FY07: Monitoring initiated in 9 watersheds to assist with determining pollutant loads and potential load reductions as a result of Section 319 funded projects.
  - Status: Complete
  - Comments: Sample sites include: Hilo Bay (exit of Ice Pond, Lighthouse, Wailua River mouth) (Hawaii), Honolua Bay, Kalapaki Beach, Kihei South, Kualoa Beach, Pelekane Bay, Waimanalo Beach, Waiulaula
- FY08: DOH will summarize data collected in FY07 and share with appropriate watershed organizations
  - Status: In Progress, 25% complete
  - Anticipated Completion Date: March 2008
  - Budget: - Needed: limited by staff time
- FY08-09: Monitoring to be continued in priority watersheds
  - Status: In Progress, 15% complete

### AGENCY: County of Hawaii

Division: Planning

Agency Work Plan Description & Tasks:

- FY07-08: Planning Dept. begin planning 2-day water quality monitoring conference to standardize water quality monitoring procedures in West Hawaii. Participants to include SMA permit holders, regulatory agencies (DOH, Planning Dept), and monitoring consultants and University researchers
  - Results Indicator: West Hawaii Water Quality Monitoring Conference conducted
  - Status: In progress
  - Comment: 10% complete; Reviewing prior SMA requirements and reported water quality monitoring in West Hawaii
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$10K    Needed: N/A
- FY08: Planning Dept. host West Hawaii Water Quality Monitoring Conference
  - Results Indicator: Formalized water quality monitoring procedures; possibly creation of umbrella monitoring body
  - Status: Not Started
  - Anticipated Completion Date: 2008

Other Partners: DOH, UH, Developers

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. to assist Hilo Bay Watershed Advisory Group in obtaining funding to conduct water quality monitoring throughout streams in Hilo Bay watershed
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Complete
  - Anticipated Completion Date: Dec -07

- Budget - Actual: \$11647    Needed: \$5020
- FY08: Community group (Hilo Bay Watershed Advisory Group) to carry out water quality monitoring project
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: June -08
- FY08-09: Planning Dept. and community group collaborate to secure additional funding for continued and/or expanded monitoring of water quality
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Not started
  - Anticipated Completion Date: 2009

Other Partners: Community groups

Agency Work Plan Description & Tasks:

- FY08-09: Community group carry out additional monitoring of water quality
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: 2009

Other Partners: Community, UH Sea Grant, DOH

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-1.13: Set up water quality monitoring stations, and organize and train community-based water quality team.
  - Results Indicator: Creation of a comprehensive water quality monitoring program to protect public and ecosystem health
  - Status: Not Started
  - Anticipated Completion Date: 2013

## **AGENCY: UH**

Division: SOEST/ NOAA-Ocean Observing

Other Partners: USGS, National Park Service, DLNR-DAR, DOH, EPA, UH-Sea Grant

Agency Work Plan Description & Tasks:

- SOEST HI Ocean Observing Project:
  - 1) C Glenn Monitoring and modeling the flow and biogeochemistry of groundwater discharge to the coastal zone both on Oahu (Kahana, North Kaneohe Bay, Waikiki) and on the Big Island (Kelakekua, North Kona) at selected sites. Ongoing over next 5 years.
  - 2) DeCarlo/ MacKenzie/ McManus: Monitoring streams/plumes in Kaneohe Bay in response to storms.
  - 3) Kathleen Ruttenburg, Brian Glazer, Margaret McManus - Monitoring Haeia Fishpond sediment storage and biogeochemistry in response to storms.
    - Results Indicator: Infrared mapping of surface waters, thermal characteristics, dissolved gas content (radon), water turbidity, chlorophyll, pH, temperature, conductivity, dissolved oxygen, salinity, nutrient level (?)
    - Status: 50-90% Complete
    - Anticipated Completion Date: ongoing
    - Budget: - Actual: \$100K

Other Partners: Kailua Bay Advisory Council - C&C Honolulu

Agency Work Plan Description & Tasks:

- 1) Eric DeCarlo Field Evaluation of Hydrodynamic Separators for Treating Storm Water. Kailua Bay Advisory Council/Center for a Sustainable Future. Contract period: Jan 15, 2006-July 30, 2008. This project, in collaboration with C&C Honolulu, DES, is examining how BMP implemented by the city affect the water quality of storm runoff entering Kaneohe Bay. The study focus is the Kahuhipa light industrial area of Kaneohe and Keaahala Stream.
  - Results Indicator: water turbidity, discharge, dissolved O, salinity, nutrient load.
  - Status: 90% Complete
  - Anticipated Completion Date: July 2008
  - Budget: - Actual: \$100K

Division: SOEST/ NOAA-Ocean Observing

Other Partners: NOAA, Sea Grant

Agency Work Plan Description & Tasks:

- Eric DeCarlo Impact of coastal zone productivity driven by land derived inputs on carbon dioxide exchange between Kaneohe Bay and the atmosphere. NOAA/UH Sea Grant College Program, Contract Period: Mar 1, 2007-Feb 28, 2009. P.I. Eric H. De Carlo, Co-I: F.T. Mackenzie, M.A. McManus. <http://www.pmel.noaa.gov/co2/coastal/kbay/>
  - Results Indicator: dissolved carbon dioxide, oxygen
  - Status: In progress
  - Anticipated Completion Date: February 2009
  - Budget: - Actual: \$75K

Other Partners: National Science Foundation

Agency Work Plan Description & Tasks:

- Eric DeCarlo Collaborative Research: Benthic Boundary Layer Geochemistry and Physics at the Kilo Nalu Observatory. NSF-OCE. Contract Period: Sept 1, 2005-Aug 31, 2008. P.I. Geno Pawlak, Co-I, M. McManus, E.H. De Carlo, F.S. Sansone : Goal of study is to understand carbon dioxide cycling through upper water column by studying internal waves, surface waves and currents, mixing and air-sea exchange.
  - Results Indicator: dissolved oxygen, carbon dioxide, temperature, salinity, and velocity to track internal wave mixing with coastal zone
  - Status: In progress
  - Anticipated Completion Date: August 2009
  - Budget: - Actual: \$2.2M

### Strategic Action 3

Restore and protect wetlands, streams and estuaries.

**Strategic Action 3a:** Improve interagency coordination, effectiveness and efficiency in watershed management through the creation of a watershed coordinating committee to ensure ecological function is maintained to the greatest extent practicable.

#### **AGENCY: OP/DOH**

Division: CZM

Other Partners: Counties

Agency Work Plan Description & Tasks:

- CZM will be working in coordination with DOH, Counties, and others to establish an Interagency Watershed Coordinating Committee to promote protection of watersheds and water quality under CZM's Coastal Nonpoint Pollution Control Program (CNPCP). Tasks to follow-up on CZM's "Strategy to Address Remaining Management Measures for Hawaii's CNPCP" include the following:

- Results Indicator: Final EPA/NOAA approval of remaining 22 (of 70 total) CNPCP Management Measures
  - Status: In progress
  - Anticipated Completion Date: 2010
  - Budget: - Actual: \$30,000 NA06, 306 Funds expire June 2009.
- FY07-08: OP (in coordination with DOH) to prepare a draft Executive Order which will tie in the various efforts together by broadening the scope of watershed management to reach from mauka to makai and possibly create the watershed coordinating committee. DOH will conduct the initial review and comment, then it will circulate for review and comment from other affected agencies/organizations.
  - Results Indicator: Executive Order signed by the Governor
  - Status: In progress, 15% Complete
  - Comment: Discussions on the EO have begun between OP, DOH, & EPA. CZM currently working up draft EO.
  - Anticipated Completion Date: June 2008
- FY07-08: OP, DOH and Counties to begin initial discussions of the role of a Watershed Coordinating Committee, which may possibly be created and outlined through the Executive Order.
  - Results Indicator: Watershed Coordinating Committee established
  - Status: In progress, 10% Complete
  - Comment: Initial discussions have begun between OP and DOH.
  - Anticipated Completion Date: December 2008
- FY07-08: OP and DOH to begin planning for a Watershed Summit (one-day meeting) per page 5 of the Strategy for Addressing Remaining Management Measures. Participants will primarily include government agencies: DOH, OP, DLNR, Counties, BWS and Public Works.
  - Results Indicator: Date set; consultant/facilitators hired; venue secured
  - Status: Not Started
  - Anticipated Completion Date: Summer 2008
- FY08-09: OP and DOH to host Watershed Summit to discuss ways to better coordinate efforts and incorporate the Management Measures.
  - Results Indicator: Watershed Summit conducted
  - Status: Not Started
  - Anticipated Completion Date: December 2008
- FY08-09: OP to begin drafting the Watershed Guidance Document in coordination with DOH and the Watershed Coordinating Committee. This document will provide guidance to agencies on possible approaches to watershed management, planning, protection and restoration. It will provide access to watershed planning guidance and a watershed plan builder, including an outline of all necessary plan contents.
  - Results Indicator: Watershed Guidance Document completed
  - Status: Not Started
  - Anticipated Completion Date: June 2009
- FY 08-09: collaborate with relevant agencies to develop outreach strategy/incentive program to make watershed groups aware of guidance and encourage its use
  - Results Indicator: Outreach Strategy developed
  - Status: Not Started
  - Comment: OP Staff time and capacity limited at this point; contractor will be necessary
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: Consultant to be hired with allocated \$30,000



## **AGENCY: County of Maui**

Division: Planning

Agency Work Plan Description & Tasks:

- As part of the above project to establish an Interagency Watershed Coordinating Committee to promote protection of watersheds and water quality under CZM's Coastal Nonpoint Pollution Control Program (CNPCP):.
- FY07-08: ORMP WG representative will contact established watershed groups on island to determine their needs, interests, desires as well as ongoing and planned projects and programs so that efforts are not duplicated and are maximized for all constituents
  - Results Indicator: List of contacts made and program descriptions
  - Status: Not Started
  - Budget: - Needed: Staff time, site visits, meetings arranged
- FY07-08: Maui County to designate a watershed coordinator for each island (Lanai, Molokai, Maui)
  - Results Indicator: Watershed Coordinating Committee established
  - Status: Not Started
  - Comment: Appointment of designee will be conducted at OP's request once EO is signed
- FY08-09: OP and DOH to host Watershed Summit to discuss ways to better coordinate efforts and incorporate the Management Measures.
  - Results Indicator: Attendance at Summit by Maui County designees'
  - Status: Not Started
  - Budget: - Needed: Travel Expenses for Designees'
- Develop impervious surface area ordinance so that a Watershed Committee would be empowered to regulate storm water impacts and contributions to storm water impacts within a watershed.
  - Results Indicator: Impervious Surface Ordinance
  - Status: Not Started
  - Comment: Research on sample ordinances available from the Center for Watershed Protection
  - Other Needs: GIS layers of Impervious Surface (LIDAR)

## **Management Goal 1.2**

Protect beaches, wetlands and coastal communities from shoreline erosion and other coastal hazards.

### **Strategic Action 4**

Develop and implement a comprehensive and integrated shoreline policy that addresses the impacts of chronic and episodic coastal hazards.

**Strategic Action 4a:** Establish a consensus on issues, management strategies and remedial actions to address shoreline erosion and coastal hazards.

## **AGENCY: OP/CZM**

Division: Planning

Other Partners: Counties

Agency Work Plan Description & Tasks:

- FY07: Special Management Area (SMA) Gap Survey Project: OP/CZM is conducting an internal assessment of all SMA and Shoreline Setback Variance (SSV) permits and procedures.
  - Results Indicator: Final report on gap survey, including recommendations complete
  - Anticipated Completion Date: April 2008
  - Budget: - Needed: Staff time only; no \$ needed at this time
- Request & receive county permits, rules & decision and orders
  - Status: 100% Complete
- Evaluate documents
  - Status: 100% Complete
- Summarize & finalize results
  - Status: 75% Complete

### **AGENCY: County of Maui**

Division: Planning

Other Partners: OP

Agency Work Plan Description & Tasks:

- Implement results of the SMA Gap Survey project by proposing rule amendments where and if applicable
  - Results Indicator: Receipt and Analysis of OP report. Publication and passage of rule amendments if applicable
  - Status: Not Started

### **AGENCY: County of Kauai**

Division: Planning

Agency Work Plan Description & Tasks:

- Two initiatives have been completed that have had broad input and produce management strategies. The Shoreline Setback bill has passed and remedial actions are addressed through variances and incentives of building size through setbacks. The Coastal Mitigation handbook has been circulated to all agencies and the Planning Commission. Further work is needed to implement both.
  - Status: Completed
- Practice and implementation of the Shoreline Setback bill needs to be implemented through the Planning Department.
  - Results Indicator: Structures Planned and built according to new standards.
  - Status: In Progress
  - Comment: Ordinance passed Council and is signed by Mayor
  - Anticipated Completion Date: Feb. 29th
  - Budget: - Actual: staff time
- The Coastal Guidebook guidelines need to be implemented into our subdivision ordinance with the SMA zone seeming the most likely place to do an overlay.
  - Results Indicator: Subdivision Ordinance Revised - Developments planned according to Guidebook Standards
  - Status: Not started
  - Anticipated Completion Date: January 2009
  - Budget: - Actual: staff time

### **AGENCY: County of Hawaii**

Division: Planning

Other Partners: Community, Non-profit

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. assist Pacific Tsunami Museum obtain funding to develop a Tsunami Education, Preparation and Recovery Plan for Downtown Hilo
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Completed
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$24,700
  
- FY07-08: Pacific Tsunami Museum to increase tsunami awareness through education by compiling background information, hosting community workshops, and begin development of comprehensive Evacuation and Disaster Preparedness Plan
  - Results Indicator: Hosting community workshops and establishing tsunami evacuation sites
  - Status: In Progress, 50% Completed
  - Anticipated Completion Date: 2008
  
- FY08: Pacific Tsunami Museum to facilitate evacuation and tsunami event planning through education workshops, establishing communication network of business owners, and recruiting participants for CERT training
  - Results Indicator: Number of businesses and individuals participating in workshops, training and networking
  - Status: Not Started
  - Anticipated Completion Date: 2008
  
- FY08: Pacific Tsunami Museum to educate community on recovery strategies and assistance applications, and to organize a working group to maintain information
  - Results Indicator: Creation of final report to be used by community and interested public agencies
  - Status: Not Started
  - Anticipated Completion Date: 2008

**AGENCY: UH**

Division: SOEST

Other Partners: HI Ocean Observing/NOAA

Agency Work Plan Description & Tasks:

- Coastal modeling project to model nearshore currents, waves, and tides; and to educate folks as to what products are available.
  - Results Indicator: model results - wave height, period, breaking face height, direction, current velocity, tides, sediment transport
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$6M

Other Partners: HI Ocean Observing/Sea Grant

Agency Work Plan Description & Tasks:

- Creating Sea Grant Center of Excellence in Community Resiliency focused on mitigating coastal hazards and preserving beaches and other coastal environments. Primary goal, in keeping with University mission is education and outreach as well as research into issues associated with coastal hazards and environmental protection.
  - Results Indicator: graduate education of island leaders, collaboration of UH researchers.
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: none at present

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

**Strategic Action 4b:** Develop comprehensive policies adopted through interagency agreements that treat shoreline management as a single integrated administrative unit and provide agencies with practical tools and skills necessary to improve management, minimize shoreline erosion, and protect communities from coastal hazards.

**AGENCY: OP/CZM**

Division: Planning

Other Partners: Counties

Agency Work Plan Description & Tasks:

- FY07: Special Management Area (SMA) Gap Survey Project: OP/CZM is conducting an internal assessment of all SMA and Shoreline Setback Variance (SSV) permits and procedures.
  - Results Indicator: Final report on gap survey, including recommendations complete
  - Anticipated Completion Date: April 2008
  - Budget: - Needed: Staff time only; no \$ needed at this time
- Request & receive county permits, rules & decision and orders
  - Status: 100% Complete
- Evaluate documents
  - Status: 100% Complete
- Summarize & finalize results
  - Status: 75% Complete

**AGENCY: County of Hawaii**

Division: Planning

Other Partners: Community, Non-profit

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. assist Pacific Tsunami Museum obtain funding to develop a Tsunami Education, Preparation and Recovery Plan for Downtown Hilo
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Completed
  - Anticipated Completion Date: 2008
  - Budget: - Needed: \$24,700
- FY07-08: Pacific Tsunami Museum to increase tsunami awareness through education by compiling background information, hosting community workshops, and begin development of comprehensive Evacuation and Disaster Preparedness Plan
  - Results Indicator: Hosting community workshops and establishing tsunami evacuation sites
  - Status: In Progress, 50% Completed
  - Anticipated Completion Date: 2008

- FY08: Pacific Tsunami Museum to facilitate evacuation and tsunami event planning through education workshops, establishing communication network of business owners, and recruiting participants for CERT training
  - Results Indicator: Number of businesses and individuals participating in workshops, training and networking
  - Status: Not Started
  - Anticipated Completion Date: 2008
  
- FY08: Pacific Tsunami Museum to educate community on recovery strategies and assistance applications, and to organize a working group to maintain information
  - Results Indicator: Creation of final report to be used by community and interested public agencies
  - Status: Not Started
  - Anticipated Completion Date: 2008

**AGENCY: County of Maui**

Division: Planning

Other Partners: Civil Defense

Agency Work Plan Description & Tasks:

- Proposal to relocate Baldwin Beach park public facilities inland. The proposal was written into the 2007 Update of the State Hazard Mitigation Plan. This State and FEMA-approved plan provides comprehensive information to assist permitting authorities in their analysis and decision-making and offers funding of efforts to move structures out of harms way.
  - Results Indicator: Plan submitted to civil defense. Recommendation by FEMA for approval of funding
  - Status: In Progress, 25% Completed
  - Comment: Awaiting approval by FEMA
  - Anticipated Completion Date: October 2007
  - Budget: - Actual: staff time allocated      Needed: \$500K
  - Other Needs: Need FEMA approval

Division: Planning

Other Partners: DLNR OCCL

Agency Work Plan Description & Tasks:

- Extend SMA boundary to include mean high water mark to ensure developments are fully regulated and encroaching structures are removed by either State or County agencies. Further, initiate a 'no tolerance' policy to ensure that unlawful shoreline armoring is removed at owners expense and County agencies have the authority to remove unlawful structures that degrade public shoreline resources.
  - Results Indicator: Amendments to 12-203 and 12-202 Rules for the Maui Planning Commission (Shoreline, SMA)
  - Status: Not Started
  - Anticipated Completion Date: December 2007
  - Other Needs: Staff time and DLNR OCCL support

Division: Planning

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY07: Develop a working relationship between DLNR Land Enforcement Agents and County Enforcement personnel providing information sharing, contact information and a framework for communication on shoreline violations.
  - Results Indicator: Workshops conducted
  - Status: Complete
  - Comment: Two workshops completed
  - Anticipated Completion Date: September 2007

Other Partners: Land Division

Agency Work Plan Description & Tasks:

- Develop a working framework to resolve disputes or differences in recommended resolutions of violations with DLNR OCCL, DLNR Land Agents
  - Results Indicator: MOA
  - Status: In Progress, 33% Complete
  - Comment: Legal Counsel states MOA is not a legal means to establish framework.
  - Other Needs: Legal Council Support

Other Partners: DLNR - OCCL

Agency Work Plan Description & Tasks:

- Develop a working framework to encourage the expeditious handling of 'good permits' and streamline such projects
  - Results Indicator: MOA
  - Status: Not Started
  - Comment: SSBN provides a working example
  - Other Needs: Joint DLNR-MC meetings with legal counsel

Other Partners: DLNR - OCCL

Agency Work Plan Description & Tasks:

- Integrate enforcement efforts seamlessly between State and County
  - Results Indicator: Workshops conducted
  - Status: Not Started
  - Other Needs: Workshops with legal council

Other Partners: MC-ZAED

Agency Work Plan Description & Tasks:

- Hire and train six new enforcement officers, with one located on Molokai for the Planning Department
  - Status: Not Started
  - Budget: - Needed: \$240K

Other Partners: DLNR - OCCL

Agency Work Plan Description & Tasks:

- Revise Shoreline Rules to require that the shoreline setback is shown on site plans that are posted at the project site prior to construction. Further, require that applicants for a State-certified shoreline survey post notice of the application and publication date along the shoreline to inform the public of the proceeding and appropriate agency to contact to make comments and facilitate input and public awareness.
  - Results Indicator: Shoreline Rule amendments passed by Maui Planning Commission
  - Status: Not Started
  - Comment: need DLNR OCCL concurrence
  - Other Needs: staff time

## **AGENCY: UH**

Division: SOEST

Other Partners: HI Ocean Observing/ Sea Grant

Agency Work Plan Description & Tasks:

- Creating Sea Grant Center of Excellence in Community Resiliency focused on mitigating coastal hazards and preserving beaches and other coastal environments. Primary goal, in keeping with University mission is education and outreach as well as research in issues associated with coastal hazards and environmental protection.
  - Results Indicator: graduate education of island leaders, collaboration of UH researchers.
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: none at present

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

**Strategic Action 4c:** Encourage permitting authorities to analyze shoreline erosion, coastal hazards and other risks, such as impacts to natural and cultural resources prior to any zoning changes, Special Management Area/Shoreline setback variance permits or building permits.

### **AGENCY: OP/CZM**

Division: LUD

Agency Work Plan Description & Tasks:

- OP addresses coastal hazard risks through a variety of policies and permits, such as requesting that all Petitioners address coastal hazards and risks in Environmental Assessments, Environmental Impact Statements, and Land Use Commission Petitions. Recommendations are made to the LUC (when needed) to mitigate impacts on hazards and other risks (examples: shoreline setbacks, rockfall areas, not building near stream channels, soils subject to subsidence, landslides, etc.)
  - Results Indicator: OP Position Statements, EIS comment letters, LUC conditions, etc.
  - Status: In Progress
  - Anticipated Completion Date: ongoing
  - Budget: - Needed: Staff time only; no \$ needed at this time.

Division: Planning

Other Partners: Counties

Agency Work Plan Description & Tasks:

- FY07: Special Management Area (SMA) Gap Survey Project: OP/CZM is conducting an internal assessment of all SMA and Shoreline Setback Variance (SSV) permits and procedures.
  - Results Indicator: Final report on gap survey, including recommendations complete
  - Anticipated Completion Date: April 2008
  - Budget: - Needed: Staff time only; no \$ needed at this time
- Request & receive county permits, rules & decision and orders
  - Status: 100% Complete
- Evaluate documents
  - Status: 100% Complete
- Summarize & finalize results
  - Status: 75% Complete

Division: CZM

Agency Work Plan Description & Tasks:

- Integration of planning and coastal zone management hazard mitigation work into the 2007 Update of the State Hazard Mitigation Plan. This State and FEMA-approved plan provides comprehensive information to assist permitting authorities in their analysis and decision-making.
  - Results Indicator: Linkage of OP-wide hazard mitigation work into state hazard mitigation plan update

- Status: 100% Complete
  - Comments: Integration included ORMP activities & goals; approved by FEMA on 10/24/2007.
  - Anticipated Completion Date: October 2007
  - Budget: - Needed: Staff time only; no \$ needed at this time
- Integration of planning and coastal zone management hazard mitigation work into the 2008 Update of the Kauai County Hazard Mitigation Plan. This county and FEMA-approved plan will provide comprehensive information to assist permitting authorities in their analysis and decision-making.
    - Results Indicator: Linkage of OP-wide hazard mitigation work into the county hazard mitigation plan update
    - Status: In Progress
    - Anticipated Completion Date: Dec - 2008
    - Budget: - Needed: Staff time only; no \$ needed at this time
- Integration of planning and coastal zone management hazard mitigation work into the 2009 Update to the City and County of Honolulu Hazard Mitigation Plan. This county and FEMA-approved plan will provide comprehensive information to assist permitting authorities in their analysis and decision-making.
    - Results Indicator: Linkage of OP-wide hazard mitigation work into the county hazard mitigation plan update
    - Status: Not Started
    - Anticipated Completion Date: Sept 2009
    - Budget: - Needed: Staff time only; no \$ needed at this time

Division: OP

Agency Work Plan Description & Tasks:

- FY07-08: Amend Annual county contracts to address ORMP priorities. SMA administration, and performance measures.
  - Results Indicator: Revised annual county contracts
  - Status: 100% Complete
  - Anticipated Completion Date: Feb 2008
  - Budget: - Needed: Staff time only; no \$ needed at this

## **AGENCY: County of Kauai**

Division: Planning

Agency Work Plan Description & Tasks:

- The Shoreline setback bill has passed which establishes greater setback and mandates shoreline studies for lots of a certain depth. Eventually it will be complemented by the Coastal Erosion Study.
- Coastal Erosion Study for entire island will be completed by end of 2008, (latest estimate)
  - Results Indicator: Completion of Erosion Study, Implementation
  - Status: In Progress, 75% Complete
  - Anticipated Completion Date: Dec 2008
  - Budget: - Actual: Staff time and ongoing contract

## **AGENCY: County of Hawaii**

Division: Civil Defense, Planning, Data Systems

Agency Work Plan Description & Tasks:

- County of Hawaii Multi-hazard Mitigation Plan Objective 2.1: Review the General Plan natural hazard policies in light of this mitigation plan and American Planning Association suggested policies
  - Results Indicator: Periodic reviews of the effectiveness of current land-use-related plans, codes, and standards to control future development within hazard zones
  - Status: In Progress
  - Comment: High Priority



## **AGENCY: UH**

Division: SOEST

Other Partners: HI Ocean Observing/ Sea Grant

Agency Work Plan Description & Tasks:

- Creating Sea Grant Center of Excellence in Community Resiliency focused on mitigating coastal hazards and preserving beaches and other coastal environments. Primary goal, in keeping with University mission is education and outreach as well as research into issues associated with coastal hazards and environmental protection.
  - Results Indicator: graduate education of island leaders, collaboration of UH researchers.
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: none at present

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

**Strategic Action 4d: Conduct training programs utilizing practical tools to build capacity of government agencies and private sector to plan for and implement integrated shoreline management.**

## **AGENCY: County of Kauai**

Division: Planning

Agency Work Plan Description & Tasks:

- Trainings and a Sea Grant position are scheduled.
- ASAP: We had scheduled a CZM training program for the Planning Commission , however due to a long agenda it was never completed. This training needs to be rebooked.
  - Results Indicator: Planning Commission CZM training complete. Commission actively brings CZM concerns and conditions to projects.
  - Status: Completed
  - Anticipated Completion Date: Jan 2008
  - Budget: - Actual: staff time
- Public outreach duties being added to specific divisions in each department
  - Results Indicator: Projects are planned according to current legislation
  - Status: In Progress, 10% Complete
  - Budget: - Actual: staff time
- 3 – months: Implement outreach program through Sea Grant position – one of their first jobs should be to analyze new shoreline bill and arrange a presentation to developers and landowners
  - Results Indicator: Projects are planned according to current legislation
  - Status: In Progress, 50% Complete
  - Anticipated Completion Date: March 2008
  - Budget: - Actual: \$75K

## **AGENCY: UH**

Division: SOEST

Other Partners: HI Ocean Observing/NOAA

Agency Work Plan Description & Tasks:

- Coastal modeling project to model nearshore currents, waves, and tides; and to educate folks as to what products are available.
  - Results Indicator: model results - wave height, period, breaking face height, direction, current velocity, tides, sediment transport
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$6M

Other Partners: HI Ocean Observing/ Sea Grant

Agency Work Plan Description & Tasks:

- Creating Sea Grant Center of Excellence in Community Resiliency focused on mitigating coastal hazards and preserving beaches and other coastal environments. Primary goal, in keeping with University mission is education and outreach as well as research into issues associated with coastal hazards and environmental protection.
  - Results Indicator: graduate education of island leaders, collaboration of UH researchers.
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: none at present

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

## **AGENCY: County of Maui**

Division: Planning

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY07: Develop a working relationship between DLNR Land Enforcement Agents and County Enforcement personnel providing information sharing, contact information and a framework for communication on shoreline violations.
  - Results Indicator: Workshops conducted
  - Status: Complete
  - Comment: Two workshops completed
  - Anticipated Completion Date: September 2007

Other Partners: Land Division

Agency Work Plan Description & Tasks:

- Develop a working framework to resolve disputes or differences in recommended resolutions of violations with DLNR OCCL, DLNR Land Agents
  - Results Indicator: MOA
  - Status: In Progress, 33% Complete
  - Comment: Legal Counsel states MOA is not a legal means to establish framework.

- Budget: - Needed: Legal Council Support

Other Partners: DLNR - OCCL

Agency Work Plan Description & Tasks:

- Develop a working framework to encourage the expeditious handling of 'good permits' and streamline such projects
  - Results Indicator: MOA
  - Status: Not Started
  - Comment: SSBN provides a working example
  - Other Needs: Joint DLNR-MC meetings with legal counsel

Other Partners: DLNR - OCCL

Agency Work Plan Description & Tasks:

- Integrate enforcement efforts seamlessly between State and County
  - Results Indicator: Workshops conducted
  - Status: Not Started
  - Other Needs: Workshops with legal council

Other Partners: MC-ZAED

Agency Work Plan Description & Tasks:

- Hire and train six new enforcement officers, with one located on Molokai for the Planning Department
  - Status: Not Started
  - Budget: - Needed: \$240K

Other Partners: DLNR - OCCL

Agency Work Plan Description & Tasks:

- Revise Shoreline Rules to require that the shoreline setback is shown on site plans that are posted at the project site prior to construction. Further, require that applicants for a State-certified shoreline survey post notice of the application and publication date along the shoreline to inform the public of the proceeding and appropriate agency to contact to make comments and facilitate input and public awareness.
  - Results Indicator: Shoreline Rule amendments passed by Maui Planning Commission
  - Status: Not Started
  - Comment: need DLNR OCCL concurrence
  - Other Needs: staff time

## Strategic Action 5

Develop a Hawaii beach and shoreline management plan with specific management measures to address coastal erosion and other hazards in priority coastal areas.

**Strategic Action 5a:** Conduct statewide beach and shoreline assessment to identify priority areas based on risk of coastal erosion and hazards, vulnerability of coastal communities, and presence of coastal resources and recreational areas.

### **AGENCY: County of Kauai**

Division: Planning

Agency Work Plan Description & Tasks:

- The first of part of this action is being completed through legislation and the shoreline study. Further planning for resources and recreation areas will take a broader study or ones that could be implemented through DP's and General plan. Will take inventory, measurement of use and by whom, and an inventory of cultural and historical uses, some of which may be lost or diminished.

- Coastal Erosion Study
  - Results Indicator: Erosion Study Complete
  - Status: In Progress, 75% complete
  - Anticipated Completion Date: Dec 2008
  - Budget: - Actual: staff time and ongoing contract

**AGENCY: County of Hawaii**

Division: Planning

Other Partners: Community, Non-profit

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. assist Pacific Tsunami Museum obtain funding to develop a Tsunami Education, Preparation and Recovery Plan for Downtown Hilo
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Completed
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$24,700
  
- FY07-08: Pacific Tsunami Museum to increase tsunami awareness through education by compiling background information, hosting community workshops, and begin development of comprehensive Evacuation and Disaster Preparedness Plan
  - Results Indicator: Hosting community workshops and establishing tsunami evacuation sites
  - Status: In Progress, 50% Completed
  - Anticipated Completion Date: 2008
  
- FY08: Pacific Tsunami Museum to facilitate evacuation and tsunami event planning through education workshops, establishing communication network of business owners, and recruiting participants for CERT training
  - Results Indicator: Number of businesses and individuals participating in workshops, training and networking
  - Status: Not Started
  - Anticipated Completion Date: 2008
  
- FY08: Pacific Tsunami Museum to educate community on recovery strategies and assistance applications, and to organize a working group to maintain information
  - Results Indicator: Creation of final report to be used by community and interested public agencies
  - Status: Not Started
  - Anticipated Completion Date: 2008

**AGENCY: County of Maui**

Division: Planning

Agency Work Plan Description & Tasks:

- Imitate workshop and communication with insurance industry to avoid under-writing proposed developments in coastal hazard areas
  - Results Indicator: Workshops Conducted
  - Status: Not Started
  - Other Needs: Contacts in the Insurance Industry
  
- Incorporate the results of the PrIMO study on community resiliency to coastal disasters (tsunami, flood) into Island-wide and Community Plan updates. Revise SMA and Shoreline Rules to support resilient communities.
  - Results Indicator: Implementation actions within updated County and Community Plans
  - Status: Not Started
  - Comments: Need copies of study and digital maps of at-risk areas from PrIMO

Division: MC-LRD

Other Partners: UH, MCLT

Agency Work Plan Description & Tasks:

- MC initiated a study to prioritize beaches on the island for conservation and protection. The SAND-Alternatives study, phases I-IV are in process and funded. Phase V will be conducted thereafter.
  - Results Indicator: Completion of Phases I-IV
  - Status: In Progress, 25% Complete
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: \$87,500

Division: Planning

Other Partners: UH, MCLT

Agency Work Plan Description & Tasks:

- SAND-Alternatives study, phase V to be completed.
  - Results Indicator: Completion of Phases I-V
  - Status: Not Started
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: \$60K Needed: \$60K

## **AGENCY: UH**

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

**Strategic Action 5b: Develop and implement coastal erosion and hazard mitigation management measures in priority areas.**

## **AGENCY: County of Hawaii**

Division: Civil Defense, Planning, Data Systems

Agency Work Plan Description & Tasks:

- County of Hawaii Multi-hazard Mitigation Plan Objective 1.3: Evaluate warning siren coverage
  - Results Indicator: Improved local tsunami warning system
  - Status: In Progress
  - Comment: Medium Priority
- County of Hawaii Multi-hazard Mitigation Plan Objective 1.5: Evaluate warning siren coverage
  - Results Indicator: Establishment of a warning system that is cognizant of warning siren gaps that require supplemental field warning, that strives to fill those gaps based on population, that is routinely tested and maintained, and that educates the public on proper response
  - Status: In Progress
  - Comment: Medium Priority

## **AGENCY: County of Maui**

Division: Planning

Agency Work Plan Description & Tasks:

- Maui County implements erosion-based shoreline setbacks for the construction of buildings. The number of Shoreline Setback Determinations is a surrogate measure of the implementation of this strategic action
  - Results Indicator: number of shoreline setback determination
  - Status: 100% Completed
  - Comment: Oct 03, Dec 06 and Dec 07 Rule Amendments

Division: Planning

Other Partners: UH

Agency Work Plan Description & Tasks:

- Updated erosion rate maps to add to the most recent maps from 1997 (west Maui and south shores) and 2002 (north shore) for Maui's sandy shorelines
  - Results Indicator: revised erosion maps
  - Status: In Progress
  - Comment: RFP in development
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: \$100K      Needed: \$50K
  - Other Needs: Only 50k is budgeted for this purpose
- Improved computing capacity for conducting shoreline setback determinations including GIS.
  - Results Indicator: ARC-GIS installed on PCs
  - Status: Not Started
  - Anticipated Completion Date: June 2008
  - Budget: - Needed: \$4,000

## **AGENCY: UH**

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

**Strategic Action 5c: Identify and implement innovative mechanisms for coastal land acquisition and funding as an effective measure to preserve beaches and other coastal areas.**

## **AGENCY: County of Hawaii**

Division: N. Kohala CDP/ County Open Space Comm.

Agency Work Plan Description & Tasks:

- FY08: North Kohala Community Development Plan, Strategy 2-3 Land Acquisition - Identify priority sites to be acquired for preservation of open space and cultural resources and establish an Open Space Bond Fund to purchase these properties and others identified island-wide
  - Results Indicator: Establishment of Open Space Bond Fund to purchase identified properties
  - Status: Not Started
  - Anticipated Completion Date: 2008

## **AGENCY: County of Maui**

Division: Planning

Agency Work Plan Description & Tasks:

- Provide public recognition and discussion of alternative financing mechanisms for purchases of beach front properties at Paluea Beach, South Maui
  - Results Indicator: Discussed as an alternative within the Paluea Beach Final EA
  - Status: In Progress, 85% Completed
  - Comment: FEA to be reviewed by Planning Commission (MPC)
  - Anticipated Completion Date: April 2008
  
- Conduct sufficient research on Mitigation Banking and Rolling Easements to draft an ordinance or other mechanism for the establishment and implementation of such a system
  - Results Indicator: Ordinance for beach mitigation bank establishment
  - Status: In Progress, 15% Completed
  - Comment: FEA to be transmitted to County Council after MPC determination
  - Anticipated Completion Date: Dec 2008
  - Budget: - Needed: \$50K
  - Other Needs: staff time

## **AGENCY: UH**

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes...also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

## **Strategic Action 6**

Encourage appropriate coastal-dependent development that reduces risk from coastal hazards and protects coastal and cultural resources.

**Strategic Action 6a: Conduct coastal hazard and resource assessment and risk analysis for any proposed coastal development.**

## **AGENCY: County of Kauai**

Division: Planning

Agency Work Plan Description & Tasks:

- Currently the new Shoreline legislation does mandate studies for properties over 300' in lot depth. When the Coastal Erosion Study is complete a more vertically complete implementation can be made.
  
- Implementation of legislation
  - Results Indicator: Structures Planned and built according to new standards.
  - Status: Not started
  - Anticipated Completion Date: Feb 29th
  - Budget: - Actual: staff time

- Practice of requiring erosion studies at Commission and Subdivision level
  - Results Indicator: Subdivisions Planned according to new standards.
  - Status: Not started
  - Anticipated Completion Date: July 2008
  - Budget: - Actual: staff time
  
- Completion of Coastal Erosion Study
  - Results Indicator: Erosion Study Complete
  - Status: In Progress, 75% Complete
  - Anticipated Completion Date: Dec 2008
  - Budget: - Actual: staff time and ongoing contract

**AGENCY: County of Hawaii**

Division: Planning, County Council

Agency Work Plan Description & Tasks:

- FY08-17: Puna CDP Objective 2.1.3(B) - Initiate Special Design District designations
  - Results Indicator: Adoption of appropriate location-specific development standards and design guidelines for Special Design District Status
  - Status: Not Started
  - Anticipated Completion Date: 2017

Division: Civil Defense, Planning, Data Systems

Agency Work Plan Description & Tasks:

- County of Hawaii Multi-hazard Mitigation Plan Objective 2.1: Review the General Plan natural hazard policies in light of this mitigation plan and American Planning Association suggested policies
  - Results Indicator: Periodic reviews of the effectiveness of current land-use-related plans, codes, and standards to control future development within hazard zones
  - Status: In Progress
  - Comment: High Priority

**AGENCY: County of Maui**

Division: Planning

Agency Work Plan Description & Tasks:

- Maui County implements erosion-based shoreline setbacks for the construction of buildings. The number of Shoreline Setback Determinations is a surrogate measure of the implementation of this strategic action
  - Results Indicator: number of shoreline setback determination
  - Status: 100% Completed
  - Comment: Oct 03, Dec 06 and Dec 07 Rule Amendments

Division: Planning

Other Partners: UH

Agency Work Plan Description & Tasks:

- Updated erosion rate maps to add to the most recent maps from 1997 (west Maui and south shores) and 2002 (north shore) for Maui's sandy shorelines
  - Results Indicator: revised erosion maps
  - Status: In Progress
  - Comment: RFP in development
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: \$100K      Needed: \$50K
  - Other Needs: Only 50k is budgeted for this purpose
  
- Improved computing capacity for conducting shoreline setback determinations including GIS.
  - Results Indicator: ARC-GIS installed on PCs
  - Status: Not Started



- Anticipated Completion Date: June 2008
- Budget: - Needed: \$4,000

**AGENCY: UH**

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

**Strategic Action 6b:** Require all new coastal development projects and plans as part of permit process to identify specific measures to mitigate risks associated with coastal erosion and hazards, and to protect sensitive coastal and cultural resources, and ensure public access.

**AGENCY: OP/CZM**

Division: LUD

Agency Work Plan Description & Tasks:

- OP/LUD requests all Petitioners to identify measures to mitigate coastal hazards, protect coastal resources, and ensure public access. LUD recommends approval of those measures or stronger measures if necessary, to the LUC in OP's testimony and proposed D&O's. Recommendations are made to the LUC (when needed) to mitigate impacts on hazards and other risks (examples: shoreline setbacks, rockfall areas, not building near stream channels, soils subject to subsidence, landslides, etc.)
  - Results Indicator: OP Position Statements, EIS comment letters, LUC conditions, etc.
  - Status: In Progress
  - Anticipated Completion Date: ongoing
  - Budget: - Needed: Staff time only; no \$ needed at this time.

Division: CZM

Agency Work Plan Description & Tasks:

- FY07: Special Management Area (SMA) Gap Survey Project: OP/CZM is conducting an internal assessment of all SMA and Shoreline Setback Variance (SSV) permits and procedures.
  - Results Indicator: Final report on gap survey, including recommendations complete
  - Anticipated Completion Date: April 2008
  - Budget: - Needed: Staff time only; no \$ needed at this time
- Request & receive county permits, rules & decision and orders
  - Status: 100% Complete
- Evaluate documents
  - Status: 95% Complete
- Summarize & finalize results
  - Status: Not Started

**AGENCY: County of Maui**

Division: Planning

Agency Work Plan Description & Tasks:

- Through the SMA Major Permit approval process by the Maui Planning Commission, applicants within proximity to the shoreline are required to show that they have addressed public access needs, avoided or minimized potential impacts from coastal hazards, and protected sensitive cultural sites. Conditional approvals followed by mandatory compliance reports ensures implementation of avoidance, mitigation and minimization measures to achieve this strategic action.
  - Results Indicator: Number of SMA permits processed, NOAA performance measures
  - Status: 100% Complete
  - Comment: Action is already a requirement in Maui shoreline and SMA rules
  - Anticipated Completion Date: ongoing
  - Other Needs: SMA Rule Amendments

**AGENCY: County of Hawaii**

Division: Planning

Other Partners: University, Developers, DOH

Agency Work Plan Description & Tasks:

- FY07-08: Planning Dept. begin planning 2-day water quality monitoring conference to standardize water quality monitoring procedures in West Hawaii. Participants to include SMA permit holders, regulatory agencies (DOH, Planning Dept), and monitoring consultants and University researchers
  - Results Indicator: West Hawaii Water Quality Monitoring Conference conducted
  - Status: In progress
  - Comment: 10% complete; Reviewing prior SMA requirements and reported water quality monitoring in West Hawaii
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$10K    Needed: N/A
- FY08: Planning Dept. host West Hawaii Water Quality Monitoring Conference
  - Results Indicator: Formalized water quality monitoring procedures; possibly creation of umbrella monitoring body
  - Status: Not Started
  - Anticipated Completion Date: 2008

Division: Planning, County Council, Dept of Public Works

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 2.1.3(D) - Amend the county grading ordinance to require consultation with the Historic Preservation Division and County Historic Preservation Commission
  - Results Indicator: Protection of cultural sites from destruction by development activity
  - Status: Not Started
  - Anticipated Completion Date: 2012

Division: Planning, CDP, DPW

Agency Work Plan Description & Tasks:

- FY08: Kona CDP Policy ENV-1.9: Kona Urban Stormwater Management Guidelines to be enabled by CDP and provide education and certification program for LID
  - Results Indicator: All new public streets in Kona comply with Kona Urban Stormwater Guidelines
  - Status: Not Started
  - Anticipated Completion Date: begin 2008, then ongoing

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-18: Kona CDP Policy ENV-1.11 & 1.12: Identify anchialine ponds and budget and hire contractor to prepare anchialine pond management plan

- Results Indicator: Anchialine ponds are inventoried, management policy created for management of ponds on development project lands, education module developed and funding mechanisms identified for pond maintenance
- Status: Not Started
- Anticipated Completion Date: 2018

Division: Civil Defense, Planning, Data Systems

Agency Work Plan Description & Tasks:

- County of Hawaii Multi-hazard Mitigation Plan Objective 2.1: Review the General Plan natural hazard policies in light of this mitigation plan and American Planning Association suggested policies
  - Results Indicator: Periodic reviews of the effectiveness of current land-use-related plans, codes, and standards to control future development within hazard zones
  - Status: In Progress
  - Comment: High Priority

**AGENCY: UH**

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

**Strategic Action 6c: Develop an on-line statewide shoreline information management system on coastal hazards and risks in coastal areas.**

**AGENCY: UH**

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

**Strategic Action 6d: Research, develop and institutionalize a methodology for assessing what proportion of a region's surface water runoff and erosion impacts are generated by any given development project.**

**AGENCY: County of Hawaii**

Division: Planning

Other Partners: University, Developers, DOH

Agency Work Plan Description & Tasks:

- FY07-08: Planning Dept. begin planning 2-day water quality monitoring conference to standardize water quality monitoring procedures in West Hawaii. Participants to include SMA permit holders, regulatory agencies (DOH, Planning Dept), and monitoring consultants and University researchers
  - Results Indicator: West Hawaii Water Quality Monitoring Conference conducted
  - Status: In progress
  - Comment: 10% complete; Reviewing prior SMA requirements and reported water quality monitoring in West Hawaii
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$10K Needed: N/A
  
- FY08: Planning Dept. host West Hawaii Water Quality Monitoring Conference
  - Results Indicator: Formalized water quality monitoring procedures; possibly creation of umbrella monitoring body
  - Status: Not Started
  - Anticipated Completion Date: 2008

Division: Planning, County Council, DPW

Agency Work Plan Description & Tasks:

- FY08: Organization of a task force to research issues pertaining flood hazards in Hawaii County
  - Results Indicator: Amendment of Chapter 27 Flood Control, Hawaii County Code
  - Status: Not Started
  - Anticipated Completion Date: 2008

Division: Planning, Community, UH Sea Grant, DOH

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-1.13: Set up water quality monitoring stations, and organize and train community-based water quality team
  - Results Indicator: Creation of a comprehensive water quality monitoring program to protect public and ecosystem health
  - Anticipated Completion Date: 2013

Division: Planning, Civil Defense, Data Systems

Agency Work Plan Description & Tasks:

- County of Hawaii Multi-hazard Mitigation Plan Objective 1.2: Study feasibility of participating in the Community Rating System
  - Results Indicator: Improved flood prediction and field-monitoring systems
  - Status: In Progress
  - Comment: Low Priority
  
- County of Hawaii Multi-hazard Mitigation Plan Objective 1.2: Develop rainfall and streamflow gaging system suitable to flood monitoring, and develop technology and training system for efficient field monitoring of in-progress event
  - Results Indicator: Improved flood prediction and field-monitoring systems
  - Status: In Progress
  - Comment: High Priority
  
- County of Hawaii Multi-hazard Mitigation Plan Objective 1.4: Conduct hazard loss estimation study, incorporating cost-benefit methodology as a factor in prioritizing projects, and adapt HAZUS-M or other hazard modeling to Hawaii Island
  - Results Indicator: Improved applicability of modeling systems to Hawaii Island conditions for hazard and mapping, mitigation planning, and scenario training purposes
  - Status: In Progress
  - Comment: Medium Priority

## **AGENCY: UH**

Division: SOEST Coastal Geology Group

Agency Work Plan Description & Tasks:

- Contracts with Maui, City and County of Honolulu, and Kauai Counties to provide and update historical shoreline change databases for management purposes....also, meet with DLNR and Sea Grant regularly to discuss beach management and coastal hazard reduction projects and ideas.
  - Results Indicator: Coastal erosion database effort to bridge regulatory and research communities in regular monthly meetings at UH
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$500K

## **Management Goal 1.3**

Improve and ensure maintenance and appropriate use of environmental infrastructure.

## **Strategic Action 7**

Inspect and maintain sewer collection systems including the detection of leaks.

**Strategic Action 7a: Repair leaking sewers in priority watersheds.**

## **AGENCY: County of Maui**

Division: WWRD

Agency Work Plan Description & Tasks:

- Actions taken for this management goal and Strategic Actions 7, 8 and 9 are under the jurisdiction of the Maui County Wastewater Division (WWRD) of the Department of Public Works. Actions being taken by WWRD are pursuant to Department of Health (DOH) requirements, recommendations and programs and are not the result of ORMP initiatives or funding. As such, Maui County defers to DOH for reporting progress on these Strategic Actions and Management Goal.
  - Comment: 90% of funding is for rehab and replacement of existing infrastructure while 10% is for extending services. Leak detection is part of normal maintenance practices.

## **AGENCY: County of Kauai**

Division: Public Works

Agency Work Plan Description & Tasks:

- Currently there is limited Waste Water systems on Kauai however expansion and upgrade has been realized as a priority and been necessitated by a recent spike in commercial, multi-family residential, and resort development. Generally waste water system improvements are negotiated as a part of development rights.
- Inventory deficient stations and ones that need upgrades to meet planned capacity - Lihue has capacity but needs additional transmission, Wailua needs to upgrade capacity
  - Status: Completed

Division: Public Works, Finance

Agency Work Plan Description & Tasks:

- CIP budget to upgrade - Wailua Wastewater plant to be upgraded
  - Status: In Progress

- Budget: - Actual: \$1M

Division: Planning

Agency Work Plan Description & Tasks:

- Continue conditioning as part of large scale developments - Wailua upgrade conditioned as part of 2 resort developments, Lihue capacity to be increased as part of Grove Farm developments
  - Status: In Progress
  - Comment: ongoing process
- HOH is implementing a regional sewer plan in Koloa that can replace many of the package plants along the shore
  - Results Indicator: New Wastewater Plants functioning
  - Status: Not Started
  - Anticipated Completion Date: 2010
  - Budget: - Needed: millions

### **AGENCY: County of Hawaii**

Division: Planning

Other Partners: DOH, UH, Developers

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. to assist Hilo Bay Watershed Advisory Group in obtaining funding to conduct water quality monitoring throughout streams in Hilo Bay watershed
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Complete
  - Anticipated Completion Date: Dec -07
  - Budget - Actual: \$11647    Needed: \$5020

Other Partners: Community groups

Agency Work Plan Description & Tasks:

- FY08: Community group (Hilo Bay Watershed Advisory Group) to carry out water quality monitoring project
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: June -08
- FY08-09: Planning Dept. and community group collaborate to secure additional funding for continued and/or expanded monitoring of water quality
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Not started
  - Anticipated Completion Date: 2009
- FY08-09: Community group carry out additional monitoring of water quality
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: 2009

**Strategic Action 7c: Develop long-term infrastructure plan to ensure complete hookup to and adequate capacity and maintenance of wastewater systems.**

## **AGENCY: County of Hawaii**

Division: Planning

Other Partners: Legislature, DOH, DLNR, Community groups

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 2.3.3(A) - Encourage State legislation to prohibit the use of cesspools as a means for wastewater disposal in areas below 800 feet Mean Sea Level, with the objective of protecting both water quality in coastal areas, as well as in the aquifer, particularly the portion underlying State-owned lands in the Maku'u area, where there is potential to develop the source for community potable water wells and agricultural irrigation purposes
  - Results Indicator: Improved wastewater treatment methods and standards in areas designated for future aquifer use and in coastal areas
  - Status: Not started
  - Anticipated Completion Date: 2012

Other Partners: Legislature, DOH

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 2.3.3(B) - Seek State Department of Health acceptance of small-footprint septic wastewater treatment designs; for example, those using drip irrigation or low-pressure pipe and double-tank no-leach field designs. Also seek acceptance of clustered septic systems for wastewater treatment in village/town centers.
  - Results Indicator: Improved wastewater treatment methods and standards in areas designated for future aquifer use and in coastal areas
  - Status: Not started
  - Anticipated Completion Date: 2012

## **Strategic Action 8**

Reduce the number of individual wastewater systems and improve the operation of existing systems in the coastal environment.

**Strategic Action 8a:** Conduct an inventory of individual wastewater disposal systems in coastal areas.

## **AGENCY: County of Maui**

Division: WWRD

Agency Work Plan Description & Tasks:

- Actions taken for this management goal and Strategic Actions 7, 8 and 9 are under the jurisdiction of the Maui County Wastewater Division (WWRD) of the Department of Public Works. Actions being taken by WWRD are pursuant to Department of Health (DOH) requirements, recommendations and programs and are not the result of ORMP initiatives or funding. As such, Maui County defers to DOH for reporting progress on these Strategic Actions and Management Goal.
  - Comment: The burden is on developers to provide WWTP services. DOH approves IWS, thus there are minimal expansion plans for WWRD.
- A community based organization in Molokai proposes to use treated wastewater from the Kaunakakai wastewater treatment facility for restoration of wetland habitat for endangered birdlife (avian fauna). A secondary benefit would be to reduce the quantity of wastewater that is injected into wells and use the water in a constructed wetland, which serves as tertiary treatment and restores wetland functions.

- Results Indicator: funding for a grant proposal from the CBO/NPO
- Comment: Technical assistance is available from the Planning Department
- Budget: - Needed: \$200K

**AGENCY: DOH**

Division: CWB-Polluted Runoff Control, WWB

Agency Work Plan Description & Tasks:

- Map known Individual Wastewater System locations, central sewer parcels (using County information) and make assumptions about developed parcels being on cesspool in the absence of better information;
  - Results Indicator: TMK parcel maps indicating method of wastewater treatment/disposal
  - Status: In Progress, 40% Complete
  - Anticipated Completion Date: Sept 2008
  - Budget: - Needed: limited by available information and staff resources
  - Other Needs: comprehensive and accurate ww info at TMK parcel scale

Division: CWB, SWWB

Agency Work Plan Description & Tasks:

- Effort w/UH to be initiated spring 2008 will conduct an onsite wastewater disposal (OSDS) risk-based approach for Oahu and also develop recommended OSDS inspection protocols
  - Results Indicator: Analysis to determine if the installation/operation and maintenance of onsite disposal systems should be different where these systems may impact surface water quality; inspection protocols
  - Status: Not Started
  - Comment: This effort will utilize the inventory information but will also consider a risk based approach to determine where OSDS have a likelihood of impacting surface water quality.
  - Anticipated Completion Date: Dec 2008
  - Budget: - Actual: ~\$75K

**AGENCY: County of Hawaii**

Division: Planning

Other Partners: DOH, UH, Developers

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. to assist Hilo Bay Watershed Advisory Group in obtaining funding to conduct water quality monitoring throughout streams in Hilo Bay watershed
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Complete
  - Anticipated Completion Date: Dec -07
  - Budget - Actual: \$11647    Needed: \$5020

Other Partners: Community groups

Agency Work Plan Description & Tasks:

- FY08: Community group (Hilo Bay Watershed Advisory Group) to carry out water quality monitoring project
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: June -08
- FY08-09: Planning Dept. and community group collaborate to secure additional funding for continued and/or expanded monitoring of water quality
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Not started
  - Anticipated Completion Date: 2009



- FY08-09: Community group carry out additional monitoring of water quality
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: 2009

**Strategic Action 8c: Develop appropriately scaled wastewater treatment systems in coastal areas with planned growth.**

**AGENCY: County of Hawaii**

Division: Planning

Other Partners: Legislature, DOH, DLNR, Community groups

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 2.3.3(A) - Encourage State legislation to prohibit the use of cesspools as a means for wastewater disposal in areas below 800 feet Mean Sea Level, with the objective of protecting both water quality in coastal areas, as well as in the aquifer, particularly the portion underlying State-owned lands in the Maku'u area, where there is potential to develop the source for community potable water wells and agricultural irrigation purposes
  - Results Indicator: Improved wastewater treatment methods and standards in areas designated for future aquifer use and in coastal areas
  - Status: Not started
  - Anticipated Completion Date: 2012

Other Partners: Legislature, DOH

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 2.3.3(B) - Seek State Department of Health acceptance of small-footprint septic wastewater treatment designs; for example, those using drip irrigation or low-pressure pipe and double-tank no-leach field designs. Also seek acceptance of clustered septic systems for wastewater treatment in village/town centers.
  - Results Indicator: Improved wastewater treatment methods and standards in areas designated for future aquifer use and in coastal areas
  - Status: Not started
  - Anticipated Completion Date: 2012

**Strategic Action 9**

Reduce illegal storm-water discharges to the wastewater system.

**AGENCY: County of Maui**

Division: WWRD

Agency Work Plan Description & Tasks:

- Actions taken for this management goal and Strategic Actions 7, 8 and 9 are under the jurisdiction of the Maui County Wastewater Division (WWRD) of the Department of Public Works. Actions being taken by WWRD are pursuant to Department of Health (DOH) requirements, recommendations and programs and are not the result of ORMP initiatives or funding. As such, Maui County defers to DOH for reporting progress on these Strategic Actions and Management Goal.
  - Comment: County Public Works prohibits storm water connections and pool discharges to the centralized wastewater treatment and collection system

## Perspective 2: Preserving Our Ocean Heritage

### Management Goal 2.1

Improve coastal water quality by reducing marine sources of pollution.

### Strategic Action 10

Minimize the introduction and spread of marine alien and invasive species (AIS) into and throughout archipelagic waters.

**Strategic Action 10b:** Organize technical, financial, and management resources for effective prevention; monitoring and early detection; and response, eradication, and control for high-risk species and areas.

#### **AGENCY: DOA**

Division: Plant Quarantine Branch

Agency Work Plan Description & Tasks:

- DOA/PQB is looking for ways to control invasive species by putting in interception/inspection and monitoring facilities and staff at the airports. PQB is beginning to examine shipping manifests for ocean cargo.
  - Results Indicator: Fewer populations of exotic species
  - Status: In Progress
  - Comment: ongoing effort
  - Anticipated Completion Date: ongoing effort
  - Other Needs: dialogue needed with DLNR

**Strategic Action 10c:** Organize and train local action teams for the monitoring and control of marine AIS.

#### **AGENCY: USCG**

Division: SECTOR/D14

Agency Work Plan Description & Tasks:

- Implemented for all foreign vessel boardings
  - Status: ongoing
  - Anticipated Completion Date: ongoing

### Strategic Action 11

Establish wastewater-discharge restricted zones and conditions for commercial vessels in archipelagic waters.

**Strategic Action 11b:** Enforce existing federal and State regulations on wastewater-discharge restricted zones in archipelagic waters with a monitoring and enforcement plan.

**AGENCY: USCG**

Division: SECTOR/D14

Agency Work Plan Description & Tasks:

- Mandatory facility & ship inspections
  - Status: ongoing

## Strategic Action 12

Provide appropriate waste management infrastructure to support commercial and recreational marine facilities.

**Strategic Action 12a:** Provide temporary pump-out facilities, such as pump trucks and encourage boaters to use them while permanent pump-out facilities are constructed for recreational boat and commercial harbors.

**AGENCY: DOT**

Division: HAR

Agency Work Plan Description & Tasks:

- Each agency is responsible for its area of jurisdiction. DOT Harbors is concerned with providing facilities at all commercial harbors in the system. Of particular concern is providing facilities for the commercial fishing vessels at Piers 16 and 17.
  - Results Indicator: Installation of pump-out facilities. However, DOT Harbors can only provide pump out facilities to existing adequate municipal systems.
  - Status: Not Started
  - Comment: As the fishing fleet has decreased in numbers, the need for facilities considered low.
  - Anticipated Completion Date: Unknown
  - Budget: - Actual: \$250,000.00. Future funding for the Port Allen Harbor sump pump station.
  - Budget: - Needed: Unknown. An assessment would have to be conducted to determine project cost.

**Strategic Action 12c:** Increase the frequency of inspection of marine sanitation devices for commercial and recreational vessels.

**AGENCY: USCG**

Division: SECTOR/D14

Agency Work Plan Description & Tasks:

- Mandatory inspection during boardings
  - Status: ongoing

**Strategic Action 12e:** Increase user fees for infrastructure improvements and maintenance.

## **AGENCY: DOT**

Division: HAR

Agency Work Plan Description & Tasks:

- DOT Harbors has retained a consultant and is undertaking a tariff study to review its existing harbor fee structure. The intent is to increase and simplify the tariff system to increase revenues to pay for improvements and maintenance.
  - Results Indicator: Completion of tariff study and implementation of recommendations.
  - Status: In Progress, 90% Complete
  - Comment: Waiting for recommendations of Harbors Modernization Policy Group. Many issues to consider: e.g., lease versus tariff system, transshipment fees, etc.
  - Anticipated Completion Date: Spring 2008
  - Budget: - Actual: \$200K

**Strategic Action 12f:** Ensure the State's commercial harbor system meets existing and future needs for maritime commerce in an environmentally and economically sustainable manner.

## **AGENCY: DOT**

Division: HAR

Agency Work Plan Description & Tasks:

- Through master planning and the implementation of new projects, DOT Harbors is providing for the current and future needs of the commercial harbor system.
  - Results Indicator: Completion of exemptions, EAs and EISs.
  - Status: In Progress
  - Comment: All master plans goes through an environmental review process.
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: Varies according to the specific project.

## **Management Goal 2.2**

Improve the health of coastal and ocean resources for sustainable traditional, subsistence, recreational, and commercial uses.

## **Strategic Action 13**

Strengthen and expand marine protected area management.

## **Strategic Action 14**

Develop ecosystem-based approaches for nearshore fisheries management.

**Strategic Action 14c:** Develop and promote public- and private-sector hatchery culture and release programs to increase standing stock biomass of economically important reef and ocean species.

**AGENCY: DOA**

Division: ADP

Agency Work Plan Description & Tasks:

- Each finfish operation must build a hatchery to allow for continuous production. Dialogue with DLNR is needed. Feds want release programs to restock coastal and oceanic species.
  - Results Indicator: Greater biomass available for harvest
  - Status: ongoing effort
  - Comment: Division Aquatic Resources, DLNR opposes such activity. Dialogue is required.
  - Anticipated Completion Date: ongoing effort
  - Other Needs: dialogue needed with DLNR

**Strategic Action 15**

Establish and institutionalize approaches for restoring, operating, and preserving ancient Hawaiian coastal fishponds and salt ponds for the benefit of coastal communities around the State.

**Strategic Action 15c:** Provide support and incentives for individuals and communities to facilitate restoration and operation of ancient Hawaiian coastal fishponds and salt ponds.

**AGENCY: DOA**

Division: ADP

Other Partners: (Actual leasing is in hands of DHHL/OHA)

Agency Work Plan Description & Tasks:

- DOA/ADP has a "road map" for the permitting process, which we follow and use when we advise the private sector. Each regulatory agency has its own focus.
  - Results Indicator: More restored Hawaiian fishponds available for harvest.
  - Status: ongoing effort
  - Comment: Permitting process is complicated but appears to work. Scoping meeting helps to facilitate process.
  - Anticipated Completion Date: ongoing effort

**Strategic Action 16**

Improve enforcement capacity and voluntary compliance with existing rules and regulations for ocean resource protection.

**Strategic Action 16a:** Conduct education and outreach campaigns on underlying rationale for existing rules and regulations related to ocean resource use.

**AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- Kona CDP Policy ENV-1.14: Development of appropriate educational tools for visitors and marketing plan to use them, and conduct educational workshops

- Results Indicator: Increased education and awareness of residents and visitors regarding preservation of Kona's environment
- Status: Not Started
- Anticipated Completion Date: 2013

**Strategic Action 16c:** Increase the presence of conservation and resources enforcement officers and natural resource rangers to increase educational opportunities, defer infractions, and improve compliance.

**AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- Kona CDP Policy ENV-1.14: Development of appropriate educational tools for visitors and marketing plan to use them, and conduct educational workshops
  - Results Indicator: Increased education and awareness of residents and visitors regarding preservation of Kona's environment
  - Status: Not Started
  - Anticipated Completion Date: TBD

**Strategic Action 16d:** Employ community-based partnership programs, including the Mauka-Makai Watch Program.

**AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- Kona CDP Policy ENV-1.14: Development of appropriate educational tools for visitors and marketing plan to use them, and conduct educational workshops
  - Results Indicator: Increased education and awareness of residents and visitors regarding preservation of Kona's environment
  - Status: Not Started
  - Anticipated Completion Date: TBD

Division: Planning, DPW

Other Partners: DLNR, DOH

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-1.15: Identify appropriate enforcement programs that would benefit from a volunteer community deputy program and select one as a pilot project.
  - Results Indicator: Establishment of a community-based volunteer "deputy" program to work with authorities to curb violations and increase educational opportunities
  - Status: Not Started

**Strategic Action 16e:** Improve enforcement capabilities through the use of administrative and civil penalties.

**AGENCY: County of Hawaii**

Division: Planning, County Council, Dept of Public Works

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 2.2.2(B) Amend the grubbing and grading ordinance and/or the zoning code to protect native species, geological and historic features outside of the BRBZ by preventing pin-to-pin lot grading and encroachments and water diversions into adjoining properties. The new regulations should provide standards for the preservation of native vegetation, review and public notice procedures for grading permits, and penalties for violations.
  - Results Indicator: Modification and enforcement of Chapter 10 to prevent storm water diversion to other properties
  - Status: Not Started
  - Anticipated Completion Date: 2012

## Strategic Action 17

Enhance the conservation of Hawaii's marine protected species, unique habitats and biological diversity.

**Strategic Action 17a:** Develop public outreach, educational materials and interpreter training for appropriate interaction with protected species.

### **AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- Kona CDP Policy ENV-1.14: Development of appropriate educational tools for visitors and marketing plan to use them, and conduct educational workshops
  - Results Indicator: Increased education and awareness of residents and visitors regarding preservation of Kona's environment
  - Status: Not Started
  - Anticipated Completion Date: TBD

**Strategic Action 17d:** Conduct a survey of statewide anchialine ponds.

### **AGENCY: County of Hawaii**

Division: Planning

Other Partners: University, Developers, DOH

Agency Work Plan Description & Tasks:

- FY07-08: Planning Dept. begin planning 2-day water quality monitoring conference to standardize water quality monitoring procedures in West Hawaii. Participants to include SMA permit holders, regulatory agencies (DOH, Planning Dept), and monitoring consultants and University researchers
  - Results Indicator: West Hawaii Water Quality Monitoring Conference conducted
  - Status: In progress
  - Comment: 10% complete; Reviewing prior SMA requirements and reported water quality monitoring in West Hawaii
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$10K    Needed: N/A
- FY08: Planning Dept. host West Hawaii Water Quality Monitoring Conference
  - Results Indicator: Formalized water quality monitoring procedures; possibly creation of umbrella monitoring body
  - Status: Not Started

- Anticipated Completion Date: 2008

Division: Planning, Planning Commission

Agency Work Plan Description & Tasks:

- FY08: Kona CDP Policy ENV-1.1 - Prepare an Environmental Resources Map identifying coastal areas, mauka lands, anchialine ponds and water quality monitoring station site, with amendments made through Resolution approved by the Planning Commission
  - Results Indicator: Minimization of impacts on land by increased use of BMPs in planning process
  - Status: Not started
  - Anticipated Completion Date: beginning 2008 - ongoing

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-18: Kona CDP Policy ENV-1.11 & 1.12: Identify anchialine ponds and budget and hire contractor to prepare anchialine pond management plan
  - Results Indicator: Anchialine ponds are inventoried, management policy created for management of ponds on development project lands, education module developed and funding mechanisms identified for pond maintenance
  - Status: Not started
  - Anticipated Completion Date: 2018

**Strategic Action 17e: Incorporate information on location of anchialine ponds into parcel information and integrate protection measures into SMA permits.**

### **AGENCY: County of Hawaii**

Division: Planning

Other Partners: University, Developers, DOH

Agency Work Plan Description & Tasks:

- FY07-08: Planning Dept. begin planning 2-day water quality monitoring conference to standardize water quality monitoring procedures in West Hawaii. Participants to include SMA permit holders, regulatory agencies (DOH, Planning Dept), and monitoring consultants and University researchers
  - Results Indicator: West Hawaii Water Quality Monitoring Conference conducted
  - Status: In progress
  - Comment: 10% complete; Reviewing prior SMA requirements and reported water quality monitoring in West Hawaii
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$10K    Needed: N/A
- FY08: Planning Dept. host West Hawaii Water Quality Monitoring Conference
  - Results Indicator: Formalized water quality monitoring procedures; possibly creation of umbrella monitoring body
  - Status: Not Started
  - Anticipated Completion Date: 2008

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-18: Kona CDP Policy ENV-1.11 & 1.12: Identify anchialine ponds and budget and hire contractor to prepare anchialine pond management plan
  - Results Indicator: Anchialine ponds are inventoried, management policy created for management of ponds on development project lands, education module developed and funding mechanisms identified for pond maintenance
  - Status: Not started
  - Anticipated Completion Date: 2018



## Management Goal 2.3

Enhance public access and appropriate coastal dependent uses of the shoreline.

## Strategic Action 18

Enhance and restore existing public shoreline areas and scenic vistas.

**Strategic Action 18a:** Develop enhancement and restoration plans to increase public access and restore priority beaches and scenic vistas.

### **AGENCY: County of Kauai**

- Base information is there through general plan and will be further developed through the General Plan update and upcoming development plans. This sets the basis to either acquire land or condition through development rights. The Open Space Commission has published 2 reports listing priority acquisitions. So far the best possibilities for acquisition have been coastal. The Department has been working with the Kauai Public Land Trust to partner with land acquisitions. The largest coastal project providing access is currently the bike path planned to run from Nawiliwili to Anahola.

Division: Planning, Finance, CA

Agency Work Plan Description & Tasks:

- Have purchase options and money available by the time the next Legacy Lands rounds of grants is available
  - Results Indicator: Funds Acquired, Property purchased
  - Status: In progress, 25% Complete
  - Comment: Nov 2009
  - Anticipated Completion Date: Nov 2008
  - Budget: - Needed: millions

Division: Planning, Finance, Public Works, Parks & Rec

Agency Work Plan Description & Tasks:

- Bike Path Plan is continuing and next phases are under contract. Eventual plan is to stretch from Anahola to Nawiliwili
  - Results Indicator: Bike Path open
  - Status: In progress, 90% Complete
  - Comment: Phase 1 of bike path will open Feb 15<sup>th</sup>
  - Anticipated Completion Date: Feb 2008
  - Budget: - Needed: millions

### **AGENCY: County of Hawaii**

Division: Planning, R&D, Parks & Rec

Other Partners: DLNR, Community

Agency Work Plan Description & Tasks:

- FY07: Hilo Bayfront Trails project is a coordinated effort among numerous County (i.e. R&D, Parks & Rec, Planning, DPW, Mayor's Office) and State (DLNR, DOT) agencies, as well as community groups (i.e. Chamber of Commerce, Hawaiian Canoe Racing Association, Vision Keepers, Bicycle & Pedestrian Committee) to construct a multi-use path along the length of Hilo Bay

- Results Indicator: Establishment of multi-agency advisory committee for project
- Status: Completed
- Anticipated Completion Date: 2008
- FY07-08: Phase 1: Advisory committee and community meetings to discuss ideas/alternatives on alignment and design of trail
  - Results Indicator: Phase 1: Trail alignment, design and report completed
  - Status: In Progress, 80% Complete
  - Anticipated Completion Date: 2008
- FY08-09: Phase 2: Preparation of Draft EA and process through to Final EA
  - Results Indicator: Phase 2: Environmental assessment completed
  - Status: Not Started
  - Anticipated Completion Date: 2008
- FY09: Phase 3: Prepare SMA Permit Application for processing
  - Results Indicator: Phase 3: Approved SMA Permit
  - Status: Not Started
  - Anticipated Completion Date: 2009

Division: Planning

Agency Work Plan Description & Tasks:

- Update/correct existing data and SPA data layer in the Shoreline Public Access Geodatabase
  - Results Indicator: Accurate SPA Geodatabase is available for public and private use in planning for shoreline public access needs.
  - Status: Completed
  - Anticipated Completion Date: 2008

Division: Planning

Other Partners: Consultant

Agency Work Plan Description & Tasks:

- FY07: Island Transitions LLC is retained to confirm existing data and data layer line segments for North and South Kona under a 100% County funded contract.
  - Results Indicator: Corrections and additions to the North and South Kona data layers and attributes table are completed with the possible exception preparing abstracts to confirm legal status of unresolved sites.
  - Status: In Progress, 64% Completed
  - Anticipated Completion Date: 2008
- FY07-08: Hire consultant to confirm existing data and data layer line segments for the remainder of the island.
  - Results Indicator: Attributes table and data layer line segments have been corrected and updated for the entire island.
  - Status: Not Started
  - Anticipated Completion Date: 2008
- FY07-08 & 08-09: The Planning Department will continue to update existing information in the online Shoreline Public Access Brochure and to add new public accesses as they are created or suitable established.
  - Results Indicator: Up to date brochure is available via the Hawaii County website.
  - Status: In Progress
  - Comment: Ongoing project that includes a significant number of accesses that will require extensive research to establish legal status and continual updating.
  - Anticipated Completion Date: 2008

Division: Planning

Other Partners: DLNR, Parks & Rec, County Council, Legislature

Agency Work Plan Description & Tasks:

- FY08-30: Puna CDP Objective 3.5.3(B) - Improve and expand coastal activity areas
  - Results Indicator: Puna offers a variety of public recreational areas, reflecting the beauty and diversity of the natural setting, and recreational programs for people of all ages and physical abilities that are not currently available
  - Status: Not Started
  - Anticipated Completion Date: 2030

Division: N. Kohala CDP, County Open Space Comm.

Agency Work Plan Description & Tasks:

- FY08: North Kohala CDP Strategy 2-3 Land Acquisition - Identify priority sites to be acquired for preservation of open space and cultural resources and establish an Open Space Bond Fund to purchase these properties and others identified island-wide.
  - Results Indicator: Establishment of Open Space Bond Fund to purchase identified properties
  - Status: Not Started
  - Anticipated Completion Date: 2008

## **AGENCY: County of Maui**

Division: MC

Other Partners: Civil Defense

Agency Work Plan Description & Tasks:

- Integration of relocating Baldwin Beach public facilities into the 2007 Update of the State Hazard Mitigation Plan. This State and FEMA-approved plan provides comprehensive information to assist permitting authorities in their analysis and decision-making and offers funding of efforts to move structures out of harms way.
  - Results Indicator: Plan submitted to civil defense.
  - Status: 100% Complete
  - Comment: Awaiting approval by FEMA
  - Anticipated Completion Date: October 2007
  - Budget: - Actual: staff time allocated      Needed: \$500K

Division: MC-LRD

Other Partners: UH, MCLT

Agency Work Plan Description & Tasks:

- MC initiated a study to prioritize beaches on the island for conservation and protection. The SAND-Alternatives study, phases I-III are in process and funded. Phases IV-V are to be conducted thereafter.
  - Results Indicator: Completion of Phases I-III
  - Status: In Progress, 25% Complete
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: \$89,500

Division: Planning

Other Partners: UH, MCLT

Agency Work Plan Description & Tasks:

- SAND-Alternatives study, phases IV-V to be completed.
  - Results Indicator: Completion of Phases I-III
  - Status: Not Started
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: \$60K      Needed: \$60K

Division: Planning

Agency Work Plan Description & Tasks:

- Complete the Beach Management Plan update and enact policy as an ordinance
  - Results Indicator: County Council Approval
  - Status: In Progress, 50% Complete
  - Comment: in peer review
  - Anticipated Completion Date: Aug 2008

Division: MC-LRD

Agency Work Plan Description & Tasks:

- Revise Beach Access guide, digitize and georeference all access points and correlate with the shoreline access numbered signs. Create tri-fold brochure for distribution to the public.
  - Results Indicator: All access points documented and georeferenced.
  - Public access guide and map.
  - Status: Not Started
  - Comment: Identify those access points that the county does not own and purchase them
  - Budget: - Needed: \$40K

Division: Planning

Other Partners: MC-CD

Agency Work Plan Description & Tasks:

- Establish priority view sheds and scenic vistas to be protected. An interactive picture based report has been produced for the Long Range Division of the Planning Department but requires incorporation into Current Planning & Permitting tasks.
  - Results Indicator: Report completed with GIS interface
  - Status: In Progress, 75% Complete
  - Comment: Need GIS capability in Current Division for full implementation of report
  - Anticipated Completion Date: Nov 2007
  - Budget: - Needed: \$4,000
  - Comment: GIS capability to actively use report
- Establish evaluation methodology for reducing visual impacts from development proposals along the shoreline
  - Results Indicator: Method included in Department policies
  - Status: In Progress, 67% Complete
  - Comment: Methodology drafted based on multi-state research
  - Anticipated Completion Date: March 2008
- Amend SMA and Shoreline Rules to incorporate the above
  - Results Indicator: Commission Approval
  - Status: Not Started
  - Anticipated Completion Date: Dec 2008

**Strategic Action 18a: Establish funding priorities for priority beach restoration projects.**

**AGENCY: County of Kauai**

- Priority projects have become known and have had to be addressed through public works and individual actions that in some cases have exacerbated the problems and led to lawsuits. Future problematic areas can be predicted through Coastal Erosion Study and then brought into a larger study which would establish priority projects based on erosion rate, usage development potential and strategy for each.

Division: Planning, Finance, CA

Agency Work Plan Description & Tasks:

- Institute stop gap measures and limit development in problematic areas
  - Results Indicator: Implementation of Legislation
  - Status: In Progress, 50% Complete
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: Staff time

Division: Planning

Agency Work Plan Description & Tasks:

- Establish high erosion and possible problematic areas through Coastal Erosion study
  - Results Indicator: Erosion Study Complete
  - Status: Not Started
  - Anticipated Completion Date: Dec 2008
  - Budget: - Actual: Staff time
  
- Incorporate into DP's
  - Results Indicator: Planning
  - Status: In Progress, 50% Complete
  - Comment: DP process is annual
  - Budget: - Actual: roll into other contract projects

Division: Finance

Agency Work Plan Description & Tasks:

- Establish funding sources, (CIP, Federal, otherwise) for restoration projects
  - Results Indicator: Grants or budget acquired
  - Status: Not Started
  - Anticipated Completion Date: Nov 2008
  - Budget: - Actual: Staff time

**AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-3.2: Develop a financing strategy as part of Public Facilities Financing Plan
  - Results Indicator: Identification of a variety of funding sources to supplement government operational budgets to ensure maintenance of Open Space Network created open areas
  - Status: In Process
  - Anticipated Completion Date: 2009

**AGENCY: County of Maui**

Division: MC

Other Partners: UH, MCLT

Agency Work Plan Description & Tasks:

- MC initiated a study to prioritize beaches on the island for conservation and protection. The SAND-Alternatives study, phases I-III are in process and funded. Phases IV-V are to be conducted thereafter.
  - Results Indicator: Completion of Phases I-III
  - Status: In Progress, 25% Complete
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: \$89,500
  
- SAND-Alternatives study, phases IV-V to be completed.
  - Results Indicator: Completion of Phases I-III

- Status: Not Started
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: \$60K    Needed: \$60K
- Complete the Beach Management Plan update and enact policy as an ordinance
    - Results Indicator: County Council Approval
    - Status: In Progress, 50% Complete
    - Comment: SAND-Alternatives Model
    - Anticipated Completion Date: August 2008

**Strategic Action 18c: Develop interagency agreements and public-private partnerships to implement enhancement plans.**

**AGENCY: County of Hawaii**

Division: Planning, R&D, Parks & Rec

Other Partners: DLNR, Community

Agency Work Plan Description & Tasks:

- FY07: Hilo Bayfront Trails project is a coordinated effort among numerous County (i.e. R&D, Parks & Rec, Planning, DPW, Mayor's Office) and State (DLNR, DOT) agencies, as well as community groups (i.e. Chamber of Commerce, Hawaiian Canoe Racing Association, Vision Keepers, Bicycle & Pedestrian Committee) to construct a multi-use path along the length of Hilo Bay
  - Results Indicator: Establishment of multi-agency advisory committee for project
  - Status: Completed
  - Anticipated Completion Date: 2008
- FY07-08: Phase 1: Advisory committee and community meetings to discuss ideas/alternatives on alignment and design of trail
  - Results Indicator: Phase 1: Trail alignment, design and report completed
  - Status: In Progress, 80% Complete
  - Anticipated Completion Date: 2008
- FY08-09: Phase 2: Preparation of Draft EA and process through to Final EA
  - Results Indicator: Phase 2: Environmental assessment completed
  - Status: Not Started
  - Anticipated Completion Date: 2008
- FY09: Phase 3: Prepare SMA Permit Application for processing
  - Results Indicator: Phase 3: Approved SMA Permit
  - Status: Not Started
  - Anticipated Completion Date: 2009

Division: Planning, Kona Chamber of Commerce

Other Partners: DLNR, Community

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-3.3: Establish Kona Treasures Fund as a tax deductible organization, and provide funding and staff support as well as a public marketing campaign
  - Results Indicator: Establishment of a public-private stewardship partnership to implement environmental policies set forth in plan that will supplement any governmental funding
  - Status: Not Started
  - Anticipated Completion Date: 2013

**AGENCY: County of Maui**

Division: MC

Agency Work Plan Description & Tasks:

- Revise shoreline penalty and After-The-Fact fee schedule for shoreline violations to be directed towards a revolving beach nourishment program
  - Results Indicator: An ordinance passed by County Council
  - Status: In Progress
  - Other Needs: staff time
  
- Fund publicly beneficial beach and dune restoration projects sponsored and conducted by non-profit and community based organizations
  - Results Indicator: Small grant awards and RFP
  - Status: In Progress, 75% Complete
  - Comment: Funds allocated from the Baskin Settlement in County General Budget
  - Anticipated Completion Date: July 2009
  - Budget: - Actual: \$50K
  
- Develop annual funding allocation and grant opportunities to support NPO NGO community dune and beach restoration plans
  - Results Indicator: Small grant awards and RFP
  - Status: In Progress
  - Budget: - Needed: \$60K

**Strategic Action 18d: Implement shoreline enhancement and restoration plans in priority areas.**

**AGENCY: County of Hawaii**

Division: Planning, R&D, Parks & Rec

Other Partners: DLNR, Community

Agency Work Plan Description & Tasks:

- FY07: Hilo Bayfront Trails project is a coordinated effort among numerous County (i.e. R&D, Parks & Rec, Planning, DPW, Mayor's Office) and State (DLNR, DOT) agencies, as well as community groups (i.e. Chamber of Commerce, Hawaiian Canoe Racing Association, Vision Keepers, Bicycle & Pedestrian Committee) to construct a multi-use path along the length of Hilo Bay
  - Results Indicator: Establishment of multi-agency advisory committee for project
  - Status: Completed
  - Anticipated Completion Date: 2008
  
- FY07-08: Phase 1: Advisory committee and community meetings to discuss ideas/alternatives on alignment and design of trail
  - Results Indicator: Phase 1: Trail alignment, design and report completed
  - Status: In Progress, 80% Complete
  - Anticipated Completion Date: 2008
  
- FY08-09: Phase 2: Preparation of Draft EA and process through to Final EA
  - Results Indicator: Phase 2: Environmental assessment completed
  - Status: Not Started
  - Anticipated Completion Date: 2008
  
- FY09: Phase 3: Prepare SMA Permit Application for processing
  - Results Indicator: Phase 3: Approved SMA Permit
  - Status: Not Started
  - Anticipated Completion Date: 2009

Division: Planning, Parks & Rec, DPW

Other Partners: DLNR, DOT

Agency Work Plan Description & Tasks:

- In order to enhance the ability of the public to identify accesses to the shoreline, the Planning Department commissioned a contract with Island Transitions LLC to conduct an inventory of shoreline public access and specific hazard signs throughout the County of Hawaii and, in coordination with other State (DOT, DLNR) and County (DPW, P & R) agencies determine appropriate locations for sign placement and to implement the installation of approved signs.
  - Results Indicator: Inventory completed and appropriate signs are installed.
  - Status: In Progress
  - Anticipated Completion Date: 2008

Division: Planning

Other Partners: Consultant

Agency Work Plan Description & Tasks:

- FY07-08: Island Transitions LLC conducts inventory and installation activities pursuant to the terms of the contract commissioned on June 22, 2007.
  - Results Indicator: Existing sign inventory is submitted, needed signage is installed and/or bids for additional sign purchases and installation are submitted.
  - Status: In Progress, 60% Completed
  - Anticipated Completion Date: 2008
  - Budget: - Actual: \$30K

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-09: Planning Department staff will maintain inventory, periodically inspect existing signage for replacement needs and provide for new site signage installations.
  - Results Indicator: All appropriate shoreline public access site are properly signed and signage inventory is adequately maintained to serve its intended purpose.
  - Status: Not Started
  - Anticipated Completion Date: N/A

### **AGENCY: County of Maui**

- Revise Beach Access guide, digitize and georeference all access points and correlate with the shoreline access numbered signs. Create tri-fold brochure for distribution to the public.
  - Results Indicator: All access points documented and georeferenced. Public access guide and map.
  - Status: Not Started
  - Comments: Identify those access points that the county does not own and purchase them
  - Budget: - Needed: \$40K

Division: Planning

Other Partners: MC-CD

Agency Work Plan Description & Tasks:

- Establish priority view sheds and scenic vistas to be protected. An interactive picture based report has been produced for the Long Range Division of the Planning Department but requires incorporation into Current Planning & Permitting tasks.
  - Results Indicator: Report completed with GIS interface
  - Status: In Progress, 75% Complete
  - Comment: Need GIS capability in Current Division for full implementation of report
  - Anticipated Completion Date: Nov 2007
  - Budget: - Needed: \$4,000
  - Comment: GIS capability to actively use report



Division: Planning

Agency Work Plan Description & Tasks:

- Complete the Beach Management Plan update and enact policy as an ordinance
  - Results Indicator: County Council Approval
  - Status: In Progress, 50% Complete
  - Comment: in peer review
  - Anticipated Completion Date: Aug 2008
  
- Amend Molokai SMA and Shoreline Rules to protect Papohaku Dune and base shoreline setbacks on erosion rates at the site.
  - Results Indicator: Molokai Planning Commission approval
  - Status: In Progress, 25% Complete
  - Comment: Erosion rates are already established for the P. Dune area
  - Anticipated Completion Date: Aug 2008
  - Budget: - Needed: \$40K
  - Other Needs: expand boundary study

Division: MC

Other Partners: UH, MCLT

Agency Work Plan Description & Tasks:

- MC initiated a study to prioritize beaches on the island for conservation and protection. The SAND-Alternatives study, phases I-III are in process and funded. Phases IV-V are to be conducted thereafter.
  - Results Indicator: Completion of Phases I-III
  - Status: In Progress, 25% Complete
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: \$89,500
  
- SAND-Alternatives study, phases IV-V to be completed.
  - Results Indicator: Completion of Phases I-III
  - Status: Not Started
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: \$60K    Needed: \$60K

**Strategic Action 18f: Identify and implement innovative mechanisms for coastal land acquisition and funding as an effective measure to preserve beaches.**

**AGENCY: County of Kauai**

Division: Planning, CA, Finance, Public Works, Parks & Rec

Agency Work Plan Description & Tasks:

- Planning Department has been working with the Kaua'i Public Land Trust to partner on acquisition projects. The County can possibly be more aggressive in condemnation policy. We would need to work with the grant coordinator and possibly other agencies to see what funding is available. Erosion coupled with climate change would have to be seen a hazard or possible even disaster giving the County or State authority to condemn or reclaim land
  - Results Indicator: Method agreed upon and land acquired
  - Status: In Progress
  - Budget: - Needed: millions

## **AGENCY: County of Hawaii**

Division: N. Kohala CDP, County Open Space Comm.

Agency Work Plan Description & Tasks:

- FY08: North Kohala CDP Strategy 2-3 Land Acquisition - Identify priority sites to be acquired for preservation of open space and cultural resources and establish an Open Space Bond Fund to purchase these properties and others identified island-wide.
  - Results Indicator: Establishment of Open Space Bond Fund to purchase identified properties
  - Status: Not Started
  - Anticipated Completion Date: 2008

Division: Planning, Parks & Rec

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-1.10 Enhanced Shoreline Setback: Identify priority shorelines for increase setback and part of Policy ENV-2.1 Open Space Network Plan and review change of zone and Special Management Area applications pursuant to these policies
  - Results Indicator: Land dedicated to the government or a land trust, or encumbered as open space for realizing a shoreline linear park along Kona's coastline
  - Status: Not Started
  - Anticipated Completion Date: 2013 and ongoing

Division: Planning, Parks & Rec, Open Space Comm

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-3.1- Identify high priority areas for acquisition pursuant to Open Space Network Plan based on significant value, extensive public use, strict limitations on other private uses, and lack of alternative means of protection
  - Results Indicator: Identification of high priority areas in Kona for public acquisition
  - Status: Not Started
  - Anticipated Completion Date: 2009

## **AGENCY: County of Maui**

Agency Work Plan Description & Tasks:

- Allocate settlement funds from shoreline violation to public participation beach nourishment projects
  - Results Indicator: Awards to NPO/NGO's
  - Status: In Progress, 50% Complete
  - Comments: RFP published in Jan 08
  - Anticipated Completion Date: Jun 2008
  - Budget: - Actual: \$50K
- Amend enforcement ordinances to ensure that fines, penalties and fees go to a public beach conservation fund as described in 18c
  - Results Indicator: Council Approval
  - Status: In Progress
  - Anticipated Completion Date: July 2009
- Amend enforcement ordinances to ensure that fines, penalties and fees are directed to shoreline enforcement, preservation and enhancement of beach access, and beach nourishment and conservation
  - Results Indicator: Council Approval
  - Status: Not Started
  - Anticipated Completion Date: July 2009
  - Budget: - Needed: staff time and legal council review

## Strategic Action 19

Establish new shoreline areas for public and appropriate coastal dependent uses.

**Strategic Action 19a:** Conduct an inventory of beaches, shoreline areas and scenic vistas requiring protection as open space.

### **AGENCY: County of Kauai**

Division: Planning

Agency Work Plan Description & Tasks:

- Planning Department is currently updating all of its development plans, which typically involves an inventory of all of the above.
  
- Incorporate into DP's and eventually zoning
  - Results Indicator: DP's completed, Zoning
  - Status: In Progress
  - Comment: ongoing process
  
- Pursue easements as part of zoning entitlements
  - Status: In Progress
  - Comment: ongoing
  
- Continue acquisition through Open Space and partner programs
  - Results Indicator: Purchases completed
  - Status: In Progress, 25% Complete
  - Anticipated Completion Date: Nov 2008
  - Budget: - Actual: \$105K    Needed: millions

### **AGENCY: County of Hawaii**

Division: N. Kohala CDP, County Open Space Comm.

Agency Work Plan Description & Tasks:

- FY08: North Kohala CDP Strategy 2-3 Land Acquisition - Identify priority sites to be acquired for preservation of open space and cultural resources and establish
  - Results Indicator: Priority sites identified for acquisition
  - Status: Not Started
  - Anticipated Completion Date: 2008

Division: Planning, Parks & Rec, Open Space Comm

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-2.1: Budget and hire consultant to prepare Open Space Network Plan
  - Results Indicator: Adoption of Open Space Network Plan by the Planning Commission
  - Status: Not Started
  - Anticipated Completion Date: 2009

Division: Planning

Other Partners: Private

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-2.2: Identify public access needs pursuant to the Open Space Network Plan

- Results Indicator: Identification of special needs to manage public access, such as ownership and/or sensitivity of the resource
- Status: Not Started
- Anticipated Completion Date: 2009

Division: Planning, Parks & Rec

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV 2.3: Identify designated visitor needs pursuant to Open Space Network Plan
  - Results Indicator: Identification of areas with high visitor traffic to receive special attention for funding, maintenance, safety and educational signage
  - Status: Not Started
  - Anticipated Completion Date: 2009

## **AGENCY: County of Maui**

Division: MC

Other Partners: UH, MCLT

Agency Work Plan Description & Tasks:

- MC initiated a study to prioritize beaches on the island for conservation and protection. The SAND-Alternatives study, phases I-III are in process and funded. Phases IV-V are to be conducted thereafter.
  - Results Indicator: Completion of Phases I-III
  - Status: In Progress, 25% Complete
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: \$89,500
- SAND-Alternatives study, phases IV-V to be completed.
  - Results Indicator: Completion of Phases I-III
  - Status: Not Started
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: \$60K    Needed: \$60K
- Revise Beach Access guide, digitize and georeference all access points and correlate with the shoreline access numbered signs. Create tri-fold brochure for distribution to the public.
  - Results Indicator: All access points documented and georeferenced. Public access guide and map.
  - Status: Not Started
  - Comment: Identify those access points that the county does not own and purchase them
  - Budget: - Needed: \$40K

Division: Planning

Other Partners: MC-CD

Agency Work Plan Description & Tasks:

- Establish priority view sheds and scenic vistas to be protected. An interactive picture based report has been produced for the Long Range Division of the Planning Department but requires incorporation into Current Planning & Permitting tasks.
  - Results Indicator: Report completed with GIS interface
  - Status: In Progress, 75% Complete
  - Comment: Need GIS capability in Current Division for full implementation of report
  - Anticipated Completion Date: Nov 2007
  - Budget: - Needed: \$4,000
  - Comment: GIS capability to actively use report

Division: Planning

Agency Work Plan Description & Tasks:

- Complete the Beach Management Plan update and enact policy as an ordinance
  - Results Indicator: County Council Approval
  - Status: In Progress, 50% Complete
  - Comment: in peer review
  - Anticipated Completion Date: Aug 2008
  
- Update shoreline hardening inventory and digitize, and log as comment in KIVA permit and TMK database system for county-wide use.
  - Status: Not Started
  - Budget: - Needed: \$45K
  - Other Needs: Intern

**Strategic Action 19b: Develop interagency agreements and public-private partnerships to acquire, preserve, and restore priority areas.**

**AGENCY: County of Kauai**

Division: Planning

Agency Work Plan Description & Tasks:

- Open Space program is the lead in acquisition and has begun to work with Kaua'i Public Land Trust. Restoration for public areas would be done through Public works, for private areas; as part of conditions for development rights. A comprehensive plan would be needed to establish priority areas.
  
- Establish further policies and ordinances to lay out goals so that landowners know what is expected in terms of conservation and restoration at time of development.
  - Results Indicator: New Ordinance
  - Status: Not Started
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: staff time

Division: Planning, CA, Finance

Agency Work Plan Description & Tasks:

- Need to develop further incentives for landowners with finance, possibly including tax breaks
  - Results Indicator: Purchases Complete
  - Status: In Progress
  - Anticipated Completion Date: Nov 2009
  - Budget: - Needed: millions

**AGENCY: County of Hawaii**

Division: Planning, Corporate Council

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 3.1.3(A) - Adopt enabling legislation for a transfer of development rights program
  - Results Indicator: Implementation of tool for re-shaping the pattern of future development to prevent further sprawl, such as land pooling and transfer of development rights
  - Status: Not Started
  - Anticipated Completion Date: 2012

Division: N. Kohala CDP, County Open Space Comm.

Agency Work Plan Description & Tasks:

- FY08: North Kohala CDP Strategy 2-3 Land Acquisition - Establish an Open Space Bond Fund to purchase priority open space sites identified island-wide

- Results Indicator: Establishment of Open Space Bond Fund to purchase identified properties
- Status: Not Started
- Anticipated Completion Date: 2008

Division: County Planning Comm

Other Partners: State Land Use Division

Agency Work Plan Description & Tasks:

- FY08: North Kohala CDP Strategy 2-4 Down-zone State-owned parcels makai of Akoni Pule Highway - Down-zone to conservation or other more restrictive uses to ensure no future development on these parcels in perpetuity
  - Results Indicator: Protection of parcels against future development
  - Status: Not Started
  - Anticipated Completion Date: 2008

Division: Planning, Parks & Rec

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-1.10 Enhanced Shoreline Setback: Identify priority shorelines for increase setback and part of Policy ENV-2.1 Open Space Network Plan and review change of zone and Special Management Area applications pursuant to these policies
  - Results Indicator: Land dedicated to the government or a land trust, or encumbered as open space for realizing a shoreline linear park along Kona's coastline
  - Status: Not Started
  - Anticipated Completion Date: 2013 and ongoing

Division: Planning, Parks & Rec, Open Space Comm

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-2.1: Budget and hire consultant to prepare Open Space Network Plan
  - Results Indicator: Adoption of Open Space Network Plan by the Planning Commission
  - Status: Not Started
  - Anticipated Completion Date: 2009

Division: Planning

Other Partners: Private

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-2.2: Identify public access needs pursuant to the Open Space Network Plan
  - Results Indicator: Identification of special needs to manage public access, such as ownership and/or sensitivity of the resource
  - Status: Not Started
  - Anticipated Completion Date: 2009

Division: Planning, Parks & Rec

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV 2.3: Identify designated visitor needs pursuant to Open Space Network Plan
  - Results Indicator: Identification of areas with high visitor traffic to receive special attention for funding, maintenance, safety and educational signage
  - Status: Not Started
  - Anticipated Completion Date: 2009

Division: Planning, Kona Chamber of Commerce

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-3.3: Establish Kona Treasures Fund as a tax deductible organization, and provide funding and staff support as well as a public marketing campaign
  - Results Indicator: Establishment of a public-private stewardship partnership to implement environmental policies set forth in plan that will supplement any governmental funding
  - Status: Not Started
  - Anticipated Completion Date: 2013

**AGENCY: County of Maui**

Division: MC

Agency Work Plan Description & Tasks:

- All SMA Major developments require restoration and/or conservation of beach, coastal and shoreline resources, as well as public access provisions as conditions for approval. Continued education, outreach and pre-consultation meetings ensure the developer and MC design with nature. Department staff time and capacity required for SMA and Shoreline permit application reviews and cross training of staff to improve applicant response times.
  - Results Indicator: SMA conditions and NOAA Performance Measures
  - Status: 100% Complete
  - Anticipated Completion Date: ongoing
  - Budget: - Needed: \$15K
  - Other Needs: GIS Capability
- Write Mitigation Banking ordinance for Council review. The Bank purchases and protects publicly valuable beaches by requiring oceanfront property owners who harden their deteriorated shoreline to compensate for lost lateral access by contributing to the mitigation bank on a more than 1:1 ratio. Develop ordinance from endangered species, wetland, and land conservation mitigation banks authorized under federal law and guidance.
  - Results Indicator: County Council Approval
  - Status: In Progress, 25% Complete
  - Comment: Research on sample ordinances required.
  - Anticipated Completion Date: September 2008
  - Other Needs: staff time

**Strategic Action 19c: Establish criteria for identifying priority coastal areas for public acquisition and appropriate coastal dependent uses.**

**AGENCY: County of Kauai**

Division: Planning, CA

Agency Work Plan Description & Tasks:

- Will take a large rezoning project that would incorporate all coastal or SMA lands as an overlay zone with different restrictions. Would have to be a result of a broad based community input process.
  - Results Indicator: Study Completed, Purchases Complete
  - Status: Not Started
  - Budget: - Needed: \$300K inventory, millions – acquisition

**AGENCY: County of Hawaii**

- FY08-09: Kona CDP Policy ENV-3.1- Identify high priority areas for acquisition pursuant to Open Space Network Plan based on significant value, extensive public use, strict limitations on other private uses, and lack of alternative means of protection
  - Results Indicator: Identification of high priority areas in Kona for public acquisition
  - Status: Not Started
  - Anticipated Completion Date: 2009

## **AGENCY: County of Maui**

Division: Planning

Agency Work Plan Description & Tasks:

- Complete the Beach Management Plan update and enact policy as an ordinance
  - Results Indicator: County Council Approval
  - Status: In Progress, 50% Complete
  - Comment: in peer review
  - Anticipated Completion Date: Aug 2008

Division: MC

Other Partners: UH, MCLT

Agency Work Plan Description & Tasks:

- MC initiated a study to prioritize beaches on the island for conservation and protection. The SAND-Alternatives study, phases I-III are in process and funded. Phases IV-V are to be conducted thereafter.
  - Results Indicator: Completion of Phases I-III
  - Status: In Progress, 25% Complete
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: \$89,500
  
- SAND-Alternatives study, phases IV-V to be completed.
  - Results Indicator: Completion of Phases I-III
  - Status: Not Started
  - Comment: SAND-Alternatives Model
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: \$60K    Needed: \$60K

**Strategic Action 19d: Establish new beach and shoreline areas, and scenic vistas as open space for public access.**

## **AGENCY: County of Hawaii**

Division: Planning, R&D, Parks & Rec

Other Partners: DLNR, Community

Agency Work Plan Description & Tasks:

- FY07: Hilo Bayfront Trails project is a coordinated effort among numerous County (i.e. R&D, Parks & Rec, Planning, DPW, Mayor's Office) and State (DLNR, DOT) agencies, as well as community groups (i.e. Chamber of Commerce, Hawaiian Canoe Racing Association, Vision Keepers, Bicycle & Pedestrian Committee) to construct a multi-use path along the length of Hilo Bay
  - Results Indicator: Establishment of multi-agency advisory committee for project
  - Status: Completed
  - Anticipated Completion Date: 2008
  
- FY07-08: Phase 1: Advisory committee and community meetings to discuss ideas/alternatives on alignment and design of trail
  - Results Indicator: Phase 1: Trail alignment, design and report completed
  - Status: In Progress, 80% Complete
  - Anticipated Completion Date: 2008
  
- FY08-09: Phase 2: Preparation of Draft EA and process through to Final EA
  - Results Indicator: Phase 2: Environmental assessment completed
  - Status: Not Started
  - Anticipated Completion Date: 2008



- FY09: Phase 3: Prepare SMA Permit Application for processing
  - Results Indicator: Phase 3: Approved SMA Permit
  - Status: Not Started
  - Anticipated Completion Date: 2009

Division: N. Kohala CDP, County Open Space Comm.

Agency Work Plan Description & Tasks:

- FY08: North Kohala CDP Strategy 2-3 Land Acquisition - Identify priority sites to be acquired for preservation of open space and cultural resources and establish an Open Space Bond Fund to purchase these properties and others identified island-wide
  - Results Indicator: Establishment of Open Space Bond Fund to purchase identified properties
  - Status: Not Started
  - Anticipated Completion Date: 2008

Division: Planning, Parks & Rec

Agency Work Plan Description & Tasks:

- FY08-13: Kona CDP Policy ENV-1.10 Enhanced Shoreline Setback: Identify priority shorelines for increase setback and part of Policy ENV-2.1 Open Space Network Plan and review change of zone and Special Management Area applications pursuant to these policies
  - Results Indicator: Land dedicated to the government or a land trust, or encumbered as open space for realizing a shoreline linear park along Kona's coastline
  - Status: Not Started
  - Anticipated Completion Date: 2013 and ongoing

Division: Planning, Parks & Rec, Open Space Comm

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY08-09: Kona CDP Policy ENV-2.1: Budget and hire consultant to prepare Open Space Network Plan
  - Results Indicator: Adoption of Open Space Network Plan by the Planning Commission
  - Status: Not Started
  - Anticipated Completion Date: 2009

## **AGENCY: County of Maui**

Division: MC

Other Partners: DOT

Agency Work Plan Description & Tasks:

- Ukemahame linear coastal park. MC purchased 100 acres of land in conjunction with a mauka subdivision approval, accounting for 1/3 of the coastal park. The balance of the coastal park requires land purchases and the realignment of the Honopiialani Highway from the Pali tunnel to Lahaina.
  - Results Indicator: FEA completed and FONSI issued. DOT approval of highway realignment.
  - Status: In Progress, 33% Complete
  - Budget: - Actual: unknown
- Revise Beach Access guide, digitize and georeference all access points and correlate with the shoreline access numbered signs. Create tri-fold brochure for distribution to the public.
  - Results Indicator: All access points documented and georeferenced. Public access guide and map.
  - Status: Not Started
  - Comment: Identify those access points that the county does not own and purchase them
  - Budget: - Needed: \$40K

Division: MC

Agency Work Plan Description & Tasks:

- Amend Molokai SMA and Shoreline Rules to protect Papohaku Dune and base shoreline setbacks on erosion rates at the site.
  - Results Indicator: Molokai Planning Commission approval
  - Status: In Progress, 25% Complete
  - Comment: Erosion rates are already established for the P. Dune area
  - Anticipated Completion Date: Aug 2008
  - Budget: - Needed: \$40K
  - Other Needs: expand boundary study

Division: MC-LRD

Other Partners: MC-CD

Agency Work Plan Description & Tasks:

- Establish priority view sheds and scenic vistas to be protected. An interactive picture based report has been produced for the Long Range Division of the Planning Department but requires incorporation into Current Planning & Permitting tasks.
  - Results Indicator: Report completed with GIS interface
  - Status: In Progress, 75% Complete
  - Comment: Need GIS capability in Current Division for full implementation of report
  - Anticipated Completion Date: Nov 2007
  - Budget: - Needed: \$4,000
  - Comment: GIS capability to actively use report

Division: MC

Agency Work Plan Description & Tasks:

- All SMA Major developments require restoration and/or conservation of beach, coastal and shoreline resources, as well as public access provisions as conditions for approval. Continued education, outreach and pre-consultation meetings ensure the developer and MC design with nature. Department staff time and capacity required for SMA and Shoreline permit application reviews and cross training of staff to improve applicant response times.
  - Results Indicator: SMA conditions and NOAA Performance Measures
  - Status: 100% Complete
  - Anticipated Completion Date: ongoing
  - Budget: - Needed: \$15K
  - Other Needs: GIS Capability

## Management Goal 2.4

Promote appropriate and responsible ocean recreation and tourism that provide culturally informed and environmentally sustainable uses for visitors and residents.

## Strategic Action 20

Develop community-based frameworks and practices for identifying and mitigating ocean recreational use conflicts.

**Strategic Action 20a:** Conduct a baseline study of ocean recreation and tourism, building on existing information and data that focuses on user conflict and potential impacts from threats to the ocean environment.

**AGENCY: OP**

Division: CZM

Other Partners: DLNR

Agency Work Plan Description & Tasks:

- FY07: In 2005, CZM funded a DLNR contracted study entitled, "Report to the Hawaii DLNR: Recommended Strategies for Addressing Ocean Recreation User Conflicts" to identify strategies and develop tools for resolving ocean recreation user conflicts statewide. The project resulted in the identification of four primary strategies the DLNR could employ to gain better control over commercial ocean recreation operations, to increase public safety and access, and to increase protection of natural and cultural resources.
  - Results Indicator: Baseline Study Complete
  - Status: 100% Complete
  - Anticipated Completion Date: March 2007
  - Budget: - Actual: \$50K

**Strategic Action 20d:** Encourage community-based, culturally informed environmental education and outreach programs promoting responsible ocean recreation.

**AGENCY: County of Kauai**

Division: Planning, CA

Agency Work Plan Description & Tasks:

- Kauai has a very involved public and a very strong home rule ethic that could be taken advantage of to empower local citizens to manage and run coastal areas, while preserving stewardship and tradition
  - Results Indicator: Draft Policy, Priority Implementation, Broad implementation
  - Status: Not Started

**Strategic Action 21**

Promote responsible and sustainable ocean-based tourism.

**Management Goal 2.5**

Encourage cutting edge and appropriate ocean science and technology with safeguards for ocean resource protection.

**Strategic Action 23**

Plan and develop sustainable commercial aquaculture in coastal areas and ocean waters to diversify and expand Hawaii's economy and provide locally produced sources of seafood.

**Strategic Action 23a:** Develop a streamlined, one-stop approach to permitting coastal and ocean aquaculture projects that include guidelines for sustainable operations that ensures the conservation of ocean and coastal ecosystems.

## **AGENCY: DOA**

Division: ADP

Agency Work Plan Description & Tasks:

- DOA/ADP has a "road map" for the permitting process, which we follow and use when we advise the private sector. Each regulatory agency has its own focus.
  - Results Indicator: More open ocean farms and land-based farms on the coast.
  - Status: ongoing effort
  - Comment: Permitting process is complicated but appears to work. Scoping meeting helps to facilitate process.
  - Anticipated Completion Date: ongoing effort

**Strategic Action 23b:** Establish a Geographic Information System (GIS)-based site identification database to locate coastal and ocean aquaculture projects in environmentally suitable sites.

## **AGENCY: DOA**

Division: ADP

Agency Work Plan Description & Tasks:

- We are updating the bathymetry, currents and bottom type databases and displays. Permission needed from DLNR for some of the data to be released. Updates are intermittent. Model and interface need to be finalized.
  - Results Indicator: System available for locating aquaculture projects and management of resources.
  - Status: ongoing effort
  - Comment: Initial draft on State GIS server. Interacting with Hawaii County on GIS project. Contract with Ocean Mapping Group, SOEST, UH for database edits.
  - Anticipated Completion Date: ongoing effort
  - Budget: - Needed: \$15K to acquire additional software modules. \$5K to \$10K/yr to maintain. \$10k estimate for staff training.
  - Other Needs: existing staff requires training

**Strategic Action 23c:** Provide State financial incentives to landowners and investors to encourage their participation in commercial aquaculture development.

## **AGENCY: DOA**

Division: Admin

Agency Work Plan Description & Tasks:

- Pursuing Legislation
  - Results Indicator: More aquaculture farms
  - Status: ongoing effort
  - Comment: Important Agricultural Lands legislation could help process
  - Anticipated Completion Date: ongoing effort
  - Other Needs: Dialogue needed. Legislative action required.

**Strategic Action 23d:** Provide opportunities to obtain space at State commercial harbors for support activities and infrastructure needed by ocean aquaculture companies.

## **AGENCY: DOA**

Division: ADP

Agency Work Plan Description & Tasks:

- Aquaculture companies require dock space to handle feeds, equipment, base yard operations, transfer of fish, and vessel tie up.
  - Results Indicator: More land-bases for open ocean farms.
  - Status: ongoing effort
  - Comment: Dialogue needed
  - Anticipated Completion Date: ongoing effort
  - Other Needs: Dialogue needed. Legislative action required.

## **Strategic Action 24**

Expand ocean science and technology.

**Strategic Action 24a:** Facilitate appropriate research and innovation in energy, ocean leasing, and other marine technologies and ocean uses.

## **AGENCY: UH**

Division: NOAA/ SOEST Ocean Observing

Agency Work Plan Description & Tasks:

- This is the primary goal of the SOEST Ocean Observing program - to develop a global ocean model which feeds scientific products designed to enhance community resiliency through the Ocean Atlas Website.
- The Hawaii Ocean Observing System (HIOOS) is a collaborative effort among numerous researchers at the University of Hawaii – Manoa School of Ocean and Earth Science and Technology (SOEST). Knowledge of the current and future state of the coastal ocean is essential for facilitating safe, sustainable, and productive coastal activities. Our primary objective is to integrate and expand ocean observing and forecasting among the Hawaiian Islands and provide useful information and data products to a wide variety of end users. Initially, efforts are focusing on four theme areas: (1) coastal ocean-state and forecast, (2) coastal resiliency, (3) automated water quality sensing, and (4) marine ecosystem stewardship. These projects will result in nearshore and offshore safety products, shipping and marine commerce products, water quality support tools, marine ecosystem indicators and products, and marine inundation forecasts and planning tools.
  - Results Indicator: website - Hawaii Ocean Atlas to feed science information to community members as operational products
  - Status: In Progress
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$6M

**Strategic Action 24b:** Develop and promote Hawai'i as a learning destination for ocean science, technology, and management applications in the Pacific and globally.

## **AGENCY: UH**

Division: NOAA/ SOEST Ocean Observing

Agency Work Plan Description & Tasks:

- This is the primary goal of the SOEST Ocean Observing program - to develop a global ocean model which feeds scientific products designed to enhance community resiliency through the Ocean Atlas Website.
- The Hawaii Ocean Observing System (HIOOS) is a collaborative effort among numerous researchers at the University of Hawaii – Manoa School of Ocean and Earth Science and Technology (SOEST). Knowledge of the current and future state of the coastal ocean is essential for facilitating safe, sustainable, and productive coastal activities. Our primary objective is to integrate and expand ocean observing and forecasting among the Hawaiian Islands and provide useful information and data products to a wide variety of end users. Initially, efforts are focusing on four theme areas: (1) coastal ocean-state and forecast, (2) coastal resiliency, (3) automated water quality sensing, and (4) marine ecosystem stewardship. These projects will result in nearshore and offshore safety products, shipping and marine commerce products, water quality support tools, marine ecosystem indicators and products, and marine inundation forecasts and planning tools.
  - Results Indicator: website - Hawaii Ocean Atlas to feed science information to community members as operational products
  - Status: In Progress
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: \$6M

## **Perspective 3: Promoting Collaborative Governance and Stewardship**

### **Management Goal 3.1**

Apply integrated and place-based approaches to the management of natural and cultural resources.

### **Strategic Action 25**

Develop integrated natural and cultural resource planning process and standardized tools.

**Strategic Action 25a:** Facilitate integrated natural resource management in demonstration ahupua'a and moku with collaborative governance and financing mechanisms for plan implementation.

#### **AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- FY07-FY09: OP/CZM will be coordinating an ORMP Demonstration Project for integrated natural and cultural resource management using a place-based, cultural-based, and community-based management

framework and principles. The intent is to demonstrate the use of an integrated planning approach based on the ahupua'a/moku concept through a pilot implementation project.

- Results Indicator: ORMP Demonstration Project complete
- Anticipated Completion Date: Dec 2009
- Budget: - Actual: Allocated \$50,000 NA07, 306; Expire Dec. 2008\* (\*will need extension)
  
- FY07-08: Frame options for an ORMP demonstration project based on a place-, cultural- and community-based management framework
  - Status: Not Started
  - Anticipated Completion Date: June 2008
  
- FY07-08: Circulate options for input and refine
  - Status: Not Started
  - Anticipated Completion Date: June 2008
  
- FY07-08: Lead discussion for design of a place-, cultural- and community-based management demonstration project & develop contract
  - Status: Not Started
  - Anticipated Completion Date: June 2008
  - Comment: Draft management framework and principles will be developed and published by Mar 08. They will be used to frame options for a demonstration project.
  
- FY08-09: Conduct an ORMP demonstration project based on the place-, cultural- and community-based management framework & principles
  - Status: Not Started
  - Anticipated Completion Date: June 2009
  
- FY08-09: Monitor, evaluate and report on demonstration project
  - Status: Not Started
  - Anticipated Completion Date: June 2009

### **AGENCY: County of Hawaii**

Division: County Council, Planning, Dept of Public Works

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 2.2.2(A) - Enact a Biosphere Reserve Buffer Zone (BRBZ) Design District
  - Results Indicator: Adoption of a BRBZ and designation of a BRBZ Advisory Commission to guide its development within the native forests of the region through regulatory measures and economic incentives
  - Status: Not Started
  - Anticipated Completion Date: June 2012

**Strategic Action 25b:** Establish a moku support network to increase community dialogue, develop a framework for education, and build partnerships among various stakeholders.

### **AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- OP/CZM has hired a consultant to develop a Place-, Cultural- and Community-Based Framework and Principles. This project is only the first step in OP/CZM's long-term goal to develop and institutionalize an integrated planning approach for the Hawaii CZM Program to assess and manage cumulative and secondary impacts using the traditional Hawaiian ahupua'a/moku concept for purposes of implementing the

Ocean Resources Management Plan. The Tetra Tech project will establish a moku support network, among other things.

- Results Indicator: Moku (or place-based) support network established
  - Status: 100% Complete
  - Anticipated Completion Date: Feb 2008
  - Budget: - Actual: Tetra Tech contract \$104,311 (NA06, 306/309) Contract expires 2/29/08
- FY07-08: A survey of active moku groups statewide is being conducted as part of the Place-, Cultural- and Community-Based Framework and Principles project. One outcome will be an online directory of these groups.
    - Results Indicator: Statewide moku survey completed; online directory developed
    - Status: In Progress, 90% Complete
    - Anticipated Completion Date: Feb 2008
    - Budget: - Actual: Survey & online directory included in TT contract above
- OP will continuously update the online directory.
    - Results Indicator: Directory remains up to date
    - Status: In Progress
    - Anticipated Completion Date: ongoing
    - Budget: - Needed: staff time

## **AGENCY: County of Hawaii**

Division: Planning

Other Partners: DOH, UH, Developers

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. to assist Hilo Bay Watershed Advisory Group in obtaining funding to conduct water quality monitoring throughout streams in Hilo Bay watershed
  - Results Indicator: CZM-ORMP award grant for project
  - Status: In Progress, 90% Complete
  - Comment: Final contract approval in process
  - Anticipated Completion Date: Dec -07
  - Budget - Actual: \$11647    Needed: \$5020

Other Partners: Community groups

Agency Work Plan Description & Tasks:

- FY08: Community group (Hilo Bay Watershed Advisory Group) to carry out water quality monitoring project
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: June -08
- FY08-09: Planning Dept. and community group collaborate to secure additional funding for continued and/or expanded monitoring of water quality
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Not started
  - Anticipated Completion Date: 2009
- FY08-09: Community group carry out additional monitoring of water quality
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: 2009



## Strategic Action 26

Build capacity for community participation in natural and cultural resources management.

**Strategic Action 26a:** Develop education and outreach programs through interagency agreements and in partnership with community groups and relevant nonprofit organizations to educate residents and visitors on natural and cultural resource values, regulations, and best practices.

### **AGENCY: County of Hawaii**

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-18: Kona CDP Policy ENV-1.4: Privately-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are eligible for ecosystem services incentives including groundwater source protection, property tax credits, grants, and government approval assistance
  - Status: Not Started
  - Anticipated Completion Date: 2018

Division: Planning

Other Partners: DOH, UH, Developers

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. to assist Hilo Bay Watershed Advisory Group in obtaining funding to conduct water quality monitoring throughout streams in Hilo Bay watershed
  - Results Indicator: CZM-ORMP award grant for project
  - Status: In Progress, 90% Complete
  - Comment: Final contract approval in process
  - Anticipated Completion Date: Dec -07
  - Budget - Actual: \$11647    Needed: \$5020

Other Partners: Community groups

Agency Work Plan Description & Tasks:

- FY08: Community group (Hilo Bay Watershed Advisory Group) to carry out water quality monitoring project
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: June -08
- FY08-09: Planning Dept. and community group collaborate to secure additional funding for continued and/or expanded monitoring of water quality
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Not started
  - Anticipated Completion Date: 2009
- FY08-09: Community group carry out additional monitoring of water quality
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started

- Anticipated Completion Date: 2009

Division: Planning

Other Partners: Community, Non-profit

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. assist Pacific Tsunami Museum obtain funding to develop a Tsunami Education, Preparation and Recovery Plan for Downtown Hilo
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Completed
  - Anticipated Completion Date: 2008
  - Budget: - Needed: \$24,700
- FY07-08: Pacific Tsunami Museum to increase tsunami awareness through education by compiling background information, hosting community workshops, and begin development of comprehensive Evacuation and Disaster Preparedness Plan
  - Results Indicator: Hosting community workshops and establishing tsunami evacuation sites
  - Status: In Progress, 50% Completed
  - Anticipated Completion Date: 2008
- FY08: Pacific Tsunami Museum to facilitate evacuation and tsunami event planning through education workshops, establishing communication network of business owners, and recruiting participants for CERT training
  - Results Indicator: Number of businesses and individuals participating in workshops, training and networking
  - Status: Not Started
  - Anticipated Completion Date: 2008
- FY08: Pacific Tsunami Museum to educate community on recovery strategies and assistance applications, and to organize a working group to maintain information
  - Results Indicator: Creation of final report to be used by community and interested public agencies
  - Status: Not Started
  - Anticipated Completion Date: 2008

**Strategic Action 26b:** Identify existing networks, community groups and organizations to work with to establish responsible management entities for each ahupua'a and moku to implement the ORMP.

## **AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- OP/CZM has hired a consultant to develop a Place-, Cultural- and Community-Based Framework and Principles. This project is only the first step in OP/CZM's long-term goal to develop and institutionalize an integrated planning approach for the Hawaii CZM Program to assess and manage cumulative and secondary impacts using the traditional Hawaiian ahupua'a/moku concept for purposes of implementing the Ocean Resources Management Plan. The Tetra Tech project will establish a moku support network, among other things.
  - Results Indicator: Moku (or place-based) support network established
  - Status: In Progress
  - Anticipated Completion Date: Feb 2008
  - Budget: - Actual: Tetra Tech contract \$104,311 (NA06, 306/309) Contract expires 2/29/08

- FY07-08: A survey of active moku groups statewide is being conducted as part of the Place-, Cultural- and Community-Based Framework and Principles project. One outcome will be an online directory of these groups.
  - Results Indicator: Statewide moku survey completed; online directory developed
  - Status: In Progress, 90% Complete
  - Anticipated Completion Date: Feb 2008
  - Budget: - Actual: Survey & online directory included in TT contract above
  
- OP staff will collaborate efforts to identify existing moku groups.
  - Results Indicator: Enhancement of directory
  - Status: In Progress
  - Anticipated Completion Date: ongoing
  - Budget: - Needed: staff time
  
- FY07-08: Workshop(s) for broader community input (Workshop II)
  - Results Indicator: Workshop(s) convened
  - Status: Not Started
  - Comment: Funds to be used to hire planning consultant & cover associated workshop costs
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: Allocated \$29,000 NA07, 309 and requested additional \$20,000 NA06 306 for \$49,000 total. Needed: possible need for additional funds to cover costs of workshops

**AGENCY: County of Maui**

Division: Planning

Agency Work Plan Description & Tasks:

- Maui Planning Department recommends Molokai as a test site for "Moku" Management in coordination with the Molokai Community Plan update
  - Results Indicator: Plan for Molokai
  - Status: Not Started
  - Comment: Recommend meetings with MoPC and Community

**Strategic Action 26d: Undertake and coordinate outreach and educational efforts, with community input, to raise awareness of program efforts to develop integrated planning approach in each ahupua'a or moku.**

**AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- OP/CZM has hired a consultant to develop a Place-, Cultural- and Community-Based Framework and Principles. This project is only the first step in OP/CZM's long-term goal to develop and institutionalize an integrated planning approach for the Hawaii CZM Program to assess and manage cumulative and secondary impacts using the traditional Hawaiian ahupua'a/moku concept for purposes of implementing the Ocean Resources Management Plan. This project will include outreach and educational efforts within the community, as well as seek community input on the development of an integrated planning approach in each ahupua'a or moku (for more information on community outreach and input, see work tasks under strategic actions 25b and 26b). In addition to this Tetra Tech framework and principles project, OP will later refine the framework and principles, which will require identification of law, ordinance, and rule changes. Focused discussions with selected stakeholder groups will inform OP decisions.

- FY07-08: Survey existing laws and ordinances, and identify changes to incorporate place, cultural and community-based framework & principles
  - Results Indicator: Completed survey of laws and ordinances
  - Status: Not Started
  - Comment: Consultant to be hired to conduct review and make recommendations
  - Anticipated Completion Date: June 2008
  - Budget: - Needed: funding for consultant, approx. \$50,000.
  
- FY07-08: Workshop(s) for broader community input (Workshop II)
  - Results Indicator: Workshop(s) convened
  - Status: Not Started
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: see 26b. \$49,000 allocated to June 08 workshop(s)
  
- FY08-09: Refine place, cultural and community-based framework & principles based on workshop(s)
  - Results Indicator: Refinement of framework & principles
  - Status: Not Started
  - Comment: Workshop consultant to incorporate workshop results into management framework
  - Anticipated Completion Date: Dec 2008
  - Budget: see 26b. \$49,000 allocated to June 08 workshop(s) & associated tasks
  
- FY08-09: Refine survey of legislation & ordinances requiring change
  - Results Indicator: Complete list of laws & ordinances requiring change
  - Status: Not Started
  - Anticipated Completion Date: Dec 2008
  - Budget: - Needed: \$50,000 funding needs listed above for initial survey of laws & ordinances would also cover refinement.

**AGENCY: County of Hawaii**

Division: Planning

Other Partners: Community Group

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. assist Hilo Bay Watershed Advisory Group obtain funding to create a web site to facilitate internal and community networking and to offer educational outreach programs
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Complete
  - Anticipated Completion Date: Dec 07
  - Budget: - Actual: \$10K      Needed: \$5K
  
- FY08: Community group (Hilo Bay Watershed Advisory Group) to create web site
  - Results Indicator: Completed live web site
  - Status: Not started
  - Anticipated Completion Date: Jun -08
  
- FT08-09: Begin the process of creating Planning Dept/Community-based watershed partnerships with other communities in the County
  - Results Indicator: Potential community partners identified
  - Status: Not started
  - Anticipated Completion Date: 2009
  
- FT08-09: Identify potential points of collaboration for the Planning Dpt and community-based watershed groups
  - Results Indicator: Future watershed projects planned
  - Status: Not started
  - Anticipated Completion Date: 2009

Division: Planning

Other Partners: DOH, University, Community Group

Agency Work Plan Description & Tasks:

- FY07: Planning Dept. to assist Hilo Bay Watershed Advisory Group in obtaining funding to conduct water quality monitoring throughout streams in Hilo Bay watershed
  - Results Indicator: CZM-ORMP award grant for project
  - Status: In Progress, 100% Complete
  - Anticipated Completion Date: Dec -07
  - Budget - Actual: \$11647 Needed: \$5020

Other Partners: Community groups

Agency Work Plan Description & Tasks:

- FY08: Community group (Hilo Bay Watershed Advisory Group) to carry out water quality monitoring project
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: June -08
- FY08-09: Planning Dept. and community group collaborate to secure additional funding for continued and/or expanded monitoring of water quality
  - Results Indicator: CZM-ORMP award grant for project
  - Status: Not started
  - Anticipated Completion Date: 2009
- FY08-09: Community group carry out additional monitoring of water quality
  - Results Indicator: Summary report of monitoring provided to Planning Dept., DOH, and University
  - Status: Not started
  - Anticipated Completion Date: 2009

Division: Planning

Agency Work Plan Description & Tasks:

- FY08-18: Kona CDP Policy ENV-1.4: Privately-Owned Mauka Lands: Identify, inform, and educate affected public agencies to participate in the preparation of the Kona Mauka Watershed Management Plan, developed with financing incentives through the plan.
  - Results Indicator: All public lands mauka of Mamalahoa Hwy identified on the Environmental Resources Map are eligible for ecosystem services incentives including groundwater source protection, property tax credits, grants, and government approval assistance
  - Status: Not started
  - Anticipated Completion Date: 2018
- Kona CDP Policy ENV-1.14: Development of appropriate educational tools for visitors and marketing plan to use them, and conduct educational workshops
  - Results Indicator: Increased education and awareness of residents and visitors regarding preservation of Kona's environment
  - Status: Not started
  - Anticipated Completion Date: TBD

## Management Goal 3.2

Institutionalize integrated natural and cultural resources management.

### Strategic Action 27

Develop legislation and administrative proposals to improve management of natural resources.

**Strategic Action 27a:** Develop the principles for an ahupua'a/moku management framework for the further development and implementation of the ORMP.

#### **AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- OP/CZM has hired a consultant to develop a Place-, Cultural- and Community-Based Framework and Principles. This project is only the first step in OP/CZM's long-term goal to develop and institutionalize an integrated planning approach for the Hawaii CZM Program to assess and manage cumulative and secondary impacts using the traditional Hawaiian ahupua'a/moku concept for purposes of implementing the Ocean Resources Management Plan. The Tetra Tech project will develop the principles for such a framework for the further development and implementation of the ORMP, among other things.
  - Budget: (Same as 25b.Tetra Tech contract above) Tetra Tech contract \$104,311 (NA06, 306/309) Contract expires 2/29/08
  
- FY07-08: Survey and identification of existing moku groups
  - Results Indicator: Statewide moku survey completed; online directory developed
  - Status: In Progress, 90% Complete
  - Anticipated Completion Date: Feb 2008
  - Budget: - Actual: Survey & online directory included in TT contract above
  
- FY07-08: Workshop for survey participants from representative moku and watershed groups on the Place-, Cultural- and Community-Based Framework and Principles (Workshop I)
  - Results Indicator: Workshop(s) convened
  - Status: Not Started
  - Anticipated Completion Date: January 2008
  - Budget: - Actual: Workshop included in TT contract above. Needed: Additional \$2,500 requested (NA06, 306) for Olelo taping and airing of Workshop I.
  
- FY07-08: Publish and copy (about 500) preliminary Place-, Cultural- and Community-Based Framework and Principles; distribute to relevant agencies and to community members at Workshop(s) II for review and comment
  - Results Indicator: Preliminary framework published for review
  - Status: Not Started
  - Anticipated Completion Date: March 2008
  - Budget: - Actual: Report included in TT contract above. Needed: \$2,000 for printing

**Strategic Action 27c:** Advocate for changes to State statutes, State and County rules, or administrative policies that will equip the CZM program entities to incorporate ahupua'a and moku concept into policies.

**AGENCY: County of Hawaii**

Division: County Council, Planning, Dept of Public Works

Agency Work Plan Description & Tasks:

- FY08-12: Puna CDP Objective 2.2.2(B) Amend the grubbing and grading ordinance and/or the zoning code to protect native species, geological and historic features outside of the BRBZ by preventing pin-to-pin lot grading and encroachments and water diversions into adjoining properties. The new regulations should provide standards for the preservation of native vegetation, review and public notice procedures for grading permits, and penalties for violations.
  - Results Indicator: Adoption of regulatory measures, educational programs and incentives to preserve remnants of native ecosystems in Puna subdivisions especially remnants at lower elevations
  - Status: Not Started
  - Anticipated Completion Date: 2012

Division: County Council, Finance, Dept of Public Works

Agency Work Plan Description & Tasks:

- FY08-30: Puna CDP Objective 2.2.3(D) - Provide indirect County support for native vegetation preservation via land conservation trusts by offering real property tax reductions for conservation easements and contributing County land, where appropriate, to a trust for native habitat management
  - Results Indicator: Increased County role in helping to sustain the native forest , primarily through tax incentives, new regulations and changing zoning
  - Status: Not Started
  - Anticipated Completion Date: 2030

**Strategic Action 28**

Monitor and evaluate Ocean Resource Management Plan implementation.

**Strategic Action 28a:** Establish multisectoral ORMP implementation and monitoring group.

**AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- FY07-08: In the summer of 2007, OP/CZM established an ORMP Policy Group and Working Group to coordinate and monitor the implementation and further development of the ORMP.
  - Results Indicator: ORMP Policy Group & Working Group established
  - Status: 100% Complete
  - Comment: These groups will be continuous
  - Anticipated Completion Date: July 2007

**AGENCY: County of Kauai**

Division: Planning, CA

Agency Work Plan Description & Tasks:

- Planning's role in such a group would be through our CZM inspector, planner, and Seagrant position. A regular process of reporting and coordination would have to be established

- Results Indicator: Agencies identified, draft policy, players and roles established, actual assignments and run through
- Status: Not Started
- Budget: - Actual: staff time only

**Strategic Action 28b:** Establish public advisory group to help assess and monitor ahupua'a or moku issues and maintain a dialogue at the community level to learn about each ahupua'a or moku.

**AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- The Marine and Coastal Zone Advocacy Council (MACZAC), OP/CZM's citizens advisory group, formed a moku management working group to monitor and assist OP with all moku-related activities, including the Place-, Cultural- and Community-Based Framework and Principles project and following the status of the Aha Moku Councils. Members will also hold periodic public meetings to gather public input on moku management activities.
- Establish public working group
  - Results Indicator: Public working group on ahupua'a/moku issues established
  - Status: 100% Complete
  - Anticipated Completion Date: Dec 2007
- Public working group to assess, monitor, and maintain a dialogue at the community level about ahupua'a or moku issues
  - Results Indicator: Maintenance of community dialogue on ahupua'a/moku issues
  - Status: In Progress
  - Anticipated Completion Date: ongoing
  - Budget: - Actual: Allocated \$3,000 NA07, 306 for MACZAC's role in Moku Mgmt work

**Strategic Action 28c:** Convene workshop to continue discussion of the integrated planning approach.

**AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- FY07-08: OP will be holding one or more workshops to discuss lessons learned and the "Place-, Cultural- and Community-Based Framework and Principles" developed by our consultant. Community groups and representatives will be invited to participate. The intention is to obtain broad stakeholder input. In addition to ahupua'a, moku, and watershed groups, landowners, business, agriculture, and other interests will be asked to attend. (Workshop II)
  - Results Indicator: Workshop(s) convened
  - Status: Not Started
  - Anticipated Completion Date: June 2008
  - Budget: - Actual: CZM funds allocated for broader public review see 26b. \$49,000 allocated to June 08 workshop(s)



**Strategic Action 28d: Conduct ORMP monitoring and evaluation by multisectoral implementation and monitoring group.**

**AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- FY07-08: In the summer of 2007, OP/CZM established an ORMP Policy Group and Working Group to coordinate and monitor the implementation and further development of the ORMP. The Groups will be reporting on agency implementation status on a continual basis.
- FY07: Establish ORMP Policy and Working Groups
  - Results Indicator: Groups established
  - Status: 100% Complete
  - Anticipated Completion Date: July 2007
  - Budget: - Actual: Staff time only; no \$ needed at this time.
- FY07: Establish implementation priorities
  - Results Indicator: Priorities identified
  - Status: 100% Complete
  - Anticipated Completion Date: March 2008
  - Budget: - Actual: Facilitator contracted. \$13,125.67 NA05, 306
- FY07: Develop results indicators
  - Results Indicator: Results indicators identified
  - Status: In Progress, 90% Complete
  - Anticipated Completion Date: March 2008
  - Budget: - Actual: Utilized facilitator above.
- FY07: Prepare biennial agency work plans for ORMP implementation
  - Results Indicator: Agency work plans complete
  - Status: In Progress, 90% Complete
  - Anticipated Completion Date: March 2008
  - Budget: - Actual: Utilized facilitator above
- FY08: Conduct biennial implementation status reviews of agency work plans, mid-term evaluation on overall ORMP implementation and report on results
  - Results Indicator: ORMP evaluation and report complete
  - Status: Not Started
  - Anticipated Completion Date: June 2009
  - Budget: - Actual: staff time Needed: Printing \$\$
- FY08: Future tasks to be determined by the March 08 Policy Group meeting
  - Results Indicator: TBD
  - Status: Not Started
  - Anticipated Completion Date: TBD
  - Budget: - Needed: Funding for continued facilitation of ORMP Working and Policy Group meetings

**Strategic Action 28e: Adjust strategic actions as needed based on monitoring and evaluation.**

**AGENCY: OP**

Division: CZM

Agency Work Plan Description & Tasks:

- CZM is keeping track of all suggestions from the ORMP Working Group to adjust and better refine the ORMP strategic actions. Suggestions are being continuously tracked until it's time to update the ORMP, which is scheduled for every 5 years.
  - Results Indicator: ORMP Update
  - Status: In Progress
  - Anticipated Completion Date: 2012
  - Budget: - Needed: Staff time only; no \$ needed at this time.