

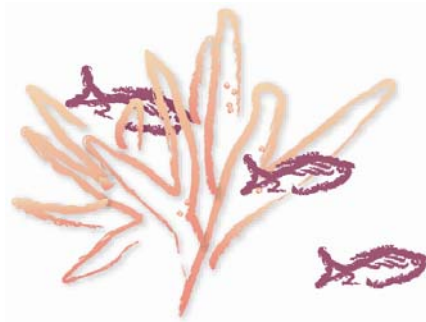


NOAA Coral Reef Conservation Program Roadmap for the Future

A Plan for Developing CRCP Direction Through 2015



July 2008





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I/ Introduction

NOAA's Coral Reef Conservation Program (CRCP) was established in 2000 to help fulfill NOAA's responsibilities under the Coral Reef Conservation Act (CRCA) and Presidential Executive Order 13089 on Coral Reef Protection. The CRCP also complements a variety of other NOAA mandates for science and management action related to coral reef ecosystems including the Magnuson Stevens Fishery Conservation and Management Act (MSA), the Endangered Species Act (ESA), the Marine Mammal Protection Act, the Coastal Zone Management Act, and the National Marine Sanctuaries Act.

The primary goal of the CRCP is to protect, conserve, and restore coral reef resources by maintaining healthy ecosystem function. The CRCP has accomplished much during its first seven years, supporting activities such as ecosystem science, mapping and monitoring, outreach, and management implementation, as well as capacity building to address a broad array of threats to coral reef ecosystems. These accomplishments relied on partnerships with coral reef scientists and managers from all levels of government, the U.S. Coral Reef Task Force, academia, NGOs, and the private sector. However, the threats and their impacts continue to increase and coral reefs continue to deteriorate in many parts of the world. The CRCP is thus looking to build on its successes and better focus its activities to improve its effectiveness in conserving coral reef ecosystems.

Towards this end, the CRCP conducted its first external review in 2007, during which a panel of experts was convened to provide an independent assessment of the CRCP's effectiveness in achieving its mandates and to provide recommendations for improving its impact and performance in the future (<http://www.coralreef.noaa.gov/review.html>). In addition to the review panel's recommendations, there are three other catalysts for change. First, fiscal year (FY) 2008 is the third year of a planned three-year funding cycle, and new investment decisions must be made starting in FY 2009. Second, Kacky Andrews, the new CRCP Program Manager, brings a fresh perspective and has provided her ideas on how to improve the program. Finally, it is anticipated that a reauthorized CRCA will be passed in 2008, which may provide new mandates to be implemented¹. In response to these catalysts, the CRCP is developing a new set

¹ At present time, reauthorization of the CRCA is still pending. Once passed, the reauthorized Act may require the CRCP to make changes not currently included in this roadmap to meet new mandates.



of principles and priorities to better focus its activities and improve the coordination and effectiveness of the program.

This document is a roadmap for the future direction of the CRCP. This roadmap builds upon the foundations established in the National Action Plan to Conserve Coral Reefs (2000), the National Coral Reef Action Strategy (2002), and the NOAA Coral Reef Ecosystem Research Plan, as well as information stemming from triennial reports on The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States. The purpose of this roadmap is to lead the CRCP toward a more focused set of priorities than those set forth in previous guiding documents, as recommended by the external review. The roadmap builds upon the principles and priorities originally proposed by the new Program Manager in her January 4, 2008 memo as a guide in responding to the recommendations of the external review panel.

The roadmap is intended to set the CRCP's future direction for FY 2010-2015 and define a process to align operations with newly articulated principles and priorities. The document lays out the following components:

- 1) the new CRCP principles and priorities,
- 2) national-level responsibilities that the CRCP must address, and
- 3) the processes by which the CRCP will implement the changes suggested.

The discussion of each component of this roadmap is intentionally brief. New inclusive working groups will be formed to develop detailed implementation plans, and feedback will be sought in the development of these plans. It should be recognized that completion of this transformation will likely take several years. However, refocusing the program will entail some changes in the allocation of CRCP resources. This roadmap outlines the near-term actions that will be taken to begin informing funding for FY 2009 and steer funding for FY 2010-2015.

II/ CRCP Principles

The CRCP sets forth the following seven key principles to serve as guidelines for decision-making regarding the program's activities. The principles represent the basic tenets that underlie the program and reflect how the CRCP will operate. They will guide future working groups in the development of implementation plans for changes proposed in this roadmap and they will be used to guide funding decisions.

1. The CRCP will address coral reef management needs based on sound science. Effective coral reef conservation cannot be achieved without a strong link between biophysical and socioeconomic science and management. The CRCP has an important role to play in bridging the existing gaps between collection of scientific information and implementation of on-the-ground action. The CRCP will ensure, through its funding criteria and performance measures, that scientific research and monitoring activities supported or conducted by the CRCP are driven by specific, management goals and needs, that they include plans for translating the information



produced into a form useful to decision makers, and that the products are disseminated in a timely manner. The CRCP will assist the management community to build the capacity to apply this information.

2. The CRCP will take an ecosystem-level approach to coral reef conservation, including human aspects. The CRCP will approach coral reef science and management through an ecosystem-based approach, integrating ecological, social, economic, and cultural goals, recognizing humans as key components of the ecosystem, using an adaptive approach in the face of uncertainties, and developing and maintaining capacity to manage activities that affect coral reefs.

3. The CRCP will implement its objectives through strong partnerships. Conservation of coral reefs comes through management actions; however, the CRCP has limited independent management authority over U.S. coral reefs. Therefore, the CRCP's conservation goal must be achieved by partnering with the management community. **The community of managers includes all Federal, state, territory, and regional entities, local communities, village chiefs, and Fisheries Management Councils (FMC) who have management authority over coral reef resources.** Given that most U.S. coral reefs are within state and territorial waters, a strong partnership among the states and territories and the CRCP is critical to success. Successful coral reef conservation will also require partnerships with other Federal agencies, which the CRCP is well positioned to do through the U.S. Coral Reef Task Force (USCRTF), as the CRCP coordinates NOAA involvement in the USCRTF, serves as the co-chair and is the secretariat for its steering committee. The CRCP can also play an important role as catalyst for coral reef conservation partnerships with Non-Governmental Organizations (NGO), academic institutions, the private sector, and the international coral reef conservation community.

4. Leveraging of non-CRCP resources will be instrumental in achieving program objectives. The CRCP will seek to leverage program dollars to the maximum extent practicable to achieve program objectives. Leverage can be from any number of different sectors, e.g. Federal agencies, other NOAA programs, NGOs, or the private sector. Having programs or partners contribute financial or in-kind resources to a project helps stretch dollars and achieves buy-in for the results. At the same time the CRCP recognizes that not all entities have financial resources to match CRCP funding, and this will be appropriately considered.

5. Measurable objectives will be included and tracked for all CRCP-funded activities. As a Federal government program, the CRCP must be accountable and able to show progress towards its goals. This means both the CRCP and all its partners and funding recipients must be accountable for results within appropriate timeframes. Plans and projects must have a defined set of milestones, deliverables, and performance measures. Principal investigators must provide clear and concise progress reports that include outcomes and recommendations for next steps, and products must be delivered in a timely fashion. The CRCP will work to streamline reporting requirements and reduce duplicative or burdensome requests to the extent possible.



6. Decision-making processes, including those involving spend plans, will be clear and transparent. As both an internal NOAA and external partnership program, the CRCP will set up clear funding decision processes, including schedules, which allow partners an opportunity to provide input and understand how their input was used.

7. Program funding will reflect CRCP priorities. CRCP's priorities will guide how the program funding is allocated for the National Program, Grants Program, and the CRCP's public-private partnership. The priorities establish a narrowed and focused set of activities in order to increase the CRCP's efficacy.

III/ CRCP Priorities

By spreading its resources across the thirteen goals of the National Action Strategy to Conserve Coral Reefs, the CRCP has significantly increased the understanding of coral reef ecosystem processes and threats. However, that breadth of activity has not permitted the program to intensively invest in mitigating or reducing the most serious threats to coral reefs. The final report of the CRCP external review panel strongly recommended the CRCP sharpen its priorities and reconsider the balance of its activities, and CRCP leadership agrees with this recommendation.

The primary objective of the CRCP is to address strategic coral reef management needs in a targeted, cost-effective and efficient manner. To make the most of limited resources and to have the largest impact to reverse the general decline in coral reef health that has occurred over the past several decades, the CRCP will narrow the focus of its national program and shift allocation of CRCP resources to taking on-the-ground and in-the-water action. As previously noted, the CRCP has little independent management authority over US coral reefs. Hence, the CRCP's goal to protect, conserve, and restore coral reef resources must be achieved by partnering with the coral reef management community to address their strategic needs. To accomplish this, the CRCP will place increased emphasis on place-based management and strategic planning. The CRCP will continue to support the Local Action Strategies, but will also place strong emphasis on working collaboratively with the broader management and scientific communities to identify strategic conservation priorities.

The CRCP will work to both narrow its range of activities and address strategic management needs. To accomplish these dual purposes, the program will emphasize efforts on three select threats. Based on guidance from the review panel and the new Program Manager, the urgency to implement changes that result in improved coral reef condition, and the widely recognized understanding of the top three global threats to coral reef ecosystems, **the CRCP will focus efforts on understanding and addressing the following three key priority threats.**



- ***Impacts of Fishing***

Rapid human population growth, emergence and rapid growth of export fisheries, use of more efficient fishery gear, expansion of destructive fishing techniques, and inadequate management and enforcement have led to the depletion of key functional groups of reef species in many locations, with cascading impacts on coral reef habitats and associated species and ecosystems. The CRCP considers fishing pressures as one of the most important threats to coral reefs and will focus more attention and resources on this topic.

In addition to NOAA, the management of coral reef fisheries falls across several groups, including the regional FMCs and Commissions, and other Federal, state, territory, commonwealth, and local agencies. The CRCP can provide relevant technical expertise, financial support, and capacity building to Federal, state, territorial, commonwealth, local, and international entities to reduce the adverse impacts of fishing and increase the sustainable management of coral reef fisheries. The CRCP can also conduct applied scientific and/or socioeconomic research to provide the information necessary for evaluating the impact of various management regimes including marine protected areas (MPA) on coral reef fish populations and/or human coastal communities, protecting fish spawning aggregations, or developing new or improved ecosystem-based fishery management plans. The CRCP will work collaboratively with other NOAA and non-NOAA entities with coral reef fishery management responsibilities to increase its impact in this area.

- ***Impacts of Land-based Sources of Pollution***

Pollution from land-based sources such as coastal runoff, agriculture, coastal development, road construction, and oil and chemical spills affects coral reef ecosystems through increased sedimentation, eutrophication, toxins, and pathogen introduction. These pollutants and related synergist effects can cause disease and mortality in sensitive species, disrupt critical ecological functions, cause trophic structure and dynamics changes, and impede settlement, growth, and reproduction. Land-based sources of pollution and poor water quality are recognized as one of the most important factors driving coral reef decline and as such will be addressed by the CRCP.

Improving the health and function of coral reefs will occur through the management of human activity and behavior within coastal watersheds. Although the CRCP recognizes that the management of watersheds is a complex cross-jurisdictional and multi-agency issue, for the CRCP to improve the condition of coral reefs in the future it is imperative that we increase our efforts in this area. While several Federal agencies, including the U.S. Environmental Protection Agency (EPA) and Department of Agriculture, address land-based sources of pollution as one of their key missions, NOAA will work with its USCRTF partners to develop effective management strategies and seek additional resources to address this issue. NOAA can provide technical expertise, guidance,



training, and funding to coastal zone management and coral reef management programs in areas such as watershed management and the development of appropriate best management practices, as well as assistance determining the greatest land-based sources of pollution threats or conducting targeted research to measure pollutants and contaminants and establish linkages to coral reef degradation. NOAA also consults with the EPA and other Federal agencies regarding water quality standards and other Federal actions related to water quality that affect threatened and endangered species, as required by Section 7 of the ESA, or Essential Fish Habitat (EFH), as required by the MSA.

- ***Impacts of Climate Change***

Climate change threatens coral reef ecosystems through increased mass coral bleaching and disease, sea level rise, and storm activity. Additionally, increasing atmospheric carbon dioxide has already begun to reduce calcification rates in reef-building and reef-associated organisms by altering sea water chemistry through decreases in pH (ocean acidification). Elevated rates of mortality from bleaching and disease, combined with reduced calcification ability, impair the ability of reefs to maintain themselves against erosion and rising sea level. Climate change influences all coral reef resources and must be taken into account when making management decisions. In the long term, failure to address the impacts of rising temperatures and ocean acidification could make many other management efforts futile.

The CRCP recognizes that the impacts of climate change need more focused attention and resources. Other parts of NOAA and other Federal agencies are focused on understanding how the climate is changing, but they do not emphasize either understanding the impacts on coral reefs or actions to alleviate these impacts. The CRCP will leverage resources from other climate efforts to support applied research on ecological, social and economic impacts; develop actions to help corals adapt and to locally mitigate climate changes; develop and implement local management strategies to improve reef resilience; increase public awareness; and better prepare dependent social communities for expected climate change. The development of management strategies will demand improved ecosystem monitoring and modeling of the impacts of climate change and ocean acidification, which the CRCP has the capability to support. Furthermore, NOAA conducts research and provides information to decision-makers regarding the source of the problem, increasing anthropogenic greenhouse gases, through its Climate Program and Climate Observations and Analysis Goal Team, and through interagency mechanisms such as the USCRTF and the Climate Change Science Program. The CRCP will strategically align with these programs to address climate change threats to coral reef ecosystems.

The CRCP recognizes that within particular geographic areas there may be threats other than those emphasized above that are of particular importance. These threats may include, for example, the adverse effects of coastal development, ship groundings, recreational mis-use, or



invasive alien species. The CRCP will work with the appropriate management entities to identify one or two important local threats and take actions concerning those threats as part of our objective to address strategic management needs. However, with limited resources, the program will make funding decisions in adherence with the new CRCP principles in an effort to maximize improvements in coral reef ecosystem health.

IV/ National Responsibilities

The top priority of the CRCP is to strategically address coral reef management needs. As stated in Principle 7, the program funding distribution will reflect the CRCP's priorities. However, as a national program, the CRCP must meet certain responsibilities that relate to coral reef conservation as a whole both domestically and internationally. Such responsibilities include, but are not limited to, providing maps of all U.S. coral reefs appropriate for management and monitoring needs, conducting coral reef biophysical and socioeconomic monitoring and assessments so as to comparably track status and trends over time and geography, and producing a comprehensive national report on the condition of U.S. coral reefs every three years. The CRCP is also responsible for leading a national-level education campaign and outreach initiatives to build awareness and support for coral reef conservation efforts; leading U.S. coordination efforts through the USCRTF; serving as its co-chair and steering committee secretariat, and providing leadership, support and U.S. representation for international coral reef conservation initiatives. These activities will be focused, to the extent possible, on the above three top priority threat areas.

The CRCP also recognizes the importance of efforts to manage and conserve deep-sea coral ecosystems, as mandated by the reauthorized MSA. The CRCP will continue to support deep-sea coral efforts and will address these funding needs separately, through a distinct process with future congressional appropriations targeted for deep-sea coral activities.

V/ Implementing the Program

The CRCP has a number of tools at its disposal to achieve its goal to protect, conserve, and restore coral reef resources. First, the program can offer management support, such as providing training and technical assistance, directly funding implementation actions, and coordinating or facilitating a better link between coral reef science and management. Second, the CRCP can conduct mapping and biophysical and socioeconomic assessments directed toward answering on-the-ground and in-the-water management questions. Third, the program can support both national-level education and outreach campaigns and assist with local-level targeted efforts. Fourth, the program can conduct and fund both biophysical and socioeconomic research directly linked to answering management relevant questions or developing management applications.



The program will use each of these tools, when appropriate, to address strategic coral reef management needs, and understand and address the impacts of the three key priority threats.

While this roadmap is intended to lay out future directions for the program, and not their detailed implementation plans, initial steps are outlined below for how the CRCP will begin bringing its activities and operations in line with the directions proposed.

1. Strategic Planning around Priority Threats

The CRCP will establish working groups, including representatives from various NOAA offices, as well as external partners with the appropriate expertise, to determine objectives and track performance in each of the three priority threat areas. These working groups will help focus the CRCP's activities around these three priority threat areas, including long-term planning, annual spend plans, grants, and partnerships with other Federal agencies, states and territories, NGOs, FMCs, the Coral Reef Institutes, academia and others. Each working group will be charged with providing recommendations for the following:

- Determining a set of outcomes the CRCP should aim to achieve in a given time frame through its investments in each priority area.
- Processing information relevant to local priority management needs, as well as regional and national-level needs, and developing options for achieving goals. This will also require input from multiple sources (NOAA field and headquarters, other Federal agencies, states and territories, NGOs, academic partners, scientists, managers, and stakeholders).
- Providing recommendations for integrated, performance-driven sets of activities that the CRCP should carry out through NOAA offices, through its grant programs, or through partnerships to leverage funds and expertise. These recommendations will be used by the CRCP Staff Evaluation and Assessment Team (SEA), Program Manager, and Senior Management Council (SMC) to inform funding decisions allocations and develop partnerships.
- Identifying performance measures and evaluation criteria for tracking progress towards addressing the threats.

Timeline: Working groups will be established in late FY 2008, and will play a stronger role in developing recommendations and plans for the FY 2010 to FY 2015 period.

2. Identification of Place-based Priority Management Needs

As discussed in Section III, the CRCP will implement steps to identify and address place-based coral reef management needs and seek to direct its NOAA internal funding, grants program, and LAS support towards identified priorities and needs. For the CRCP to effectively complement coral reef management efforts, the Federal, state and territory, and local management community in each jurisdiction will need to articulate a set of strategic priorities. The CRCP will provide assistance and resources to facilitate this assessment and planning process. Specifically, the



CRCP will work with managers to assess their current priorities and their program's capacity, and where needed, provide assistance in strategic planning and program development. Results of these efforts will help inform the CRCP, local entities, and other funding partners about the most effective ways to build capacity, and provide support for successful and productive partnerships to meet conservation targets. For both the identification of priorities and the capacity assessments described below, the CRCP will contract the services of an external team with expertise conducting such studies, as suggested by the review.

- **Identification of local strategic management priorities.** The CRCP will develop processes for defining local priorities that include Federal agencies, state and territory agencies and local communities with responsibilities for conservation and sustainable use of coral reefs and related resources. To achieve this, the CRCP will begin by reviewing existing coral reef plans, strategies, and priorities for each of the jurisdictions, including Local Action Strategies, Fisheries Management Plans, management plans for state and territorial MPAs, National Marine Sanctuaries and Marine National Monuments, the All Islands Committee Strategic Action Plan, and information gathered during the Mapping, Monitoring and Assessment workshops (see below), among others. The CRCP will then hold meetings and interviews with individual managers, NOAA and external scientists, and other relevant stakeholders and experts on specific issues of local concern to gather input on coral reef conservation and management priorities, and facilitate a meeting(s) to develop or more clearly refine existing local strategic coral reef management priorities. The coral reef management community will be encouraged to consider local needs related to social science as well as those related to natural science and governance.
- **Capacity assessments.** The CRCP will perform an assessment of the capacity in each state and territory to implement coral reef management and conservation priorities. The assessments will examine current capacity and identify gaps from a broad perspective, examining issues such as institutional and governance framework, local strategic planning, management, enforcement and evaluation capabilities, as well as needs for staff, leadership training and development, technical assistance, information and data needs, or equipment. This will allow the CRCP to better understand the roles, responsibilities, missions, capabilities and issues for management agencies, NGOs, academia, and other civic organizations. This information will also help CRCP, USCRTF agencies, NGOs, local governments, and others identify how best to assist in improving management capacity.
- **Evaluation.** As a part of setting place-based priorities, the CRCP will need to ensure performance measures are set to track on-the-ground outcomes, measurable quantitatively in terms of real environmental change or alterations in human behavior or attitudes. The CRCP must track investments made to management performance and link evaluations to the design of adaptive management. A process for conducting progress evaluations at each jurisdiction will also be developed as local strategic priorities are identified. This will position the CRCP to assess its performance in meeting benchmarks for capacity building, assess progress towards achieving management objectives, reevaluate and update priorities and needs, and continue informing the direction of CRCP efforts to meet conservation targets.



Timeline: Local priority setting and capacity assessment initiatives will be implemented in two to three jurisdictions per year, beginning in the fall of 2008. All planning and assessments will be completed by the end of FY 2011, at which point the CRCP will begin the process of evaluating progress and updating priorities for each jurisdiction on a rotating basis.

3. Identification of Long-term Monitoring, Mapping, and Data Management Needs

The CRCP's program components of mapping, monitoring and other assessments (e.g. *in situ* instrumentation, satellite monitoring), and associated data dissemination will undergo evaluation and strategic planning processes to ensure they are in line with management needs and CRCP priorities. To achieve these goals, the CRCP will do the following:

- ***Long-term Mapping and Monitoring Plans.*** The CRCP will review and potentially revise long-term plans for CRCP mapping, monitoring and assessment activities in the Pacific and Atlantic/Caribbean regions to ensure they are strategic, cost effective, align with management needs and allow for the timely delivery of required products and services to all essential users. These plans must also ensure balance between CRCP national needs and local jurisdiction needs, and the CRCP's funding constraints.

As part of a strategic planning effort to strengthen the link between science and management goals, the CRCP will bring together coral reef ecosystem managers and scientists, and CRCP management in a pair of workshops. The first workshop, to be held in the fall of 2008, will focus on efforts in the Pacific region, and will be followed by a similar effort focusing on the Atlantic/Caribbean region in 2009. These workshops will ultimately provide guidance for FY 2010 and outyear funding and initiatives.

Specific objectives of the workshops and associated preparatory efforts will include:

- Soliciting from managers their prioritized location-specific needs for mapping, monitoring, and assessment data based on their management goals and objectives.
- Clarifying and clearly articulating CRCP's national program needs as they pertain to mapping and monitoring activities.
- Facilitating a discussion among the managers, NOAA service providers, and CRCP management of the capabilities that exist to meet location-specific and national program needs.
- Exploring the potential trade-offs and compromises that will be necessary to maximize the benefits realized from CRCP's mapping, monitoring, and assessment activities given funding constraints.

Timeline: *Pacific:* Spring/summer 2008 (planning), fall 2008 (workshop), fall 2008/winter 2009 (development of plans). Plans will be completed by spring 2009, to inform the FY 2010 funding decision process. *Atlantic/Caribbean:* Winter 2009 (planning), spring 2009 (workshop), summer/fall 2009 (development of plans). Although a spring workshop will provide information



to begin influencing the FY 2010 funding decision process, final plans will likely not be completed until summer/fall 2009, to inform the FY 2011 funding decision process.

- **Data Management Plan.** The data produced through mapping and monitoring projects is currently disseminated to coral reef managers and other users through a variety of NOAA websites and databases that make this information publicly available. Through its comprehensive assessments of monitoring and mapping needs, gaps and long-term goals, the CRCP will have a better understanding of its future data needs and will address ways to improve data management and dissemination.

Data management planning will take place in conjunction with the Pacific and Atlantic/Caribbean mapping and monitoring planning described above. CRCP will subsequently assess the NOAA Coral Reef Information System (CoRIS) capabilities, gaps, and goals, and investigate interoperability issues with the NOAA Integrated Ocean Observation System (IOOS). CRCP will develop a long-term data management plan which will explore alternative options for an end-to-end system, including data archiving, metadata production, comprehensive dissemination and visualization tools, and decision support tools.

Timeline: Fall 2009/winter 2010 (data system planning), spring 2010 (data planning workshop and development of plan). A comprehensive data management plan will be complete by summer 2010 to inform the FY 2011 budget decision process.

4. International Activities

The CRCP will develop a strategy to increase its participation in international coral reef conservation efforts such as the International Coral Reef Initiative, build and strengthen international partnerships (including those with NGOs and international conventions), and strengthen NOAA leadership in the international context. The future CRCP international portfolio will be aligned with the new direction of the program, including its principles and priorities, and will be held accountable for performance of its projects. Pending reauthorized CRCA language, the CRCP may receive additional appropriations to address international coral reef conservation issues, allowing the program to increase its investments in this area.

Timeline: Evaluation of current international activities and development of options for revising the CRCP's portfolio will begin in Summer 2008.

5. Education and Outreach Activities

The CRCP will identify current investments in education and outreach activities, evaluate their effectiveness, and develop options to improve strategies, campaigns, and products. This process will be channeled in a unified direction with a set of clear, consistent messages to targeted audiences, will focus on the three priority threat areas, and will be directed at two scales: national and jurisdiction-specific. The CRCP will lead the development and implementation of selected



national endeavors and will coordinate with and assist local entities with more targeted efforts. Special consideration will be placed on improving the ability to assess the outcomes and impacts of outreach efforts.

Timeline: Development of CRCP's communications, education, and outreach portfolio will be an ongoing, iterative process. It will begin in the fall of 2008 for analysis and evaluation on the national endeavors.

6. Funding Decision Process

As pointed out by the program review, the current annual and short-term funding basis is inefficient and constrains the effectiveness of many efforts. The CRCP will redefine and restructure the process by which it crafts its spend plans and evaluates its performance.

- A process will be crafted for translating the information provided by the working groups regarding recommended activities for addressing priority threats, the information stemming from workshops and long-term planning for mapping, monitoring and assessment activities, and the identified place-based management priorities and capacity needs for each jurisdiction, into both internal NOAA projects and external grants.
- The reduction in the breadth of program activities combined with clear guidelines regarding program priorities will simplify and streamline the decision making process. Development of a multi-year funding structure that allows for long-term planning within projects will also simplify the spend plan development process, allowing the CRCP to dedicate more effort to the evaluation of outcomes and progress. Projects awarded multi-year funding can expect a more stable funding level than the past year-to-year decisions have provided. The funding decision process will also include a schedule identifying opportunities for input from key partners as appropriate, with a process for subsequent feedback (if requested) on relevant decisions made.
- The CRCP will reorganize the internal decision-making processes to improve efficiency and coordination and provide greater transparency. The respective roles and responsibilities of the SMC, SEA Team and Program Manager will be revised to provide a clearer and more streamlined model.

Timeline: New program priorities and principles, and new internal roles and processes will be implemented in FY 2009 in order to begin informing efforts as of FY 2010. As various elements of this roadmap are implemented, they will feed into and improve the process of spend plan development.

7. External Funding

As CRCP moves forward, the activities carried out under the CRCP Grants Program, including the public-private partnership with the National Fish and Wildlife Foundation, will be aligned



with the new direction of the program, including its principles and priorities. The Grants Program will be used as an integral part of accomplishing CRCP's mission and must complement work done under the other program components. To this end, the current composition and operation of the Grants Program will be reviewed to ensure that it 1) aligns with the future direction of the program, 2) targets priority issues and projects for funding, 3) is accountable through performance measures, and 4) is an efficient mechanism for furthering the mission of the CRCP. Further, we will place emphasis on ensuring that all grants programs become results-oriented, focusing on outcomes and not just outputs. The CRCP will also explore ways to make requirements less burdensome while retaining effective grants management, in conformance with NOAA grants management requirements and procedures.

The CRCP will also review its relationship with the National Coral Reef Institute, the Caribbean Coral Reef Institute, and the Hawaii Coral Reef Initiative Research Program in order to ensure we complement each other's activities and work toward achieving shared goals.

Timeline: Fall 2008 through winter 2009 (proposed changes will be implemented in the spring of 2009, in time for the 2010 grant cycle)

8. Performance Measures

The CRCP will refine the performance and efficiency measures it uses as part of its annual operating plan and Programming, Planning, Budget and Execution System as mandated by legislation to reflect the new program direction and better evaluate overall CRCP performance. In addition, demonstrating progress on performance measures is a critical component of the Program Assessment Rating Tool process, which the CRCP is slated to undergo in the near future. The emphasis will be on outcomes rather than outputs, with the understanding that intermediate results may be appropriate given budget constraints and the time frame necessary to measure changes in a resource. This task will be integrated with development of performance measures and benchmarks for meeting place-based conservation targets as discussed above, as well as for regional and national-level program priorities. The CRCP will look to the performance measurement experiences of other governmental and NGO entities, such as the Conservation Measures Partnership, to develop clear theories of change and logic models to craft and refine performance measures.

Timeline: This effort will be completed by the end of spring 2009. Performance measures will be further refined as the working groups produce recommendations for action for addressing each of the priority threats.

9. U.S. Coral Reef Task Force

Many of the initiatives that the CRCP will have to undertake in order to address issues as complex as climate change and land based sources of pollution will inevitably require NOAA to partner with other Federal agencies if we hope to achieve significant progress. Further, as



secretariat and co-chair to the USCRTF, the CRCP has an essential role to play as catalyst and coordinator for these partnerships. Based on the new directions established here for the future of the program, the CRCP will assess how these priorities align with, and can take greater advantage of, USCRTF existing resources, partnerships and activities.

Timeline: This will be an ongoing effort and will take place in coordination with the strategic planning conducted by the priority threat working groups. As the working groups identify recommended activities to address the priority threats, the CRCP will assess how to best utilize the USCRTF to assist in undertaking those activities.