

## V. Phases, Orientations, and Priorities

### ORMP Phasing Approach

The 2006 ORMP charted a new course from previous plans by moving from a sector-based approach implemented by jurisdictional entities to a place-based approach implemented by a broad base of stakeholders. Experiences and lessons learned from each phase were to be documented and inform the next phase. All four phases work towards the long term goal of improving the condition of ocean resources and the coastal zone for future generations. The 2006 ORMP laid out four phases spanning 20 years, as shown in Figure 5-1, with expected outcomes of each phase defined through the year 2030.

Figure 5-1: ORMP Phases and Expected Outcomes



Source: Adapted from 2006 ORMP and Updated

### What Was Accomplished In The First Phase – The Demonstration Phase

The Demonstration Phase from 2006-2012 has ended, and much was learned during this initial phase of the ORMP. This section describes management goals and strategic actions completed and it is organized under the ORMP Three Perspectives to provide a framework for the actions taken. Working to achieve these three perspectives required collaboration among jurisdictional authorities as well as greater involvement by communities. Collaboration and cooperation is a main theme for the Demonstration Phase of the 2006 ORMP. Selected accomplishments from each perspective are discussed in following sections.

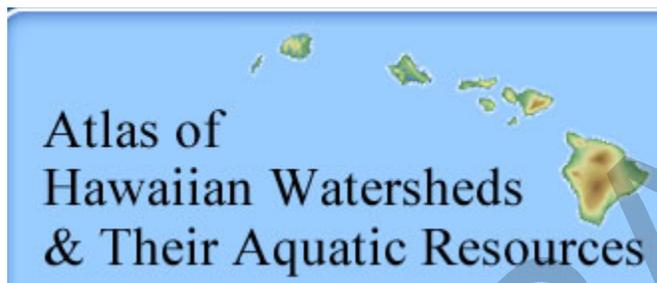
## Accomplishments Under Perspective 1: Connecting Land and Sea

### Watershed Atlas

The *Atlas of Hawaiian Watersheds & Their Aquatic Resources*, using a methodology similar to the *Hawai'i Watershed Management Plan*, defines over 500 watersheds in the State of Hawai'i. Data for 430 of these watersheds is included in the *Atlas*. The 4,500+ page *Atlas* is divided by the islands that have been mapped: Kaua'i, O'ahu, Moloka'i, Maui and Hawai'i. The *Atlas* was written in partnership with the DLNR Division of Aquatic Resources (DAR) and Bishop Museum and is linked to the DAR Aquatic Surveys Database so that it can be updated dynamically as new information becomes available.

**2006 ORMP Management Goals Addressed**  
*Management Goal 1.1 Improve coastal water quality by reducing land-based sources of pollution and restoring natural habitats.*

Strategic Actions that addressed this goal included: identification of priority watersheds, creation of a watershed guidance document, hosting a Watershed Summit, and improved interagency coordination.



The full *Atlas* may be viewed online. This reference is important because it lists land management status, areas of watersheds that are developed, percentages of various flora planted in that watershed, stream ratings, and specific scientific references for each unique area.

### 2009 Watershed Summit

The State of Hawai'i is required under the Federal Coastal Zone Management Act of 1990 to develop and submit to the Environmental Protection Agency (EPA) and National Oceanic and Atmosphere Administration (NOAA) a Coastal Nonpoint Pollution Control Program (CNPCP). At the State level, the Department of Health (DOH) and OP's CZM Program are responsible for developing the state's CNPCP. Hawai'i submitted its first CNPCP for Federal approval in 1996, covering 70 management measures and administrative elements. In 1998, the State received conditional approval of its program, subject to condition on 46 of the management measures and administrative elements that must be met for Hawai'i to receive final approval of its CNPCP.

**2006 ORMP Management Goals Addressed**  
*Management Goal 1.1 Improve coastal water quality by reducing land-based sources of pollution and restoring natural habitats.*

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

Strategic Actions that addressed this goal included: identification of priority watersheds, creation of a watershed guidance document, hosting a Watershed Summit, identification of channelized streams, improvement of water quality monitoring, and improved interagency coordination.

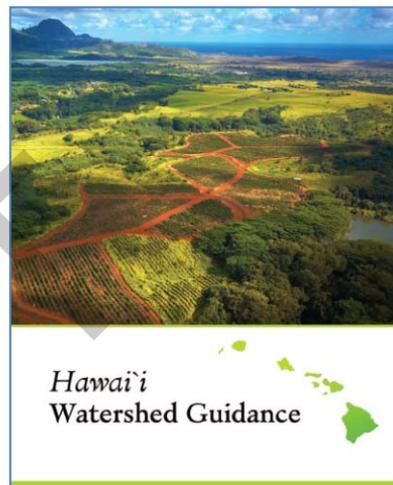
As of 2009, there were 14 management measures or administrative elements that have not received approval from EPA and NOAA. These include management measures for:

- Roads
- Highways

- Bridges
- Watershed Protection
- Hydromodifications (for example, impacts as a result of stream channelization)
- Protection of wetlands and riparian areas
- Multiple urban measures

In June 2009, the Office of Planning hosted a Watershed Summit to discuss the State of Hawaii's CNPCP. The workshop took each of the management measures that needed to be addressed and discussed them. From this workshop came the *Hawaii'i Watershed Guidance* (August 2010). This guidance report is intended to help those who are involved in managing watersheds in the State.

Since the 2009 Watershed Summit and publication of the *Hawaii'i Watershed Guidance*, OP and DOH have continued to work towards obtaining NOAA and EPA approval of the remaining 14 management measures. On March 27, 2012, NOAA and EPA approved management measures for Urban (Watershed Protection and Existing Development, Site Development); Hydromodifications; and Wetlands, Riparian Areas, and Vegetated Treatment Systems. The remaining management measures that require approval are: Urban (New Development, New and Operating Onsite Disposal Systems, and Roads, Highways and Bridges); and Monitoring and Tracking.



Many members of the ORMP Working Group participated in the Watershed Summit. The interagency and intergovernmental cooperation and collaborations were assisted by the partnerships and relationships that have been formed under the ORMP Working Group and Policy Group.

## Accomplishments Under Perspective 2: Preserving Our Ocean Heritage

### 2011 Climate Change Workshop

Climate change adaptation grew in attention and relevance during the Demonstration Phase. When the 2006 ORMP was written, climate change science was an emerging issue, just gaining international attention with many scientists gathering and aggregating data.

Climate change is important to Hawaii's coastal and ocean resources due to the potential for rising sea levels, increased storm surge, erosion of the shoreline, increased temperature of oceans, and increased salinity of oceans.

According to Dr. Chip Fletcher at the University of Hawaii'i School of Ocean, Earth, and Science Technology (UH-SOEST), Hawaii's sea level is expected to rise approximately one foot by 2050 with an acceleration to three feet by 2100. Storm surges and their accompanying erosion are expected to increase up to 60% by the year 2100. And increase in salinity affects coral reefs, causing "coral bleaching."

**2006 ORMP Management Goals Addressed**  
*Management Goal 2.5 Encourage cutting edge and appropriate ocean science and technology with safeguards for ocean resource protection.*

This Management Goal included Strategic Actions to expand ocean science and technology as well as to conduct public education and outreach campaigns, which includes climate change.

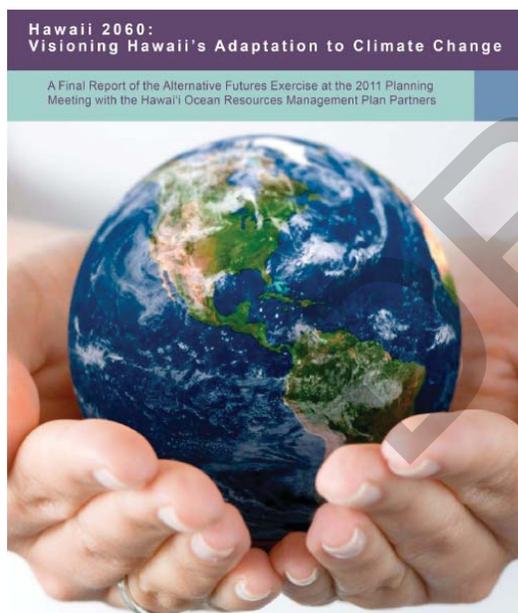
In August 2011, OP-CZM Program, in partnership with the U.S. Army Corps of Engineers (USACE), held a two-day workshop titled, “Visioning Hawaii’s Adaptation to Climate Change.” The list of participants included many of the ORMP Policy Group and Working Group members as well as other partners. The workshop was facilitated and recorded by Jim Dator, PhD, of the University of Hawaii’s Hawaii’i Research Center for Futures Studies and by Donna Ching, PhD, of the Department of Family and Consumer Sciences of the College of Tropical Agriculture and Human Resources.

The purpose of the workshop was to help identify which laws, plans, policies, and actions were needed to address potential impacts of climate change, including sea level rise. The workshop was divided into four groups, and each group discussed a futuristic scenario for the year 2060, framed by a set of questions to prompt discussion on climate change priorities and to deal with personal views of participants on climate change.

Participants identified two strategic issues with accompanying action plans:

- Strategic Issue #1: Educated Public and Political Will, with a goal to influence political will regarding climate change through educational efforts.
- Strategic Issue #2: Integrated Planning and Collaboration, with one goal to have better integration of planning among all agencies and another goal to create a better balance of the built and natural infrastructure to response to the effects of climate change.

The workshop results are documented in a report, *Hawaii’i 2060: Visioning Hawaii’s Adaptation to Climate Change*. As a follow up, a core group of participants volunteered to work with OP to draft climate change policy legislation that became part of the Governor’s 2012 Legislative Packet as SB 2745.



Prior to the 2012 Legislative Session’s opening day, the group worked to arrange a legislative informational briefing on climate change to address Strategic Issue #1.

The climate change adaptation bill, SB 2745, passed the 2012 Legislature and was signed by Governor Neil Abercrombie to become Act 286.

This was a management priority success. The program identified an issue, formed a partnership with a federal agency and various stakeholders, held a workshop, developed an approach, and then was able to affect change to public policy by getting the State Legislature to adopt a bill.

## Accomplishments Under Perspective 3: Promoting Collaboration and Stewardship

The interagency and intergovernmental collaboration achieved in the first five years not only represented a new approach to ocean resources management in Hawai‘i, but it is a collaboration that has led to achievement of many of the management priorities and strategic actions and has helped to strengthen ongoing efforts to manage ocean resources.

### **2006 ORMP Management Goals Addressed**

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

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

Strategic Actions included the development of integrated planning processes and legislative proposals to improve the management of natural resources as well as monitoring ORMP implementation.

## Formation of the ORMP Policy Group and ORMP Working Group for Agency Coordination

The OP-CZM Program formed the ORMP Policy Group and ORMP Working Group in 2007 just after completion of the *2006 ORMP*. The Policy Group consists of the Directors of state and county resource management agencies, the University of Hawai‘i, federal partners, and the Marine Coastal Zone Advocacy Council. The Working group consists of managers and staff of the same offices that are tasked with coordinating their respective agency’s implementation efforts.

Lessons learned during the Demonstration Phase were that the ORMP Policy and Working Groups are an integral part to implementation of the ORMP. The *2006 ORMP* had already been written at the time of the Working Group’s formation, however, the group still needed to go through the process of finding the group’s common goals and working styles in order to perform as a group.

The Policy Group meets approximately twice a year to sanction staff time and resources for the Working Group. The Working Group meets nearly every month. Agency status reports are given and special topical presentations are scheduled as needed. The Working Groups typically has a professional facilitator. Several of its monthly meetings in 2012 were dedicated to input and feedback on the ORMP Update.

There is a fairly frequent turnover of members in the Policy Group due to changeovers in administrations. Therefore, an orientation package was developed to assist members in their duties and roles. The Orientation Packet includes key reference materials:

- Background on the CZM Program;
- Summary of the National CZM Act of 1972;
- Summary of Hawaii’s CZM law (Section 205A, HRS);
- Summary of the *2006 ORMP*;
- Listing of Federal, State, University, County, and community partners;
- Coordination/communication process outlining CZM Staff, Policy Group, and Working Group roles and responsibilities; and
- ORMP implementation projects.

### 2010 Joint ORMP Policy & Working Group Appreciative Inquiry Strategic Planning Session

At the February 2010 ORMP Policy Group meeting, Policy and Working Group members both requested that the Policy Group meet more frequently and increase their engagement with the Working Group. As a result, the OP-CZM Program developed a two-day strategic planning meeting for the Policy Group and the Working Group.

The Joint ORMP Policy & Working Group Appreciative Inquiry Strategic Planning Meeting was held at the Waikiki Beach Marriott in July 2010. A written record was kept of discussions at the meeting. A group memory was taken; aspirations or visions for the future and strategic issues were listed for each breakout group.

Visions for the future included more collaboration, education, and sustainability. Changes or transformations to the process that are necessary to achieve the vision include: education of participants, buy-in, and political will. Root causes of success include: communication, resources, and leadership. Core values included: Stewardship (malama), leadership, and unity expressed with harmony (lokaahi).

#### Mission Statement of the Policy and Working Groups

*“In support of a healthy and thriving ocean for today and future generations, we are committed to adopting integrated approaches to manage our ocean’s resources by: connecting land and sea; preserving our ocean heritage; and promoting collaboration and stewardship.”*

With a mission statement in place, the ORMP Groups brainstormed and prioritized their strengths, identified and prioritized opportunities, imagined a future to work toward, and developed action plans on how to achieve success. This exercise was called SOAR: Strengths, Opportunities, Aspirations and Results.

- Strengths included: partnerships and collaboration, resources, framework/plan itself, people capacity.
- Opportunities included: ocean planning and governance (opportunity for ORMP Policy Group) and purposeful collaboration (opportunity for ORMP Working Group).
- Aspirations included: All members of ORMP work together efficiently, the ORMP has become a living document, and adequate funding exists to implement the plan
- Results included: Action plans to achieve the vision, such as educating the next generation on the ocean through influencing change in standards-based curriculum and developing a Succession Strategy/Plan for the upcoming transition in membership within the ORMP Group.

### ORMP Consolidated Work Plan

The ORMP Working Group developed a two-year 2008 *ORMP Consolidated Work Plan*, which contained 137 activities related to the 2006 *ORMP* Three Perspectives. The Work Plan’s 137 activities were part of the 113 2006 *ORMP* strategic actions, which are in turn the implementation of each of the 2006 *ORMP* 10 Management Goals.

The 2008 *ORMP Consolidated Work Plan* recognized that not all of the 2006 *ORMP* management goals and strategic actions were being implemented in 2008. The 2008 *Work Plan* indicates that 69 out of the 113 *ORMP* strategic actions, or 61%, are currently in some stage of implementation by agency Working Group members. The 2008 *ORMP Consolidated Work Plan* provides a summary listing of the management goals and strategic actions being implemented through 2009 by 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, UH School of Ocean and Earth Science and Technology, and U.S. Coast Guard.

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 Strategic Action Matrix and identified which actions their respective agency were actively implementing or intending to implement between July 2007 to June 2009, which were deferred, and which should be dropped (or added). The intent was for the 2008 *ORMP Consolidated Work Plan* to be updated as needed.

Lessons learned from the 2008 *ORMP Consolidated Work Plan* were that it needed to be simplified, and the number of strategic actions reduced to a manageable and measurable number.

### **Accomplishments under the list of 28 Strategic Actions (from the 2006 ORMP)**

The 2006 *ORMP* contained 10 Management Goals and 28 Strategic Actions. Progress on these were reported in an interim year (2009) and in 2012 as a part of this evaluation and are described below. Even with the large amount of strategic actions, many of these were completed by 2009. A list of the 2006 *ORMP* actions underway in 2012 is included as Appendix B.

#### **For PERSPECTIVE ONE**

SA 1: Reduce soil erosion from upland forest ecosystems and conservation lands.

- In general, work on this strategy is on-going. Agencies have asked for the plan to provide more detail on types of preventive measures and BMP.

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

- PacIOOS operates near shore and some offshore water stations, expansion is underway.

SA 3: Restore and protect wetlands, streams and estuaries.

- The Coastal Non-Point Pollution Control Program has been approved (by NOAA and EPA) for 44 of 50 management areas, including all three for wetlands and riparian areas.
- Watershed Guidance document was prepared and a one-day Watershed Summit held. The Watershed Coordinating Committee was formed.
- Agency training was completed.

SA 4: Develop and implement a comprehensive and integrates shoreline plan for chronic and episodic coastal hazards.

- DLNR has a Coastal Erosion Management Plan and a Small Scale Beach Nourishment Program. But there still needs to be a consistent statewide policy on shoreline erosion, beach loss, and coastal hazards. There are complex jurisdictional issues, and the cost of solutions is high. There is inadequate interagency coordination and lack of problem recognition by the public. Also, DLNR has had staffing problems.
- County of Kaua'i Planning Commission is considering a shoreline setback bill which incorporates coastal erosion data.
- PacIOOS is developing management tools related to coastal hazards, specifically inundation.

- It is recommended that OP-CZM look at coastal hazards when reviewing EA/EISs for federal consistency.
- The Beach Vulnerability Rating Project (OCCL and SOEST) needs funding.
- CZM Program annually trains County Planning Commissioners and planning agency staff on CZM and SMA.
- UH Sea Grant conducts outreach and education and has positions funded on each island.

SA 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.

SA 6: Encourage appropriate coastal dependent development that reduces risks from coastal hazards and protects coastal and cultural resources.

- Erosion based building setbacks are especially difficult in highly developed O‘ahu
- PacIOOS website contains tools for shoreline information and coastal hazards
- Work on a Guidance document on Cumulative and Secondary Impacts (CSI) for stormwater management is in progress (Phase III which is to refine the draft step by step methodology). This will be followed by training.

SA 7: Inspect and maintain sewer collection ecosystems including the detection of leaks.

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

SA 9: Reduce illegal stormwater discharges in the waste water system.

### **For PERSPECTIVE TWO**

SA 10: Minimize the introduction and spread of marine invasive species (AIS) into and throughout archipelagic waters.

- The AIS Team has been formed to respond to the spread of marine invasive species.

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

and

SA 12: Provide appropriate waste management infrastructure to support commercial and recreational marine facilities.

- Wastewater discharge restricted zones, and monitoring and enforcement plan is complete, as is temporary pump out facilities
- Annual user fee increased are in effect from 2010-2015.
- DOT Harbors is considering environmental criteria during harbor planning.

SA 13: Strengthen and expand marine protected area management.

and

SA 14: Develop ecosystem-based approaches for nearshore fisheries management.

- PacIOOS provides data and tools useful for EBM fishing management

SA 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.

- OP, DOH and DLNR are working to streamline fishpond permitting process pursuant to 2012 Senate Resolution 86.
- OP will be submitting a CZM Program Consistency Statement to NOAA in fall 2012.
- A Draft Environmental Assessment (EA) and Programmatic Permit for fishpond restoration will be prepared in 2012-13.

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

SA 17: Enhance the conservation of Hawai‘i’s marine protected species, unique habitats and biological diversity.

SA 18: Enhance and restore existing public shoreline areas and scenic vistas.

- OCCL and the Counties (especially Kaua‘i) continue to be pressed by citizenry and the county has sought grants for coastal storm replenishment and beach nourishment for Poipu Beach and Kukui‘ula Harbor.
- Waikiki Beach sand restoration project is complete
- Interagency agreements for partnerships for Ka‘anapali and other Maui beaches are underway.
- Beach management plans for Kailua and Waikīkī are ongoing and need public and regulatory support to implement.
- *Watershed Guidance* document was prepared and training completed by CZM.
- Coastal land acquisition to preserve beaches in general has not started, although recommendations have been made for priority acquisitions when money is available.

SA 19: Establish new shoreline areas for public and appropriate coastal dependent uses.

- Beach inventories are taking place slowly as part of the County Development Plan process.
- Shoreline Assessment Model (OCCL) is complete, but the Beach Vulnerability Rating project has not started.
- Acquisition priorities have not been established, but public access areas are addressed at the subdivision and SMA level.
- County of Kaua‘i has a six phase shoreline bike path project that provides public access; two phases are already built.

SA 20: Develop community based frameworks and practices for identifying and mitigating ocean recreational use conflicts.

- DLNR study on “Recommended Strategies for Addressing Ocean Recreation User Conflicts” was completed in 2005. Next step is to address the four primary strategies recommended in the study.

SA 21: Promote responsible and sustainable ocean-based tourism.

SA 22: Promote alternative ocean energy sources.

SA 23: Plan and develop sustainable commercial aquaculture in coastal areas and ocean waters to diversify and expand Hawai‘i’s economy and provide locally produced sources of seafood.

- Responsibility has shifted to DOA (no longer DBEDT).
- NOAA Pacific Island Fisheries Science Center and PacIOOS are developing data layers and tools for aquaculture siting.

SA 24: Expand ocean science and technology.

**For PERSPECTIVE THREE:**

SA 25: Develop integrated natural and cultural resources planning process and standardized tools.  
and

SA 26: Build capacity for community participation in natural and cultural resources management.  
and

SA 27: Develop legislative and administrative proposals to improve management of natural resources.

- CZM Program funded a number of demonstration projects that were place-, cultural-, and/or community-based.
- CZM Program developed a Hawai‘i Community Stewardship Directory.
- A number of education and outreach activities were funded and supported.
- The ‘Aha Moku framework shifted to become an advisory council to the Director of DLNR.
- Permit streamlining focused on fishpond permits.
- Mauka-Makai Watch programs continue and are highly successful.

SA 28: Monitor and evaluate Ocean Resource Management Plan implementation.

- Policy Group and Working Group were established in 2007 and have met regularly since then.
- Consolidated Work Plan was prepared for 2007-09.
- Visioning Workshop was held in 2010.
- Five year update of the ORMP began in 2011-12.

## Approach for the Second Phase: Adaptation

It was determined that the full list of activities, while important, contained too many activities for effective and meaningful monitoring. Many activities were simply reported as “Ongoing” or “In Progress.”

For the *Draft 2013 ORMP*, the full list of activities (updated and amended) is shown as Appendix B. While all activities are important to get a complete picture of ocean resource management, activities that will be monitored are those that are listed as Management Priorities for the Adaptation Phase and shown in Chapter VI.

Chapter VI outlines and discusses the Perspectives, Goals, Management Priorities, actions, and metrics that will be the focus of the Adaptation Phase.

Ten Management Priorities in coastal zone management were selected because they met one or more of the following criteria:

1. Present an immediate and urgent threat.
2. Present a long term threat, which can lead to irretrievable harm.
3. Work has been initiated by a government agency that requires several years of effort.
4. Work has been initiated by a community group and place-based progress has been demonstrated.
5. The work could be completed during the Adaptation Phase
6. It fits within one of the nine objectives in the National Ocean Policy (NOP).