

# Toward a National System of Marine Protected Areas



A Report by the MPA Federal Advisory Committee  
Recommendations from 2006-2007

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## INTRODUCTION

The Marine Protected Areas Federal Advisory Committee (MPA FAC) was established in 2003 under President Clinton's Executive Order 13158 (26 May 2000), adopted by President Bush in 2001. The MPA FAC comprises 30 federally appointed marine stakeholders from a broad variety of ocean interests, including natural and social science, commercial and recreational fishing, marine conservation and recreation, ocean mining and energy extraction, state and tribal resource management, and others.

The MPA FAC operates on a pro bono basis and has met twice annually (with one exception) since its inaugural meeting in Washington, D.C., in June 2003. Meetings are held at various coastal locations in the United States and its territories, where relevant input from each region is gathered.

The general charge of the MPA FAC is to provide expert advice and recommendations regarding approaches to "(a) strengthen the management, protection, and conservation of existing marine protected areas and establish new or expanded MPAs; (b) develop a scientifically based, comprehensive national system of MPAs representing diverse U.S. marine ecosystems, and the Nation's natural and cultural resources; and (c) avoid causing harm to MPAs through federally conducted, approved, or funded activities" (Executive Order 13158, see Appendix for full text). The specific charge of the MPA FAC is provided by the National MPA Center every year or two, and on occasion, on an ad hoc basis as important issues arise.

The initial set of recommendations produced from the first two years of work by the MPA FAC was entitled *Protecting America's Marine Environment* (June 2005). This and other relevant documents, including the current recommendations, are available on-line at [mpa.gov](http://mpa.gov). This second set of recommendations represents the work of the MPA FAC from April 2006 to October 2007:

- Chapter 2, "Marine Protected Areas: Fundamental Tools for Ecosystem-Based Management," was produced in response to inconsistencies within the federal government regarding the relationship between MPAs and ecosystem approaches to ocean management being developed by NOAA and other agencies.
- Chapter 3, "Management Criteria, Priority Objectives, and Categories for the National System of Marine Protected Areas," addressed questions posed by the National MPA Center regarding the process for developing a National System of MPAs in order to address public comments on the draft *Framework for Developing a National System of Marine Protected Areas*, the MPA Center document that will guide the implementation of the national system.
- Chapter 4, "Process for Determining Which Existing MPA Sites Will Constitute the Initial National System of MPAs," outlines a two-step process for, first, filtering over 1,600 existing Marine Managed Areas in the United States to a set of eligible MPAs, whose managers will be invited to join the National System of MPAs, and second, completing the nomination process, thereby creating the initial National System of MPAs composed of sites already in existence.

- Chapter 5, " Developing Plans for Effective MPA Management: A Model," outlines an ideal management plan for MPAs, with the intention that all U.S. MPAs ultimately operate under well-structured and adaptive plans.
- Chapter 6, "Incentives for Participation in the National System of Marine Protected Areas," addresses in detail the important issue of why the managers of any MPA or MPA system would want to join the National System of MPAs, offering eight explicit recommendations and potential sources of funding for such incentives.
- Chapter 7, "Regional Approaches to Planning and Coordination of Marine Protected Areas," provides how-to guidance regarding cooperative management of MPAs based on ten relevant case studies, which are thoroughly documented.

The MPA FAC sees these recommendations as centrally important for developing an effective and widely accepted national system of MPAs. During 2008, the National MPA Center will complete the *Framework for Developing the National System of Marine Protected Areas*, and the MPA FAC will continue to offer practical recommendations for meaningful implementation.

We wish to acknowledge with gratitude the open-minded, respectful, and consensus-building dialogue that led to unanimous adoption of these recommendations by the MPA FAC. Marine protected areas have been a controversial topic, yet the MPA FAC is showing that controversy can be resolved by a diverse set of ocean stakeholders from a broad variety of perspectives and world views. We find the members of the MPA FAC to be truly inspiring in this regard. We also thank the ex officio members of the MPA FAC, and especially, the staff of the National MPA Center, all of whom have generously supported and greatly facilitated our collective work toward conservation and sustainable use of America's marine resources for present and future generations.

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## **2. MARINE PROTECTED AREAS: FUNDAMENTAL TOOLS FOR ECOSYSTEM-BASED MANAGEMENT**

*Marine Protected Areas (MPA)s and Ecosystem-Based Management (EBM) are both place-based and necessarily involve the spatial protection of marine resources. MPAs have been, are, and will continue to be fundamental tools for an ecosystem-based approach to the management of marine resources.*

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EBM is recognized as a robust approach to spatial management of the marine environment. MPAs are powerful spatial tools that can contribute to the protection of marine natural and cultural resources. The relationship between these concepts requires clarification because each is discussed both in the absence of the other—as if these concepts are unrelated—as well as in terms of the other—as if they are inexorably linked. This document represents the consensus of the Marine Protected Areas Federal Advisory Committee regarding the relationship between EBM and MPAs, a foundational issue in the development of strategies to manage marine resources.

**Place Matters.** The U.S. Commission on Ocean Policy (USCOP) and the Pew Oceans Commission, as well as a large proportion of the marine science community (e.g., the Communication Partnership for Science and the Sea [COMPASS] “Scientific Consensus Statement on Marine Ecosystem-Based Management,” signed by over 200 scientists), believe that management of marine resources in the U.S. Exclusive Economic Zone, including state and territorial waters, would be most effective if implemented explicitly from an ecosystem perspective. NOAA’s Ecosystem Goal Team has succinctly defined an “ecosystem” as “a geographically specified system of organisms, including humans, their environment, and the processes that control their dynamics.” The Team envisions an ecosystem approach that includes identification of “sub-ecoregions and trans-boundary issues that cross ecosystems and political boundaries, including international boundaries.” The Team also proposes a variety of programs, including coral-reef conservation and protection of both habitats and species. Clearly, the common theme emerging from the evolving focus on ecosystem approaches to management is that “place matters.” Thus, these programs are fundamentally place-based and involve the spatially explicit protection of marine resources and habitats.

*Administration Policy.* The President’s response to USCOP, the “U.S. Ocean Action Plan,” states that “the Administration will continue to work towards an ecosystem based approach.” The Plan includes a variety of explicitly place-based protection measures, such as:

- promoting coral-reef and deep-coral conservation, including the newly designated Northwestern Hawaiian Islands Marine National Monument to be managed by NOAA and the Department of the Interior;
- managing traditional and alternative energy development on the outer continental shelf; and
- preserving the places that represent the nation’s maritime heritage.

*What is EBM?* The definition of EBM is also explicitly place-based. Although multiple definitions of EBM exist, for the purposes of this document EBM is defined as follows:

"Ecosystem-based management is an integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the services humans want and need. Ecosystem-based management differs from current approaches that usually focus on a single species, sector, activity or concern; it considers the cumulative impacts of different sectors. Specifically, ecosystem-based management:

- emphasizes the protection of ecosystem structure, functioning, and key processes;
- is place-based in focusing on a specific ecosystem and the range of activities affecting it;
- explicitly accounts for the interconnectedness within systems, recognizing the importance of interactions between many target species or key services and other non-target species;
- acknowledges interconnectedness among systems, such as between air, land and sea; and
- integrates ecological, social, economic, and institutional perspectives, recognizing their strong interdependences." (COMPASS Scientific Consensus Statement on Marine Ecosystem-based Management)

**MPAs and Ecosystem Approaches to Management.** By any definition and from any perspective, an ecosystem-based approach to marine management involves, at a variety of scales, spatially explicit protection of marine resources. This approach is entirely consistent with the definition of MPAs. NOAA's MPA Center defines an MPA as "any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein." The MPA Federal Advisory Committee, representing a broad range of sectors and perspectives, has clarified the meanings of key terms and phrases in this definition in its June 2005 report. Importantly, MPAs are not necessarily fully-protected or "no-take" marine reserves--the range of protection varies widely in accordance with different goals.

NOAA's MPA Center recognizes three general goals of MPAs:

- **"Natural Heritage** -- established and managed principally to sustain the protected area's natural biological communities, habitats, ecosystems and processes, and the ecological services, uses and values they provide to this and future generations.
- **Cultural Heritage** -- established and managed principally to protect, understand and interpret submerged cultural resources that reflect the nation's maritime history and traditional cultural connections to the sea.

- **Sustainable Production** -- established and managed principally to support the continued sustainable extraction of renewable living resources (e.g., fish, shellfish, plants, birds, or mammals) within or outside the MPA by protecting important habitat and spawning, mating or nursery grounds; or providing harvest refugia for by-catch species.”

MPAs, therefore, are ecologically and/or socially significant places in the ocean in which society has decided to manage ecosystem-wide processes, including human activities, to achieve the goals specific to that place. MPAs designed to achieve these natural-heritage, cultural-heritage, and sustainable-production goals can contribute to ecosystem approaches to management, depending on the extent to which they meet the criteria listed in explicit definitions of EBM. Additionally, many existing examples of EBM incorporate MPAs as important tools for the protection of threatened and endangered marine species and habitats (e.g., Biosphere Reserves and the Chesapeake Bay Program) and the management of marine fisheries (e.g., protecting Essential Fish Habitat, moderating bottom-gear impacts, and rebuilding overfished stocks).

**Conclusions.** Like other tools, MPAs face the challenge of becoming more fully integrated under the broader approach of EBM, especially in the context of linking issues involving natural science (population and community ecology of marine organisms) with issues involving social science (socioeconomic and other human components of ecosystems and natural-resource management). Our challenge, as a nation, is to further refine the scientific, social and policy foundations for how we use MPAs, a place-based management tool, in developing ecosystem approaches to ocean conservation and management.

### 3. Management Criteria, Priority Objectives, and Categories for The National System of Marine Protected Areas

#### *Context*

To assist the National Marine Protected Areas Center in preparing the final *Framework for Developing a National System of MPAs*, the Marine Protected Areas Federal Advisory Committee (MPA FAC) was asked to prepare three sets of recommendations:

1. **Management Criteria:** A set of management criteria that could serve as entry criteria for the National System and/or evaluative criteria for determining necessary management improvements to sites that are admitted to the System.
2. **Priority Objectives:** A prioritized list of specific National System conservation objectives, under which existing and new areas would be identified over time, for each of the following MPA purposes: natural heritage, cultural heritage, and sustainable production.
3. **MPA Categories:** A set of user-friendly MPA categories within the National System based on site purpose and type of protection, which would serve to communicate the contribution of sites to the System and to facilitate identification of gaps in the System.

The following recommendations are offered for consideration as the Departments of Commerce and the Interior finalize the *Framework for Developing a National System of Marine Protected Areas*. The final Framework will contain definitions and criteria for MPAs to enter the National System. To encourage transparency and public engagement in developing the National System, the MPA FAC also adopted the following motion:

“The FAC recommends that Department of Commerce, in consultation with the Department of the Interior, publish a compilation of sites that meet (1) the definition of an MPA (including key terms) and (2) the criteria for entry into a national system of MPAs. This compilation should be published in conjunction with the publication of the *Framework for the National System of Marine Protected Areas*.”

## **(1) *Management Criteria***

The MPA FAC recommends that the National System of MPAs:

- addresses the three purposes of the National System (natural heritage, cultural heritage, sustainable production);
- is geographically representative;
- is ecologically representative, including multiple sites to ensure continued representation in the face of harmful impacts;
- represents all levels of governance (federal, state, tribal, local, community);
- demonstrates adaptive management; and
- fosters cooperation and coordination among managing agencies and sites, including overlapping and adjacent sites.

These characteristics would be achieved initially by the following three entry criteria:

- (1) the site meets the federal definition of Marine Protected Area;
- (2) the site meets at least one of the following two criteria:
  - a site-specific management plan, and/or
  - a formal community-based management agreement, whether written or oral; and
- (3) the site is formally nominated by the governing body or bodies responsible for that site.

Additional sites could be evaluated on a case-by-case basis to address gaps in the National System relative to the six recommended characteristics described above. These could include sites that are part of broader programmatic management plans.

All sites in the National System will work toward improved management by including the following, implemented in a manner to support each site's goals and objectives:

- monitoring and assessment;
- compliance and enforcement;
- balanced stakeholder involvement throughout the process;
- active outreach and education; and
- staff on site or dedicated to the site.

## **(2) Priority Objectives**

The MPA FAC was asked to evaluate the following factors when developing, ranking, and grouping conservation objectives:

- **Importance** of the objective, based on the MPA FAC's best judgment (objectives of greater urgency or significance would rank higher than those of lower importance);
- **Availability of existing scientific or other data** necessary to achieve the objective (having readily available data that allow for timely progress would rank higher than requiring additional studies or research); and
- **Effort necessary to achieve the objective** with respect to often limited and fluctuating staffing and funds (ability to complete an objective – nominate existing sites and identify gaps – within 1-3 years is more desirable than longer timeframes).

In discussing these considerations in ad hoc subcommittees, there was often no clear consensus regarding priorities. Many members of the MPA FAC believed that all the identified priority objectives were important. In plenary deliberations, the full Committee decided to adopt "phases" recommended by ad hoc subcommittees, but not to adopt the rankings as part of the Committee's recommendations, even though rankings were used to justify the phases. Ranking of each list was accomplished by each member of an ad hoc subcommittee ranking the priority objectives, then averaging those rankings among members. In all three of the following tables (next page), "**Phase**" refers to the timing and practicality of implementing the listed conservation objectives, phase 1 including objectives that the MPA FAC believes could be implemented first from the perspective of both timing and practicality.

<b>Natural Heritage Objectives:</b>	<b>Phase</b>
Critical habitat of threatened and endangered species	<b>1</b>
Reproduction areas and nursery grounds	<b>1</b>
Biogenic habitat	<b>1</b>
Key areas for migratory species	<b>2</b>
Areas of high species and/or habitat diversity	<b>2</b>
Unique or rare habitats and associated communities	<b>2</b>
Link areas important to life histories (e.g., spawning areas and nursery habitats)	<b>3</b>
Ecologically important geologic features, as well as enduring and recurring oceanographic features	<b>3</b>
Areas that provide compatible opportunities for education and research	<b>3</b>

<b>Cultural Heritage Objectives:</b>	<b>Phase</b>
Cultural and Historic Resources Listed on the National Register of Historic Places (NRHP)	<b>1</b>
Cultural and Historic Resources determined eligible for the NRHP or listed on a State Register	<b>1</b>
Cultural sites that are paramount to a culture's identity and/or survival	<b>1</b>
Cultural and Historic sites that may be threatened	<b>2</b>
Cultural and Historic Sites that can be utilized for heritage tourism	<b>2</b>
Cultural and Historic sites that are under-represented	<b>3</b>

<b>Sustainable Production Objectives:</b>	<b>Phase</b>
Reproduction areas (including areas of high larval production) and nursery grounds	<b>1</b>
Areas important for the conservation of natural age and sex structure of important harvestable species	<b>1</b>
Foraging grounds	<b>2</b>
Reduce bycatch in areas where bycatch has a substantial impact on sustainable fisheries	<b>2</b>
Areas that provide compatible opportunities for education and research	<b>3</b>
Areas that conserve or restore high priority fishing grounds	<b>3</b>

### **(3) *MPA Categories***

A set of MPA categories for use within the National System would help to address concerns regarding the size and scope of the System that have been raised by the MPA FAC and other stakeholders. Such categorization would be beneficial in multiple ways:

- Provides a limited set of user friendly terms for communicating about each National System MPA's purpose and level of protection;
- Partitions the National System into manageably-sized groups of comparable sites to ease identification of shared technical or other assistance;
- Packages sites based on comparable conservation objectives to facilitate identification of gaps in protection; and
- Provides a logical framework for organizing and tracking how sites added to the National System contribute to the System's conservation objectives.

The following page lists the MPA FAC's recommendations regarding this charge.

	<b>MPA Category</b>	<b>Primary Management Goals</b>	<b>Use and Protection</b>
<b>Marine Natural Heritage* Areas</b>	<b>Natural Resource Conservation Areas</b>	Conserve or restore significant marine natural resources (and where appropriate, cultural marine resources), habitats, and processes; and the ecosystem values, services, and uses they provide to present and future generations.	Multiple uses allowed; however, uses and activities may be restricted or zoned, and access limited as necessary to meet site management goals.
	<b>Natural Resource Reserve Areas**</b>	Strongly protect significant marine natural resources (and where appropriate, cultural marine resources), habitats, and processes; and the ecosystem values, services, and uses they provide to present and future generations.	No extractive uses allowed, except permitted scientific uses; destructive or disruptive activities limited; other uses and activities may be restricted or zoned, and access limited, as necessary to meet site management goals.
<b>Marine Sustainable Production* Areas</b>	<b>Sustainable Production Conservation Areas</b>	Achieve the sustainable harvest and/or restoration of marine species and the social, cultural, and economic values and services they provide to present and future generations.	Multiple uses allowed; however, uses and activities may be restricted or zoned, and access limited as necessary to meet site management goals.
	<b>Sustainable Production Reserve Areas**</b>	Strongly protect important biological, geological, or ecosystem features needed to achieve the sustainable harvest and/or restoration of marine species and the social, cultural, and economic values and services they provide to present and future generations.	No extractive uses allowed, except permitted scientific uses; destructive or disruptive activities limited; other uses and activities may be restricted or zoned, and access limited, as necessary to meet site management goals.
<b>Marine Cultural Heritage* Areas</b>	<b>Cultural Resource Conservation Areas</b>	Conserve marine cultural resources (and where appropriate, associated biological resources), and provide compatible spiritual, traditional, scientific, educational, and recreational opportunities and uses.	Multiple uses allowed; however, uses and activities may be restricted or zoned, and access limited as necessary to meet site management goals.
	<b>Cultural Resource Reserve Areas**</b>	Strongly protect cultural resources (and where appropriate, associated biological resources); and provide compatible spiritual, traditional, scientific, educational, and recreational opportunities and uses.	No extractive uses allowed, except permitted scientific uses; destructive or disruptive activities limited; other uses and activities may be restricted or zoned, and access limited, as necessary to meet site management goals.

\* These terms refer to the primary management goal of the MPA, acknowledging that a particular site could address more than one management goal.

\*\* Additional clarification will be needed as to whether areas grouped into these "reserve" categories are zones within a larger area or are free-standing.

#### **4. PROCESS FOR DETERMINING WHICH EXISTING MPA SITES WILL CONSTITUTE THE INITIAL NATIONAL SYSTEM OF MPAs**

A. Process for moving from the set of existing Marine Managed Areas (MMAs) to the set of eligible Marine Protected Areas (MPAs) based on the following criteria:

1. Site meets the definition of an MPA reported in the “Final Framework for Developing the National System of Marine Protected Areas.”
2. Site has a programmatic, site-specific, or community-based management plan or agreement (oral or written).
3. Site meets near-term priority objectives within the general goals of natural heritage, cultural heritage, and/or sustainable production.

Additional sites will be evaluated and may be included to address such issues as: geographic representation; ecological representation, including replication and connectivity; and coordination among managing agencies and sites.

The set of eligible MPAs will be compiled and published in conjunction with the “Final Framework for Developing the National System of Marine Protected Areas”.

B. Process of moving from the set of eligible MPAs to the initial National System of MPAs:

1. Governing entity or entities for eligible sites will receive a letter of invitation including the rationale for eligibility.
2. Governing entity or entities will be requested to make nominations of sites for inclusion in the National System; these nominations may include other sites believed to meet the requirements for entry into the National System.
3. The set of nominated sites will be revisited to determine if additional sites warrant inclusion by the governing entity or entities.
4. The public will be notified in the Federal Register, and by other means, of those sites nominated for inclusion in the National System.
5. Public comment will be received, evaluated, and forwarded to the governing entity or entities which will then reaffirm or withdraw the nomination.
6. Following the receipt and evaluation of public comment and appropriate consultation, the initial List of MPAs comprising the National System will be determined and published in the Federal Register.

## 5. DEVELOPING PLANS FOR EFFECTIVE MPA MANAGEMENT: A MODEL

This document describes the essential elements of an effective management plan for a marine protected area (MPA). The intention of this document is to assist the MPA Center in developing a model management plan. These elements are not eligibility requirements for the entry of an existing MPA into the initial National System of MPAs.

**Recommendation 1.** The management plan should be preceded by a brief statement of the history of the MPA and should include a description of the process involved in developing the management plan.

**Recommendation 2.** The elements of an effective management plan for an MPA should consist of the following:

- 1) Statement of Goals: A goal is a desired outcome. Each goal should be clearly articulated and succinctly stated. In addition, the rationale for each goal should be presented.
- 2) List of Management Objectives: Each goal should consist of one or more specific objectives; objectives speak to the same outcomes as goals, but do so in more specific terms. Each objective will be measurable and the rationale for selecting each objective and its measurement presented.
- 3) List of Management Actions: For each objective, management action(s), including education and enforcement, should be identified to achieve that objective. A rationale should be presented as to why each management action is needed. Management actions will inform work plans, which are more specific and dynamic than the management action.
- 4) Procedures for Determining Effectiveness of Management Actions: Monitoring and evaluation should be performed to determine to what extent a management action is effective in achieving the management objective.
- 5) Procedures for Periodically Reviewing and Updating the Management Plan: A process should be articulated that provides for: a) the review of the management plan, i.e., the objectives and actions, to determine if the management goals are being met, and b) the updating of the management plan to better achieve management goals.

In addition to the above:

1. The Management Plan should address the issues associated with MPA management that affect its efficacy and prospects for achieving its goals and objectives. Examples of issues are: 1) attention to how compliance will be fostered through participation, education and surveillance; 2) how monitoring will be conducted to provide the data necessary to improve the performance of the MPA; and 3) how management can enable an MPA to resist and recover from stress. Guidance on these and other related issues can be found in numerous public documents describing MPA design and management.
2. The management plan will determine the appropriate budget, including staff, for its implementation.
3. Each element of the management plan should be documented and all management activities should be carried out in a manner that ensures transparency and inclusiveness.
4. The management plan should promote effective outreach, education, and communication with constituents to increase awareness of, and encourage compliance with, management goals and objectives.
5. Management plans should have the capacity to allow for opportunistic actions that advance management goals.
6. Management plans are often driven by NEPA or NEPA-like processes, and can become very long and cumbersome. A short, functional version of the final management plan should also be produced to provide an accessible version to the public.

## **6. INCENTIVES FOR PARTICIPATION IN THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS**

### **I. INCENTIVES: KEY TO DEVELOPING THE NATIONAL SYSTEM OF MPAs**

Marine protected areas (MPAs) are a valuable tool for conserving the nation's marine natural and cultural resources, but must be effectively managed and coordinated with other marine management measures to fulfill their potential. Executive Order 13158 calls for a national system of MPAs (hereafter, "national system") to ensure this coordination, to identify key conservation gaps where new or enhanced MPAs may be needed, and to strengthen the scientific foundation for the nation's MPAs.

Over the past three years, the Department of Commerce (DOC) and the Department of the Interior (DOI) have reached-out to future partners and stakeholders regarding the national system to learn more about their perspectives on this initiative. The 2005 report by Marine Protected Areas Federal Advisory Committee (MPA FAC) stated: "There must be incentives for participation and cooperation by government agencies and by existing and future stakeholders."

States are critical partners in the development of the national system, as nearly 80% of the nation's marine managed areas (in number, not area) are managed by states. In comments on the *Draft Framework for Developing the National System of Marine Protected Areas*, states have emphasized the need for incentives for states to participate in the national system.

In commenting on the Draft Framework, the Coastal States Organization noted:

The framework should be amended to better articulate what benefits and incentives states will receive if they choose to participate in developing and implementing the national system of MPAs.... The reasons set forth for why a state should voluntarily participate in the national system of MPAs are inadequate and unpersuasive. No explicit benefits or incentives to states are presented in sufficient detail for states to be able to understand the potential types and amounts of assistance they would receive by participating in the national system.

This report aims to summarize the benefits of the national system, and explores potential incentives to states, territories, tribes, and federal agencies that could greatly enhance the effectiveness of the national system. At present, dedicated funding is not sufficient for the effective implementation of the national system, and necessary monetary and nonmonetary incentives are not in place to realize its benefits to the nation. In addition, the national system is authorized by an Executive Order and lacks legislative authority necessary to ensure its long-term integrity.

The importance of particular incentives will vary among individual sites and regions, so it is important to describe an array of both non-monetary and monetary incentives that will collectively address the diverse needs of sites and regions that comprise the national system.

## II. RECOMMENDATIONS

1. DOC and DOI should make use of a broad suite of monetary and non-monetary incentives to realize the benefits of an effective national system (see Section III).
2. DOC and DOI should develop a range of cost estimates to develop and implement the national system and provide needed incentives (see Section IV).
3. DOC and DOI should seek legislative opportunities to authorize the national system to provide enduring legal authority for the administration and incentives needed for its effective, long-term implementation (see Section VI).
  - For example, a current opportunity might be the administration bill currently being prepared for the Coastal Zone Management Act (CZMA) reauthorization.
4. DOC and DOI should seek the establishment of long-term funding mechanisms to provide resources for the continued development, effective implementation, and operation of the national system. This funding should encompass diverse funding sources, including dedicated funding for the MPA Center as the coordinating body for the national system, and additional funding for national system implementation through partner MPA and other conservation and/or management programs (see Section VIII).
  - For example, DOI and DOC should investigate mechanisms to tap outer continental shelf revenues as a funding source for the national system as part of a more comprehensive approach to coastal and marine funding, such as the ocean trust fund proposal of US Commission on Ocean Policy.
  - The structure of funding for the national system should emulate existing models of federal, state, territorial, and tribal government partnerships that provide incentives. Examples include:
    - the National Estuarine Research Reserve System and the Coastal Management Programs authorized under the Coastal Zone Management Act;
    - the Sportfish Restoration Act (Wallop Breaux); and
    - the Olympic Coast Intergovernmental Policy Council (a tribal/federal/state partnership).
5. DOC and DOI should inform MPA programs and sites of the potential benefits of the national system to the site, which may serve as incentives to

participate. Some of these benefits will flow from investments in the national system (e.g., technical assistance), while others will require little or no new federal investment (e.g., enhanced recognition of site importance) (see Sections III and VI).

6. DOC and DOI should direct their national and regional management, education, and research programs to integrate the goals and objectives of the national system. This enhanced integration creates an incentive to federal, state, territorial and tribal MPA Programs to participate in the national system. DOC and DOI should encourage other federal agencies (e.g., EPA, and U.S. Army Corps of Engineers) to do the same through the Committee on Ocean Policy (see Section III).
7. DOC and DOI should give additional weight to applicants within the national system applying for financial and technical assistance through resource conservation and management programs. Other federal agencies should be encouraged to provide similar consideration to national system sites (see Section V).
8. DOC and DOI should create a visual identity and outreach program for the national system to promote recognition of sites within the national system.

### **III. BENEFITS OF A NATIONAL SYSTEM OF MPAs**

A national system may offer numerous benefits above and beyond the benefits that emanate from the individual sites. The benefits of the system should accrue to the nation as a whole. Benefits are both consumptive and non-consumptive. Non-consumptive benefits are diffuse and extremely difficult to measure in monetary terms. Comparison of these benefits with the costs of creating and managing the system will be challenging.

The following initial list reflects some of the potential benefits from the creation of the national system:

#### **Enhanced Conservation**

**1. Representativeness** – A national system will significantly boost ongoing efforts to preserve the natural and cultural heritage of the United States by guaranteeing that the diverse characteristics of the natural and social environment of the nation’s seas are addressed in a systematic way. Only the representation of all ecosystem or habitat types in all the nation’s marine regions within a single system can ensure that the full complement of biodiversity and valued areas will be protected, preventing the loss of any elements of our natural and cultural heritage.

**2. Source-Sink for Larvae of Marine Resources** – If the sites are properly designed and located, they may function as sources and sinks for larvae of many marine organisms.

Including these sites in the national system highlights this function to the public and especially to consumptive users, such as fishers. It could also stimulate thought about additional source-sink sites. Recognition of such sites could translate into direct economic benefits to fisheries.

**3. Insurance** – Designation to the national system could also serve as insurance to help protect a listed MPA against the harmful effects of other on-site or off-site activities. Through enhanced regional coordination, public awareness, site management capacity, and recognition of these MPAs as important conservation areas, threats can be more effectively identified and addressed.

### **Social and Economic Benefits**

**4. Increased Tourism Revenues** – Creation and announcement of the national system could be an incentive for increased tourism and visitation in some of the areas, as well as an increased in visitation of the areas system-wide.

**5. Enhanced Fishing Opportunities** – One goal of the national system is to support sustainable production. Improved regional coordination and management could lead to more and better fishing opportunities for both commercial and recreational fishermen as a result of species recovery, spillover and seeding effects, habitat protection, conservation of old-growth age structure, reference sites to examine the regional effects of fishing, and better information on access opportunities.

**6. Maintain Coastal Community Identity** – Creation of a national system could foster social stability by helping to maintain cultural heritage and economic viability.

**7. Non-Consumptive Uses** – Creation of a national system could create additional system-wide non-consumptive benefits, such as aesthetic values, existence values, and spiritual values.

### **Recognition, Public Understanding, and Education**

**8. Increased Visibility for Marine Conservation** – A national system will boost marine protection by helping to elevate the profile of marine areas to the level that our cherished national parks occupy in the landscape. Establishment of a system at the national level also recognizes the immense value of our nation's oceans and coasts. Including worthy, but currently little known, sites in the national system could bring increased recognition and visibility to these areas.

**9. Promotion of Cultural Heritage** – Participation in a national system will elevate and enhance the recognition and appreciation of the cultural heritage value of MPA sites.

**10. Enhanced Educational Opportunities** – The creation of the national system will present enhanced opportunities for natural and cultural heritage education and will be a tool for increased public understanding of the importance of marine resources and

conservation efforts. The national system will attract increased public attention to these sites and could be an important educational tool that could increase public interest and understanding of the protection of marine biodiversity, ecological processes, and cultural resources. It would also help clarify current confusion about the nomenclature of MPAs and the differences between them.

**11. Enhanced Research Opportunities** – The national system will provide more opportunities to understand marine ecosystems and human interactions with them under different management regimes.

**12. Shared Publicity** – The public education efforts of the national system may create some savings for the sum of the publicity costs of the individual sites that are included in the national system. There may be overall savings for outreach costs.

**13. Increased Organizational Pride, Political Will, and Recognition of Importance of Effort** – The additional designation of an existing MPA to the national system could enhance organizational pride in the management of that MPA and also enhance the stature of these sites in local communities, as well as national and international communities. This designation can also increase the political willingness to support and invest in MPAs. Designation of protected area sites to other systems (UNESCO World Heritage Sites, Ramsar Wetland sites, National Wilderness System sites, etc.) has had similar results.

#### **Enhanced Coordination and Strategic Direction**

**14. Recognition of the National Objectives for Marine Resource Conservation** – The national system must fulfill certain agreed upon priority objectives. Perhaps the primary objective will be protection of sites that contain economically important species, possess exceptional biodiversity, contain important cultural resources, are important for endangered and threatened species, or are representative of the diversity of the country's marine ecosystems. The process of determination of the priority objectives for the national system is itself a benefit. This will require that managers and the public must engage in debate and reach consensus about the priorities for marine conservation.

**15. Improved Gap Analysis and Planning** – The formation of the national system may help highlight gaps in coverage of MPAs in certain regions. This might result in future planning efforts to create MPAs to fill the existing identified gaps.

**16. Enhanced Inter-Agency Cooperation** – The creation of the national system will be the framework for increased cooperation among the diverse agencies across all levels of government with management authority for the different types of MPAs that comprise the national system. The existence of listed MPAs in the same region should stimulate cooperative efforts in: planning, research and monitoring, sharing of equipment and personnel, enforcement efforts, and educational campaigns.

#### **IV. COSTS OF A NATIONAL SYSTEM OF MPAs**

More information is needed regarding the costs of a fully developed, effective national system of MPAs. It is important to distinguish between the costs needed to support individual MPA sites, and those needed to support the national system. The MPA FAC does not envision that the national system should assume costs currently being borne by individual sites for management, but should provide support to assist sites in participating in the national system. In addition, funding is needed for DOC and DOI to perform the central coordinating role needed to ensure the system's effectiveness. Types of costs associated with the national system include:

- National policy development and coordination
- Regional coordination
- Scientific support
- Technical assistance
- Training
- National System Education and Outreach
- System monitoring and evaluation

An example from smaller system of MPAs – which will likely be a component of the national system -- may be illustrative. The National Marine Sanctuaries Program has been funded at levels of \$33-53 million over the past three years. During this time, approximately 75% of the program's funding has been directed to its 14 sites (including the newly designated Papahānaumokuākea Marine National Monument in Hawai'i), and 25% has been used to support headquarters functions, such as the development of national standards and technical guidance (for functions such as education, enforcement, monitoring, emergency response, permitting, etc.); needs assessments; priorities; and regional coordination.

While the costs of the national system are expected to be significant, as with other investments in natural resource management, it is important to remember the huge costs associated with losing ecosystem services or restoring coastal and marine systems. As the benefits of the national system may be difficult to quantify, it will be particularly important to establish an evaluation process for the national system.

#### **V. MONETARY INCENTIVES FOR THE NATIONAL SYSTEM OF MPAs**

The MPA FAC recognizes that MPA programs and sites will need monetary incentives to function as part of the national system. Monetary incentives may provide a means to develop these capacities. They are particularly important to ensure participation from non-federal partners, as they are not under the authority of Executive Order 13158.

Additionally, monetary incentives may be necessary to ensure participatory processes that engage stakeholders, e.g., community groups, non-government organizations (NGOs), and states in site or regional MPA planning as it relates to inclusion in the

national system. Monetary incentives should be provided strategically to promote the goals of the national MPA system.

Monetary incentives could be allocated in a number of ways to optimize the application of limited resources. Requirements for matching funds would enhance available funding but could result in a skewing of available funding to those states and regions that have more funding available. The result of this approach could be the application of monetary incentives to regions and states with fiscal resources rather as opposed to being applied based on need or degree of fit with regional or national MPA planning efforts.

The distribution of monetary incentives could be based on a number of factors, such as miles of coastline, area of coastal zone, relative importance of specific MPA or regional in national network, or a combination of factors.

Potential uses of monetary incentives may include funds for:

(1) Planning

Monetary incentives could be used to facilitate regional planning processes by local, state or regional entities to identify gaps. Incentives will also be needed to promote MPA site planning in areas identified to fill the gaps.

(2) Stakeholder Engagement

Monetary incentives could be used to promote adequate public participation processes for individual MPA units or regional planning initiatives. This could include stakeholder identification and a stakeholder engagement process. The 2005 report by the MPA FAC stated, “There must be incentives for participation and cooperation by government agencies and by existing and future stakeholders.”

(3) Implementation

Incentives could provide for coordinated work on:

- Site action plans
- Governance planning
- Institutional networking
- Technical / logistical expertise

(4) Enforcement, Monitoring and Evaluation

Monetary incentives could provide for cooperative enforcement of MPAs. The enforcement of MPAs, as with other place based management efforts, can be resource intensive. This type of incentive could be tailored after the Joint Enforcement Agreements (JEA) currently in place between NOAA’s National Marine Fisheries Service (NMFS) and states, where federal funding is provided to state marine fisheries

enforcement agencies to enforce identified federal regulations in conjunction with regular state agency patrols.

Monetary incentives for MPA enforcement need not be limited to state marine fisheries agencies. Tribal enforcement agencies, other federal agencies, and local law enforcement agencies could be considered for law enforcement incentives. Incentives should be made available to any law enforcement agency that is capable and willing to enforce MPA provisions.

Monetary incentives could be used to promote MPA monitoring and evaluation, including participation in the Integrated Ocean Observing System (see 2005 report by the MPA FAC).

## **VI. NON-MONETARY INCENTIVES FOR THE NATIONAL SYSTEM OF MPAs**

Non-monetary incentives are those that do not involve a direct transfer of funds to participating MPA sites and programs, and are an important complement to monetary incentives for the national system. These incentives should be provided by the national system, and they often correspond to the types of costs associated with the national system outlined in Section IV, including:

- ability to participate in and influence national and regional policy development and coordination;
- ability to access scientific support, training, education and other technical assistance;
- access to national system education and outreach materials; and
- linkages to national system monitoring and evaluation.

For example, national system partners would have the opportunity to integrate site capabilities with national and regional initiatives such as the Integrated Ocean Observing System, NOAA's Integrated Ecosystem Assessments, the North American MPA Network with Canada and Mexico, and other management and research efforts.

Although these are non-monetary services to MPA programs and sites participating in the national system, they will nonetheless require resources to develop and deliver.

## **VII. USE OF INCENTIVES IN OTHER PROTECTED AREAS SYSTEMS OR OTHER PROGRAMS**

The United States has several protected areas systems that rely upon a partnership between federal and state agencies. These systems provide incentives to federal and/or state agencies to participate. The following examples, taken from public websites, illustrate the types of incentives provided and the source of funding for the system.

These types of incentives – cost sharing, recognition, technical assistance, leveraging of funds through partnerships – meet needs that have been identified by U.S. MPAs and are essential to building an effective national system.

**National Trails System** is the network of scenic, historic, and recreation trails created by the National Trails System Act of 1968. These trails provide for outdoor recreation needs, promote the enjoyment, appreciation, and preservation of open-air, outdoor areas and historic resources, and encourage public access and citizen involvement. Trails may be federally owned or may be state or private land under a conservation easement. States vary widely in their interest in and support of national trails. Most Federal National Scenic Trails and National Historic Trails have ongoing cooperative agreements with States for the provision of motor tour route signs, law enforcement services, land protection, and other areas of common interest. Some States have dedicated revenue sources for trails and others subsidize trail maintenance because of the proven economic benefits these trails bring the State. Incentives for participation include:

- technical assistance,
- cost share funding for trail projects, and
- recognition.

The largest investment in trail projects since 1992 has come through the Department of Transportation through Federal transportation funding programs. For example, the Transportation Enhancements Program provided well over \$1 billion for bicycle and pedestrian transportation projects (including many transportation trails), and the Recreational Trails Program provided \$200 million for all kinds of recreational trails.

One-third of the Challenge Cost Share Program (CCSP) is earmarked for National Trails System Projects. The purpose of the CCSP is intended to increase participation by qualified partners in the preservation and improvement of National Park Service natural, cultural, and recreational resources and on national trails. A minimum of 50% of cash, goods, or services from non-federal sources is required.

**National Park Service National Heritage Areas (NHS)** are areas designated by Congress and managed by federal, state and local partnerships that focus public and private resources to conserve a landscape and its cultural traditions. NHA initiatives are coordinated by a local entity in partnership with varied stakeholders that work collaboratively on projects that meet the area's stated management plan goals. In addition, while a National Heritage Area designation is permanent, the NPS relationship with and commitments to a NHA vary over time. The National Park Service provides technical assistance as well as financial assistance for a limited number of years following designation. Incentives include:

- limited funding for planning and implementation (no funding for land acquisition);
- leverages funding from other sources;
- preserves local control over landscape;
- technical assistance;
- connections to National Parks and federal agencies in the region;

- recognition / branding (association with NPS); and
- intangibles: local pride in the area, retention of residents.

**National Estuarine Research Reserves System** is a network of protected areas established for long-term research, education and stewardship, and is authorized by the Coastal Zone Management Act (CZMA). This partnership program between NOAA and the coastal states protects more than one million acres of estuarine land and water; offers educational opportunities for students, teachers and the public; and serves as living laboratories for scientists. Sites are managed by the State or university (with input from local partners). NOAA provides funding, guidance and technical assistance to the reserves. Allocations for operations, education, monitoring and research require a federal: state 70:30 match as mandated by the CZMA. Funding for the construction of facilities and acquisition of lands or waters require a federal: state 50:50 match in funds. Incentives include:

- federal funds for operations and construction;
- funds for graduate research fellowships;
- technical assistance; and
- membership as part of a national system of estuarine sites (e.g., system-wide monitoring network, coastal training program).

### **Ramsar Wetlands Convention**

The Convention on Wetlands, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are currently 155 Contracting Parties to the Convention, with 1675 wetland sites, designated for inclusion in the Ramsar List of Wetlands of International Importance. Incentives include:

- small grants fund for developing countries;
- monetary awards to honor contributions of individuals, organizations and governments;
- training and capacity building targeted at Latin America and the Caribbean;
- standard materials to promote World Wetlands Day; and
- recognition as part of an network of internationally important wetland sites.

### **Sport Fish Restoration Fund (Wallop Breaux)**

The Federal Aid in Sport Fish Restoration program is a joint effort between Federal, State, industry, boaters, and anglers to support increased sport fishing and boating opportunities through the collection of excise taxes on fishing equipment, boats, and boat fuel. This program is an exceptional example of a “user pays and user benefits” program (Cycle of Success). Anglers and boaters purchase the license. Industry (manufacturers) pays the excise tax which is deposited in the U.S. Department of Treasury. These funds are administered by the U.S. Fish and Wildlife and the U.S. Coast Guard (Boat Safety only) and apportioned to the State agency for eligible sport fish activities which improves fishing and boating and the anglers and boaters benefit from the work of the State agency.

### **Olympic Coast Intergovernmental Policy Council**

The Olympic Coast Intergovernmental Policy Council (IPC) was formed to provide an effective and efficient forum for communication, exchange of information and policy recommendations regarding the management of the marine resources and activities within the boundaries of the Olympic Coast National Marine Sanctuary (OCNMS). The Policy Council is a forum where sovereigns with regulatory jurisdiction over marine resources and activities within the boundaries of the Olympic Coast ecosystem meet to enhance their communication, policy coordination and resource management strategies. The IPC is designed to build on, enhance and complement existing work, while respecting jurisdictional and management authorities. The IPC is intended to strengthen management partnerships and focus and coordinate work efforts and funding potential to maximize resource protection and management.

## **VIII. POTENTIAL FUNDING FOR NATIONAL SYSTEM OF MPAS**

The following existing programs could be potential sources of funding for the national system if appropriate authorization language was passed by Congress. This list is not intended to be exhaustive, but to indicate some legislation closely aligned with national system goals. For each of these mechanisms, additional funding would be needed so that existing funds are not diverted from existing conservation needs. Another option would be new legislation to authorize and fund the national system, either as a stand-alone bill or as part of a larger new marine management/conservation bill.

### **Coastal Zone Management Act**

This program is administered by NOAA to assist states in implementing and enhancing their approved Coastal Zone Management (CZM) programs. Funds are available for projects in areas such as coastal wetlands management and protection, natural hazards management, public access improvements, reduction of marine debris, assessment of impacts of coastal growth and development, special area management planning, regional management issues, and demonstration projects with potential to improve coastal zone management. CZM was funded at \$71.5 million in FY2006.

MPA funding could be added to existing state grants to minimize administration costs, and funds could potentially be used for federal, state and local MPAs. A different mechanism may be needed for tribal areas, which do not receive CZM funds. The Coastal Zone Management Act is being considered for reauthorization in the current Congress.

### **Land and Water Conservation Fund**

The LWCF is administered by the National Park Service and provides matching grants to States and local governments to support grants to state and local park and recreation areas that guarantee public use in perpetuity. Funding is also used to acquire federal park and refuge lands. Funding for the program comes from Outer Continental shelf (OCS) mineral leasing receipts. From 1965 through the early 1980s, funding for the grants program has averaged approximately \$100 million per year, with a peak of \$369 million

in 1979. However, in the last 25 years, annual appropriations decreased to a low of zero funding in 1982 and 1996-1999. This trend was reversed in FY 2000 with appropriations that ranged from \$140 million in FY 2002 to \$28.3 million in FY 2006. The funding of other high priority federal programs from the LWCF through the appropriations process has resulted in a decrease in funding for state recreation grants in recent years.

The LWCP has been a significant, though not always stable source of funding. However, there is much competition for funding among federal and state conservation programs. In addition, the primary purpose of the LWCP is recreation; not conservation, thereby excluding some MPAs.

### **Magnuson-Stevens Fishery Conservation and Management Act**

The Magnuson-Stevens Act (MSA) is the primary law governing marine fisheries management in United States federal waters. MSA was first enacted in 1976, amended in 1996, and reauthorized in 2007. Most notably, MSA aided in the development of the domestic fishing industry by phasing out foreign fishing. To manage the fisheries and promote conservation, the Act created eight regional fishery management councils. The 1996 amendments focused rebuilding overfished fisheries, protecting essential fish habitat, and reducing bycatch. Major changes in the 2006 reauthorization mandated a hard deadline to end overfishing, increased use of market-based management tools, creation of a national saltwater angler registry, and an emphasis on ecosystem approaches to management. MSA authorizes funding for fisheries management conducted by the Fishery Management Councils and NOAA, including MPAs as a fisheries management tool. Federal MPAs for fisheries management are among the largest in U.S. waters.

### **Marine Protection, Research, and Sanctuaries Act**

The MPRSA includes several marine resource based titles implemented by the U.S. EPA and NOAA, including one of NOAA's MPA programs, the National Marine Sanctuary Program (Title III). Funding for the National Marine Sanctuaries Act was \$33 million in FY06. Authorization and funding for the national system could be added as a new title to the Act.

### **Outer Continental Shelf Lands Act**

The OCSLA defines the OCS as all submerged lands lying seaward of state coastal waters (3 miles offshore) which are under U.S. jurisdiction. Under this Act, the Secretary of the Interior is responsible for the administration of mineral exploration and development of the OCS. The Act empowers the Secretary to grant leases to the highest qualified responsible bidder on the basis of sealed competitive bids and to formulate regulations as necessary to carry out the provisions of the Act. The Act, as amended, provides guidelines for implementing an OCS oil and gas exploration and development program. Since its original enactment in 1953, the OCSLA has been amended several times, most recently as a result of the Energy Policy Act of 2005. Amendments have included, for example, the establishment of an oil spill liability fund and the distribution of a portion of the receipts from the leasing of mineral resources of the OCS to coastal states. The Minerals Management Service collects, accounts for, and disburses mineral

revenues from Federal (including offshore) and American Indian lands, and contributes to the Land and Water Conservation Fund and other special use funds, with Fiscal Year 2004 disbursements of about \$8 billion and more than \$143 billion since 1982.

### **Partnerships for Wildlife Act**

The Act authorizes the Secretary of the Interior to establish a Wildlife Conservation and Appreciation Fund to receive congressional appropriations. Monies from the Fund are made available to states on a matching basis for wildlife conservation and appreciation projects, such as: fish and wildlife species inventories; research on size, range and distribution of species populations; identification of habitats and problems adversely affecting their habitats; actions for the protection of species and establishment of non-consumptive activities. The amount of appropriated federal funds provided by the Fund in a fiscal year for a project may not exceed \$250,000 and is subject to cost-share requirements, with at least one-third of the cost coming from state sources and one-third from private sources. Each project must conform to standards, and be performed by a state agency which does not divert the revenue from activities it regulates for any purpose other than management and conservation of fish and wildlife. The Act authorized up to \$6.25 million per year during FY1999-2003.

### **Coastal Wetlands Planning, Protection and Restoration Act**

The Act provides matching grants to States for the acquisition, restoration, management or enhancement of coastal wetlands. To date, about \$183 million in grant monies have been awarded to 25 coastal States and one U.S. Territory and to acquire, protect or restore over 250,000 acres of coastal wetland ecosystems. Typically, between \$13 million and \$17 million in grants are awarded annually through a nationwide competitive process. Funding for the program comes from excise taxes on fishing equipment and motorboat and small engine fuels.

States provide 50 percent of the total costs of a project. If, however, the State has established and maintains a special fund for acquiring coastal wetlands, other natural areas or opens spaces, the Federal share can be increased to 75 percent. Territories and Commonwealths are not required to share the costs of projects except for Puerto Rico. Grants awarded under the National Coastal Wetlands Conservation Grant Program cannot exceed \$1 million for an individual project.

The Act itself provides that projects will be given priority if they are 1) Consistent with the National Wetlands Priority Conservation Plan; 2) Located in States with dedicated land acquisition programs; 3) Located in maritime forests on coastal barrier islands. Additional ranking factors developed by the Service include giving credit to projects that benefits to threatened and endangered species, promote partnerships, and support conservation and recovery programs.

### **Endangered Species Act**

Section 6 of the ESA authorizes Cooperative Agreements with states for conservation programs for endangered and threatened species. Programs have typically lasted five years. For the U.S. Fish and Wildlife Service in FY 2005, Congress appropriated \$81.6

million; \$32.2 million from the Cooperative Endangered Species Conservation Fund and \$49.4 million from the Land and Water Conservation Fund. These funds could potentially be used for area-based management associated with the protection and restoration of endangered species.

**National Coastal Assessment**

The NCA provides funding to the EPA to conduct a national assessment of different types of coastal waters. EPA provides funding to coastal states through cooperative agreements to conduct monitoring and data synthesis. Funding has recently been cut for this program.

**7. REGIONAL APPROACHES TO PLANNING AND  
COORDINATION  
OF MARINE PROTECTED AREAS:  
Guidance for Enhancing Regional MPA Coordination and Cooperation, and  
Establishing Priorities for Planning and Action**

**I. INTRODUCTION**

A. Purpose:

Executive Order 13158 calls for a National System of MPAs (hereafter, "national system") to support the long-term conservation and management of the nation's cultural and natural marine heritage through the efficient, effective use of marine protected areas (MPAs). In addition, 2005 report by the MPA Federal Advisory Committee (MPA FAC) states that a strong regional planning and implementation process is needed. Regional coordination is a valuable mechanism for important aspects of planning and implementation, including but not limited to sharing information and experiences, creating a common base of ecological knowledge, identifying common priorities and developing collaborative solutions for enhancing MPA stewardship. This work product provides how-to guidance to federal, state, and tribal managers and stakeholders who want to implement regional approaches to MPA coordination, management, and cooperation, based on experiences from case studies considered by the MPA FAC.

B. Methods:

The MPA FAC used a case-study approach and selected ten specific examples of cooperative undertakings that proved to be successful achieving conservation and management goals. The case studies were selected largely from personal knowledge of MPA-FAC members, backed by a series of questionnaires where pertinent. These case studies were selected based on MPA-FAC members' knowledge of successful regional coordination efforts to represent a broad cross-section of regional resource management issues. No effort was made to rank the various case studies. The following case studies were examined:

- All Islands Coral Reef Initiative Coordinating Committee
- Anacostia Watershed Restoration
- Appalachian National Scenic Trail
- Belize Barrier Reef Serial Marine Protected Area Network
- Great Barrier Reef Marine Park
- Great Lakes Shipwreck Preserve System
- Gulf of Mexico Alliance
- South Florida Ecosystem Restoration Project
- Tribes/Western WA Marine Fishery Co-Management
- Wild and Scenic Rivers

The MPA FAC developed the case study questionnaire. The questionnaire was administered in one of the following two ways: (1) respondents received the questionnaire via e-mail, entered their responses, and sent back to the FAC, or (2) a FAC member interviewed the respondent and recorded the information in the questionnaire. Additional information about each case study can be found in the Appendix of this document.

## II. FINDINGS

It was recognized that the responsibility for managing and coordinating regional activities, including marine managed areas, varies by location, specific issues being addressed, and region of the country. Based on the scope of the issues being addressed, some regional efforts may fall under the primary coordination of one or more federal agencies. For other issues, such as those affecting the nearshore coastal region, leadership from state agencies may be appropriate. For other issues in certain regions, tribal governments would be a primary coordinator.

Primary responsibility for leading regional coordination should be identified early in the process, followed by identification of all stakeholders. Once that has been accomplished, the following findings and recommendations, based on successful prior regional planning and coordination efforts, should be considered as to their appropriateness for the regional effort under consideration. The following findings are a condensation of the many lessons learned from the case studies detailed in the Appendix. The MPA FAC has not ranked the findings and recommendations.

A. From the various case studies, regional coordination was used to accomplish the following:

- broaden stakeholder involvement in planning and implementation,
- leverage funding by engaging more agencies and organizations in the effort,
- build a volunteer base to broaden the constituency,
- complete strategic planning by networking affected and interested organizations,
- develop action plans and priorities,
- address ecological connections and threats in a coordinated way,
- implement projects in the real world, and
- share information among broader constituencies and affected organizations.

B. The following are characteristics of effective coordination found in the case studies:

- Clear common interest in improving the effectiveness of MPAs through regional opportunities.
- Clearly recognizing opportunities for coordination and being willing to seize those real opportunities.
- Developing and using a common base of scientific information.

- Mobilization of political will.
- A group/person took initiative, provided leadership, staff, funding, and some level of coordination.
- Willingness to add interested groups and other stakeholders as their interests become apparent, even if it might at first seem to oppose the larger effort.
- Persistence in solving problems, overcoming obstacles, and reaching consensus despite initial opposition and obstacles.
- Reliable and consistent mechanisms are in place for communication – e.g., e-mail, conference calls, and meetings. These mechanisms can be improved through regional cooperation.
- Recognition of need to work within existing authorities rather than waiting for long-term changes in legislation.
- Willingness to adapt to changes in the political, economic, and scientific environment.
- Willingness to recognize and take advantage of opportunities for international cooperation where needed.
- Use of external reviews and studies to objectively evaluate progress and establish the basis for further or alternative action.
- A desire for enhanced cooperation in research and education as a mechanism for engaging more partners, evaluating the right course forward, and building the constituency for that course of action.

C. In addition, the following coordination tools and techniques were identified from the case studies as being important for good coordination:

- A functional and continuously updated website.
- Maps to provide a common basis for planning, analysis, and discussion.
- Regular meetings and conference calls to create continuity of action and to keep all involved informed about current and planned actions.
- Continuity of staff to interact with stakeholders to build the relationships needed for effective negotiation and implementation of plans.
- Negotiation and conflict resolution methods and processes used in a timely, professional and consistent manner.
- Creation of consistent guidance for joint actions that can be applied as problems and opportunities arise or are foreseen.
- Capacity building such that the organization and its partners have sufficient resources to tackle the tasks before it in a competent and consistent way.

### **III. RECOMMENDATIONS FOR MANAGERS AND STAKEHOLDERS PLANNING TO WORK REGIONALLY**

A. Scope and analyze the common goals, benefits, and challenges for working together regionally to achieve the purposes of establishing and managing individual or multiple MPAs:

1. What are the specific problems or opportunities in need of cooperative action?
2. What are the ecological connections among specific areas within the region, and how are those connections important?
3. What science exists for decision making, and is it sufficient for the issues being addressed?
4. What are the overlapping agency authorities and stakeholder interests that may influence outcomes?
5. Who are the essential stakeholders needed to address the issues?
6. How will cooperative action accomplish things that individual agency or program action can not?
7. What are the mutual goals and objectives to accomplish?
8. What are the potential benefits, costs, and drawbacks to cooperation?
9. What existing coordination mechanisms are in place?
10. Can existing coordination mechanisms be used or used more effectively to accomplish the goal rather than creating new mechanisms?
11. Has past coordination been effective in achieving goals or addressing issues?
12. What are the existing uses, issues, and demands already in place on the partners and/or resources? If so, what are the specific implications or problems likely to result from new regional structures or actions?

B. Select the most appropriate type or types of coordination to meet goals for regional cooperation:

1. To enhance coordinated decision-making among and between management agencies, consider models like the Anacostia Watershed Restoration, Gulf of Mexico Alliance, South Florida Ecosystem Restoration, and Tribes/Western Washington Marine Fishery Co-management.
2. To coordinate science-based identification and prioritization of natural and cultural resources for additional protection, consider models like the Belize Barrier Reef Serial Marine Protected Area Network, Great Barrier Reef Marine Park, Great Lakes Shipwreck Preserve System, and Wild and Scenic Rivers.

3. To formalize efforts driven by a citizen or volunteer base, consider models like the Appalachian National Scenic Trail and Great Lakes Shipwreck Preserve System.
4. To increase funding and support from federal agencies, consider models like the All Islands Committee, Great Lakes Shipwreck Preserve System, Gulf of Mexico Alliance, and South Florida Ecosystem Restoration Project.
5. To comply with required coordination or conflict resolution based on court ordered action or congressional mandate, consider models like the All Islands Coral Reef Initiative Coordinating Committee, South Florida Ecosystem Restoration Project, and State of Washington/Tribes Marine Fisheries Co-management.

#### **IV. SUMMARY OF CASE STUDY RESPONSES**

Responses to questions asked for each of the case studies are summarized in the two tables below. Where responses were not received for certain questions, the respective cell in the table was left blank.

In addition, two case studies, *Appalachian National Scenic Trail* and *Tribes/Western Washington Marine Fishery Co-management*, were not conducted in a question and answer and format are not included in these tables, but are included in the full case study description in the Appendix.

##### **Table 1.A.**

- All Islands Coral Reef Initiative Coordinating Committee
- Anacostia Watershed Restoration
- Belize Barrier Reef Serial Marine Protected Area Network
- Great Barrier Reef Marine Park

##### **Table 1.B.**

- Great Lakes Shipwreck Preserve System
- Gulf of Mexico Alliance
- South Florida Ecosystem Restoration Project
- Wild and Scenic Rivers

**TABLE 1.A. SUMMARY OF CASE STUDY RESPONSES**

<b>Question</b>	<b>All Islands Coral Reef Initiative Coordinating Committee</b>	<b>Anacostia Watershed Restoration</b>	<b>Belize Barrier Reef Serial Marine Protected Area Network</b>	<b>Great Barrier Reef Marine Park</b>
1) What are the reasons, purposes, and/or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?	To halt and reverse destruction of coral reef ecosystems.	To restore the Anacostia watershed by 2010.	Protect biodiversity, sustain fisheries, and maintain economic activities such as tourism.	Protects the variety of habitats or “bioregions” and biodiversity.
2) What is the geographic scope of your effort, what was is based on, and why is it defined that way?	The U.S. flag islands of the Pacific and Caribbean are members along with some associated and affiliated members.	176 square miles (which, represents the size of the entire watershed).	7 MPAs with a focus on the barrier reef and atolls. The network also includes a few inshore sites	The marine park covers 2,300 km of coastline and an area of 344,400 km <sup>2</sup> .
3) What types of resources (e.g., fisheries, cultural, corals, etc.) are the focus of your effort?	The focus is broad on coral reef ecosystems.	Forests, resident and migratory fishes, tidal and non- tidal wetlands, and birds.	Coral reefs and coral reef fisheries, seagrasses, mangroves, and some cultural sites are included.	Coral reefs, but also other habitats such as sea grass beds, algal or sponge gardens, and deep ocean trenches.
4) What levels of government entities are involved?	National State	Federal State County	Federal	State Federal Local
5) What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?	The committee meets often by phone and in person at least twice a year.	The AWRC works on a voluntary basis and meets quarterly.	There is no official umbrella organization that coordinates efforts.	Marine Park zoning is the primary management tool.
6) How are NGOs and other stakeholders/users involved?	Local advisory committees or working groups usually include stakeholders.	The NGOs work through AWRC’s citizen arm (AWCAC).	Some management agencies have co-management agreements which give some authority to the local level.	Management and consultation was planned and conducted so that all stakeholders had an opportunity to be involved.

7) How does it relate to historic and/or traditional uses and users?	Each point of contact is responsible for communicating with stakeholders.	Traditional uses were lost through change and environmental abuse.	The reserves are “multiple use” to allow traditional fishing in some zones.	Fishermen were included in the re-zoning program.
8) Are there associated monitoring, research, or evaluation efforts? If yes, what are they?		There monitoring efforts including biological, water chemistry, toxics, and more.	Teams have been trained in monitoring protocols. Many of the MPAs conduct management effectiveness evaluations.	Monitoring programs are underway across a broad range of physical, biological and socio-economic areas.
9) The effort enhanced coordination and cooperation among the agencies and/or partners.	Agree	Strongly Agree	Agree	Agree
10) This effort provided benefits to the region and the larger group of entities that participated	Strongly Agree	Strongly Agree	Agree	Strongly Agree
11) What lessons were learned from your effort? What would you do differently if you were doing it over?		Positively engage all stakeholders.	Partner with fishing cooperatives as co-managers.  Conduct before and after studies.	Use a non-confrontational approach to engage all interested parties.
12) A regional or national system of MPAs would help advance your efforts.	Agree			Strongly Agree.

**TABLE 1.B. SUMMARY OF CASE STUDY RESPONSES**

<b>Question</b>	<b>Great Lakes Shipwreck Preserve System</b>	<b>Gulf of Mexico Alliance</b>	<b>South Florida Restoration</b>	<b>Wild and Scenic Rivers</b>
1) What are the reasons, purposes, and/or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?	Protects submerged cultural resources	Shares science, expertise and financial resources to better protect the health of the Gulf of Mexico.	To coordinate Federal and state agency restoration of the Everglades.	To preserve certain rivers in a free-flowing state to ensure continued use of the river.
2) What is the geographic scope of your effort, what was is based on, and why is it defined that way?	11 state underwater preserves are located in Lakes Michigan, Huron, and Superior, with the National Marine Sanctuary in Lake Huron (448 square nautical miles).	Covers the shoreline of the Gulf of Mexico. A strong effort was made to include Mexican states.	The Greater Everglades ecosystem including the Florida Keys and reef tract.	This is a national program established by federal law.
3) What types of resources (e.g., fisheries, cultural, corals, etc.) are the focus of your effort?	Submerged cultural resources	All issues are covered including the socio-economic aspects	The flow of freshwater from the Upper Kissimmee Basin into Florida Bay.	
4) What levels of government are involved?	State Federal	State Federal	Federal State Local	Federal
5) What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?	There is no formal administration of the effort.	The Management Team and Federal Working Group have bi-weekly conference calls.	The Task Force has an Executive Director and a small staff and meets to address specific topics.	There was no formal umbrella organization that administers the system.
6) How are NGOs and other stakeholders/users involved?	Each preserve is administered by volunteer councils. Thunder Bay has a Sanctuary Advisory Council of stakeholders.	No non-government representatives are on the management team or are actually part of the Alliance.	NGOs and other stakeholders were involved during the drafting of the CERP.	NGO's and other stakeholders have been involved in the studies of additions to the system.

7) How does it relate to historic and/or traditional uses and users?	The traditional use of submerged cultural resources is recreational.	Fishing and shellfishing are addressed.	Traditional users (tribes, fishermen) were involved in CERP planning.	The program does little to change historical or traditional uses.
8) Are there associated monitoring, research, or evaluation efforts? If yes, what are they?	Seasonal mooring buoys are used to protect wreck sites.	Actions call for research and monitoring networks.	There are extensive monitoring efforts.	There are no specific requirements for monitoring, research or evaluation efforts.
9) The effort enhanced coordination and cooperation among the agencies and/or partners.	Agree	Strongly Agree	Agree	Agree
10) This effort provided benefits to the region and the larger group of entities that participated	Strongly Agree	Agree	Agree	Agree
11) What lessons were learned from your effort? What would you do differently if you were doing it over?	Consistent funding is needed. Involve local stakeholders.	Involve a broader range of stakeholders from the outset. Seek greater resources from states.		Clear mandates are helpful.
12) A regional or national system of MPAs would help advance your efforts.	Agree Disagree Neutral *Three surveys were received.		Agree	Neutral

**APPENDIX**  
**Case Studies: Responses from the Field**

Responses are compiled for the following regional efforts:

- Appalachian National Scenic Trail
- Great Lakes Shipwreck Preserve System
- Gulf of Mexico Alliance
- The Belize Barrier Reef Serial Marine Protected Area Network
- Great Barrier Reef Marine Park
- All Islands Coral Reef Initiative Coordinating Committee
- South Florida Restoration
- Anacostia Watershed Restoration
- Wild and Scenic Rivers
- Tribes/Western WA Marine Fishery Co-Management

The questionnaires and other form of response in their entirety are presented below.

Other case studies initially identified but not examined include the following:

- North Pacific FMC effort in the Gulf of Alaska
- Gulf of Maine Council
- World Heritage Sites

Literature utilized to compile case study includes:

1. The Forests and Fish Report - 1999
2. United States National Report - 1992
3. NW Indian Fisheries Commission Congressional Report - 2005

## **Appalachian National Scenic Trail**

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The Appalachian National Scenic Trail is one of the oldest examples of Federal, State, local and volunteer cooperation to accomplish something that no one entity could accomplish alone. It is rather unique in that individual volunteers not only provided the impetus for the trail being built but have continued over more than 80 years to provide the passion, commitment and perseverance to assure the continued maintenance and operation of the trail.

A "super trail" had been talked about in New England hiking circles in the early 1900. A Massachusetts regional planner, Benton MacKaye, in 1921 proposed to preserve the Appalachian crests as a retreat from urban life. Several hiking clubs united behind the idea. The primary responsibility for establishment and maintenance of sections of the trail was undertaken by a number of trail clubs. In 1925 the nonprofit Appalachian Trail Conservancy was formed. The ATC includes a private land trust to acquire and protect lands adjacent to the publicly purchased Trail corridor. The trail was marked in the 1920s and 1930s by volunteer hiking clubs.

Over time the Trail was established as a public footpath that follows more than 2,100 miles of Appalachian Mountain ridgelines between Maine and Georgia. The Clubs plus the U.S. Forest Service and the National Park Service and the Depression-era Civilian Conservation Corps (CCC) combined to open a continuous trail by August 1937. Hurricanes, highway construction, and the demands of World War II undid some of those efforts until 1951 when all sections were finally opened and marked for hikers. The trail is protected along more than 99% of its length by federal or state ownership or rights of way.

When the National Trail Systems Act was passed (Act of October 2, 1968, 16 U.S.C. 1241-1249) it included The Appalachian Trail and the Pacific Crest Trail as the initial components of that System and prescribed the methods and standards by which additional components may be added to the system. The Act specifically required the Secretary of Interior to appoint an Advisory Committee for the Appalachian Trail and the Secretary of Agriculture to establish such a Committee for the Pacific Crest trail. The National Park Service, USDI and the Forest Service, USDA and the states were authorized to expend funds on the trail including lands adjacent to the trail. Three categories of trail were established by the Act: (1) National Scenic Trails, which included the Appalachian Trail and the Pacific Crest Trail, (2) National Recreation Trails and (3) Connecting or side trails. Additional trails have been added to the system over time. Today there are eight National Scenic trails plus 16 National Historical Trails and more than 900 National Recreation Trails. Note that the Trails Act followed the pattern provided by the Wilderness Act of 1964(16 U.S.C 1131-1136) by designating certain initial components of the system and providing a procedure for additions. Unlike the Wilderness Act which is a federal system which includes only federal lands administered by several federal agencies, both the National Trails Act of 1968 and the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271-1287) provide for administration by federal, state and political subdivisions of a state.

In 1984, the Appalachian Trail Conservancy was delegated the day to day responsibility for the trail. So the Trail continues to be a cooperative venture involving hiking clubs, states and two Federal agencies.

Note: A substantial amount of the information on the Appalachian Trail was taken from the publication "Appalachian Trail, National Scenic Trail, Maine to Georgia", published by the National Park service. Additional information on <<http://www.appalachiantrail.org>>

## Great Lakes Shipwreck Preserve System

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The Great Lakes Shipwreck Preserve System is a loose network of state bottomland preserves in Lakes Michigan, Huron, and Superior and the Thunder Bay National Marine Sanctuary. The system seeks to preserve the cultural heritage of the Great Lakes which served as a busy, but dangerous waterway 100 years ago. The shipwrecks on the bottom of the Great Lakes are not only part of the Lakes' history but also a popular tourist attraction. The Network attempts to educate divers and recreational visitors about the value of the shipwrecks and the penalties for disturbing them.

*1) What are the reasons, purpose, and/or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?*

**Response 1:** The State of Michigan established a system of underwater preserves 25 years ago to protect submerged cultural resources, primarily in the form of historic shipwrecks, from commercial exploitation, looting, etc. Today, 11 state underwater preserves exist, including Thunder Bay which was further designated a National Marine Sanctuary in 2000. Another underwater preserve has recently been proposed, with two more on the way.

**Response 2:** Local private preserve groups "manage" the preserves in terms of promotion, occasional placement of mooring buoys, some educational materials – however limited as all volunteers as the State has never appropriated any money towards the program

**Response 3:** A poorly worded question. Not sure what you are asking. If you are asking what I think the driving force behind the efforts should be, then it should be to protect, conserve, and educate the public on the importance of (Wisconsin's) maritime heritage and its historic shipwrecks. It should illustrate how we can learn about the past from shipwrecks, and highlight why everyone should work to conserve shipwrecks rather than using them in an irresponsible manner (i.e. looting, grappling into fragile wrecks, etc). The goal of cooperative efforts should work to achieve the above goals.

*2) What is the geographic scope of your effort, what was it based on, and why is it defined that way?*

**Response 1:** State underwater preserves are located in Lakes Michigan, Huron, and Superior, with the National Marine Sanctuary in Lake Huron (448 square nautical miles).

**Response 2:** 11 bottomlands preserves from southern Lake Michigan to the Keweenaw Peninsula in Lake Superior

**Response 3:** Our geographic scope is all submerged cultural resources within Wisconsin State waters. We are a state agency, charged with the protection of state resources under Wisconsin state statutes.

*3) What types of resources (e.g., fisheries, cultural, corals, etc.) are the focus of your effort?*

**Response 1:** Submerged cultural resources, primarily in the form of historic shipwrecks dating from the early 19<sup>th</sup> century through modern times, are the focus of the preserve system.

**Response 2:** Cultural - shipwrecks

**Response 3:** Our primary focus is nineteenth-century shipwreck, but includes all historic submerged cultural resources, including native watercraft and inundated terrestrial sites.

4) *What agency/government entities are involved?*

**Response 1:** The Michigan Department of History, Arts and Libraries (HAL) Office of the State Archaeologist is the primary manager of state submerged cultural resources. The Department of Environmental Quality and HAL jointly oversee permitting activities. The Department of Natural Resources is the primary law enforcement agency involved with shipwreck cases. The National Oceanic and Atmospheric Administration National Marine Sanctuary Program also jointly manages Thunder Bay with HAL.

**Response 2:** State of Michigan – Department of Environmental Quality

**Response 3:** The Wisconsin Historical Society is charged with general protection, promotion, and education of resources. The Wisconsin Dept. of Natural Resources is charged with enforcement of laws regarding these resources.

5) *What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?*

**Response 1:** (no response)

**Response 2:** See #1 above

**Response 3:** The WI Historical Society and the DNR usually only work together if there is a conflict or need to enforce laws. Recent budget cuts have all but eliminated all submerged cultural resource management, and there is no formal administration of the effort. The WHS has one and a half Limited Term Employees that operate almost entirely from federal grant funds to conduct research and documentation of historic shipwreck sites.

6) *How are NGOs and other stakeholders/users involved?*

**Response 1:** Each of the state underwater preserves are administered by volunteer councils responsibly for fund raising, promotion, tourism, mooring buoy establishment, etc. Thunder Bay also has a volunteer Sanctuary Advisory Council consisting of a diverse group of stakeholders representing their constituents.

**Response 2:** See #1 above

**Response 3:** They participate as research volunteers on shipwreck surveys, as well as maintain state-sponsored mooring buoys on several shipwrecks statewide. Participation of NGOs has diminished proportionally with the decrease in state support of submerged cultural resource management.

7) *How does it relate to historic and/or traditional uses and users?*

**Response 1:** NGOs have no regulatory authority and cannot affect commercial/traditional fishing, etc.

**Response 2:** Unsure of question

**Response 3:** I assume “it” is our effort to manage submerged cultural resources? The traditional use of WI’s submerged cultural resources is recreational in nature and almost entirely centered around scuba diving. Our primary focus is to educate divers on responsible visitation and shipwreck preservation, as well as interpret sites to make visits more meaningful and educational.

8) *Are there associated monitoring, research, or evaluation efforts? If yes, what are they?*

**Response 1:** Seasonal mooring buoys, designed to protect the wreck sites from anchoring damage and provide better diver access, are placed and recovered and the beginning and ending of each summer dive season.

**Response 2:** None – no funds to do so

**Response 3:** One private shipwreck preservation group is working to nominate their new shipwreck discoveries to the National Register of Historic Places, because that is the only firm legal protection we have for historic shipwreck sites.

9) *The effort enhanced coordination and cooperation among the agencies and/or partners.*

a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

b. *List examples of how coordination is working and has not worked.*

**Response 1:** Agree.

**Response 2:** Agree. (no response)

**Response 3:** Agree. Well, when this office was funded and received at least a minor amount of state support, there was a great cooperative effort between state agencies as well as NGOs. As the state allowed its submerged cultural resource management program to wither and die, so too did any cooperative effort. Our primary goal has shifted from resource management to grant writing and research efforts that will win grant awards.

10) *This effort provided benefits to the region and the larger group of entities that participated*

a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

b. *If agree, what benefits to the region and larger group of entities from participating in the umbrella program cooperation (to users, enhanced efficiency, etc.*

**Response 1:** Strongly Agree. Economic development in NE Michigan in and around Thunder Bay, increased tourism, increased used education and programming, increased diver safety.

**Response 2:** Some CZM funds used years ago to purchase some mooring buoys by the state and given to local preserve groups for their use

**Response 3:** Strongly Agree. People became aware of the resources' importance and worked diligently to protect and preserve those resources, and all submerged cultural resources benefited. As people became involved with projects, they took ownership of the shipwrecks and worked even harder. With state cuts in funding and support, participants got the impression that these resources were no longer important, and participation dwindled, as did the feelings of responsibility towards the resource.

11) *What lessons were learned from your effort? What would you do differently if you were doing it over?*

**Response 1:** (no response)

**Response 2:** Need funds to manage the program

**Response 3:** Get local organizations and business involved the efforts to get them to take personal ownership in the resources.

12) *A regional or national system of MPAs would help advance your efforts.*

- a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*
- b. *If help, how? If hinder, why?*

**Response 1:** Agree. A national system facilitates interagency cooperation, provides additional funding and partnership opportunities, increases stakeholder awareness and education, etc.

**Response 2:** Disagree. Michigan needs to make the decision that this is an important program both from a tourism and historical standpoint in order to manage the wrecks for the long term. So far, not important enough to the Legislature to do so.

**Response 3:** Neutral. It would help if the state programs remain funded and active, and if the MPA system actually has tangible benefits at the local level. If the MPA systems only result in more paperwork and forms without tangible benefits (other than a listing on a website or brochure), it will not help and only add to our workload. If the state programs are dissolved and only federal programs remain, the locus of control is removed from the local interests, and local support will dwindle. If state programs remain funded and active, and can receive tangible benefits from the MPA program, it would greatly help our efforts.

13) *Other Comments:*

Response 3: As stated above, the MPA program needs to have tangible benefits at the local level to be successful. I have been asked to attend meetings, fill out many forms, and gather and submit a lot of information, but I do not yet understand how the MPA program will benefit our current efforts. We are already overworked and critically underfunded, so we need to understand how this will benefit us before we can commit a portion of our limited resources to it.

## Gulf of Mexico Alliance

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The Gulf of Mexico Alliance is a coalition created by the Governors of the U.S. Gulf states and two states in Mexico in 2005. The goal of the Alliance is to ensure the lasting health of the Gulf of Mexico through scientific cooperation and resource sharing. A Federal Working Group was created in 2005 to support the work of the Alliance. A Governor's Action Plan for Healthy and Resilient Coasts was produced in 2006 that guides the efforts of the alliance.

1. *What are the reasons, purpose, and or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?*

Alliance grew out of U.S. Oceans Commission and the Federal Action Plan that followed the recommendations of the Commission. The Action Plan cited the Gulf as an example of the need for regional governance. Governor Jeb Bush of Florida played a key role in getting it started. The first meeting was in the spring of '05 at which the governors identified priority issues. Each state took an issue to address and the Federal government agreed to provide staff support.

Becky was not sure why the Alliance was formed at this time except that the Ocean Action Plan provided the suggested and some strong personalities took over from there. Kacky Andrews, then the head of marine programs within the Florida DEP, worked closely with Governor Bush's staff on this idea.

2. *What is the geographic scope of your effort and why is it defined this way?*

Covers the shoreline of the Gulf of Mexico. A strong effort was made to include Mexican states.

3. *What types of resources are involved?*

All issues are covered including the socio-economic aspects of life along the Gulf shoreline.

4. *What agencies/government entities are involved?*

All of the states as represented by a variety of state natural resource and other agencies. 13 Federal agencies are involved with NOAA and the EPA Gulf of Mexico Program in the lead. The Department of Interior Secretary's office is involved as is the Navy.

5. *What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?*

The EPA Gulf of Mexico Program and NOAA staff the Federal Working Group. The Management Team and Federal Working Group have bi-weekly conference calls. Both do planning and marketing. Federal involvement keeps it going, but there is no Federal legislation or executive order authorizing the project. Money is all in kinds services from the Federal government. There is no chair of the management team at this time although Kacky Andrews served as chair before leaving Florida state service.

6. *How are NGOs and other stakeholders involved?*

No non-government representatives are on the management team or are actually part of the Alliance.

7. *How does it relate to traditional uses and users?*

Fishing and shellfishing are addressed. In establishing the Alliance community workshops were held in all the states. All user groups were welcome. Input was used in action plan, but no specific groups were targeted.

8. *Are there associated monitoring, research or evaluation efforts?*

Actions call for research and monitoring networks.

9. *The effort enhanced coordination and cooperation among the agencies and/or partners—*

Strongly agree.

Because of frequent and regular conference calls and meetings. Products have been coordinated. A web site used to develop products. Coordination less effective outside the Alliance itself Coordination broke down following the hurricanes.

10. *This effort provided benefits to the region and the large group of entities that participated.*

Agree.

Provided greater access to Federal agencies and more knowledge about Federal agency programs.

11. *What lessons ere learned from your effort? What would you do differently if you were doing it over?*

Look more broadly at what agencies should be involved like Fisheries Management Councils and state fisheries agencies. Seek greater resources from states. Should involve more governments and government agencies and more user groups.

12. *A regional or national system of MPAs would help advance your efforts—*

Not relate to some issues addressed by the Alliance such as water quality, but could relate to restoration of habitat. Theoretically Governors' Alliance could screen MPA proposals, but politically this might not work.

## **The Belize Barrier Reef Serial Marine Protected Area Network**

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The Belize Barrier Reef Serial Marine Protected Area Network is a collection of MPAs managed by Belize and 7 MPAs which make up the Belize Barrier Reef Reserve System World Heritage Site. Belize manages MPAs through the Fisheries and Forest Departments. The World Heritage Site is managed by a subcommittee of the Belize Barrier Reef Committee.

Questionnaire completed by: Janet Gibson, Coordinator, Belize Marine Program, Wildlife Conservation Society BELIZE (Tel: 501-223-3271; Email: jgibson@btl.net)

- 1) *What are the reasons, purpose, and/or driving force behind the Belize Barrier Reef serial MPA network? What is the goal of the cooperation of multiple entities under the one umbrella?*
  - The main reason is the protection of marine biodiversity, given that the Belize Barrier Reef is the longest in the Western Hemisphere.
  - Another purpose is protection that will result in sustaining fisheries and other economic activities such as tourism.
  - Several management authorities and NGO co-managers co-operate to ensure the protection of the system as a whole.
  
- 2) *What is the geographic scope of the Belize Barrier Reef MPA network, what was it based on, and why is it defined that way?*
  - The original scope was to include representative coral reef habitats. The network therefore includes protected areas that are located within the northern, central and southern regions of the reef, each of which has specific characteristics, as well as sites on two of the three outer atolls. It has been long recognized that a big gap in the system was the lack of a site on the third atoll, Turneffe Islands.
  - The present Belize Barrier Reef Reserve System World Heritage Site is a subset of the network, and includes 7 MPAs.
  - Although the original focus was the barrier reef and atolls, the network also includes a few inshore sites, recognizing the importance of the connectivity between habitats and the land/sea interface.
  - Recently, as part of the gap analysis conducted under the National Protected Area Policy and System Plan (NPAPSP) project in which representation of habitats was assessed, the gaps noted were the need for sites in Turneffe, deep-water areas, coastal lagoon sites. The present system, however, was viewed as very representative if these additional areas were added.
  
- 3) *What types of resources (e.g., fisheries, cultural, corals, etc.) are the focus of the Belize Barrier Reef MPA network?*
  - The main focus as mentioned earlier has been coral reefs and coral reef fisheries.
  - However, the need to include other linked habitats such as seagrasses and mangroves is also recognized and these are included to some extent within the system.
  - Some cultural sites are included – historic lighthouses, Mayan sites, shipwrecks – but these have not been a main focus of the program. The Archaeological Dept. is responsible for this aspect.
  
- 4) *What agency/government entities are involved?*
  - The MPAs are established under 2 main pieces of legislation – the Fisheries Act and the National Parks System Act.

- The first is administered by the Fisheries Dept, who declares marine reserves.
  - The second is administered by the Forest Dept. who establishes national parks, wildlife sanctuaries, and natural monuments.
  - The Archaeological Dept can also establish protected ancient monuments, etc.
- 5) *What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?*
- Informally, where 2 MPAs are adjacent to each other, the Fisheries Dept. has taken the lead and manages them as a unit.
  - The World Heritage Site matters are also managed through a national entity, the Belize Barrier Reef Committee that has a sub-committee that deals with the WHS.
  - However, there is no official umbrella organization that coordinates efforts and this has been recognized as a weakness.
  - The NPAPSP program has recommended that a national commission be formed to fulfill this role, not just for MPAs but for PAs in the country. I believe that the Minister of Natural Resources is expected to establish this Commission shortly.
- 6) *How are NGOs and other stakeholders/users involved?*
- For many of the MPAs, the management agency (Fisheries or Forest Dept.) has a co-management agreement for management of the respective MPA. This has been the case for many years and is viewed as one of the strengths of the system, devolving authority to the local level.
  - The level of authority devolved, however, differs according to each agreement, depending on the capacity of the NGO.
  - Presently these agreements are made on an ad hoc basis, and there is no legislation governing them. Again, under the NPAPSP, there are plans to strengthen and standardize these co-operative agreements, putting them on a legal footing.
- 7) *How does the Belize Barrier Reef MPA network relate to historic and/or traditional uses and users?*
- The main traditional users are fishermen. The MPAs have been established with varying levels of consultation with fishermen and the fishing co-operatives. The marine reserves are zoned for multiple use, allowing traditional fishing in certain zones.
- 8) *Are there associated monitoring, research, or evaluation efforts? If yes, what are they?*
- Many efforts have been taken to incorporate the results of research in reserve design and management. For instance, the research conducted at Wildlife Conservation Society's research station on Glover's Reef has been instrumental in influencing reserve design on that Atoll and led to a large extent to the protection of 11 spawning aggregation sites.
  - Many organizations have also been involved in monitoring activities – e.g. WCS, WWF, TNC have been involved in training of reserve management teams in various monitoring protocols.
  - The Mesoamerican Barrier Reef System project has also been very much involved in training and capacity building in monitoring and evaluation.
  - Many of the MPAs have been participating in management effectiveness evaluations.
- 9) *The establishment and management of the Belize Barrier Reef MPA network has resulted in enhanced coordination and cooperation among the agencies and/or partners.*
- a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

b. *List examples of how coordination is working and has not worked.*

As mentioned earlier, coordination is very loose and on an unofficial basis. It is hoped that with the establishment of the PA Commission, this will be improved. An MPA Working Group had been formed to try to improve coordination amongst sites, but this has not met on a regular basis.

10) *The establishment and management of the Belize Barrier Reef MPA network provided benefits to the region and the larger group of entities that participated*

a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

b. *If agree, what benefits to the region and larger group of entities from participating in the umbrella program cooperation (to users, enhanced efficiency, etc.*

- I believe that it has enhanced fisheries production and has certainly been beneficial to tourism.
- The MBRS project has also helped to strengthen ties with the other countries in the region that are part of the wider system.

11) *What lessons have been learned from establishing and managing the Belize Barrier Reef MPA network? What would you do differently if you were doing it over?*

- The system could have been stronger if it included more representation of inshore habitats from the outset.
- Getting more buy in from the fishing cooperatives as co-managers.
- Doing more socioeconomic studies so that data were available to document benefits more clearly.
- Conducting ‘before’ and ‘after’ studies so that changes were documented clearly.
- Establishing a larger percentage of ‘no take’ or fully protected zones.

12) *Would the inclusion of the Belize Barrier Reef MPA network in a larger regional or national system of MPAs help advance your efforts?*

a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

b. *If yes, how? If no, why?*

- The Belize system is part of the regional system that extends into Mexico.
- It would be good to have more joint management of the two transboundary sites on the border with Mexico.
- Many impacts – mainly from run-off of major watersheds – to the system occur from neighbouring countries. Thus management must include integrated efforts with the upland areas.

## Great Barrier Reef Marine Park

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Created in 1975, the Great Barrier Reef Marine Park aims to provide protection, use, and development of the Great Barrier Reef for current and future generations. The Great Barrier Reef Marine Park Authority is the main body in charge of developing management and zoning plans, monitoring environmental impacts, and educating users. The Authority is a small body whose members represent the community, indigenous peoples, and government.

1) *What are the reasons, purpose, and/or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?*

The Re-zoning of the Great Barrier Reef Marine Park was undertaken to protect the variety of habitats or “bioregions” within the park. Conserving biodiversity is the goal.

Less than 5% of the Marine Park was in [Green Zones](#) ('no-take' areas) that prohibit extractive uses like fishing and collecting. An analysis of the existing level of no-take areas within [reef](#) and [non-reef](#) bioregions found this was not enough to adequately protect the biodiversity of the GBRWHA.

2) *What is the geographic scope of your effort, what was it based on, and why is it defined that way?*

The Great Barrier Reef stretches more than 2,300km along the northeast coast of Australia from the northern tip of Queensland to just north of Bundaberg. It extends from the low water mark on the coast of Queensland out past the edge of the continental shelf. The marine park covers 2,300 km of coastline and an area of 344,400 km<sup>2</sup>.

3) *What types of resources (e.g., fisheries, cultural, corals, etc.) are the focus of your effort?*

Coral reefs, but also other habitats such as seagrass beds, algal or sponge gardens, sandy or muddy seabed communities, and deep ocean trenches.

4) *What agency/government entities are involved?*

Great Barrier Reef Marine Park Authority (GBRMPA) is the lead agency responsible for the protection and wise use of the GBRMP. The GBRMPA is the principal adviser to the Commonwealth Government. However, many other government agencies and non-government organizations participate in the management of the Marine Park. For example, all Federal Police and some Queensland Water Police are Marine Park Inspectors. Listed here are some of the government agencies that collaborate closely with the Authority.

- GBRMPA
- Great Barrier Reef Ministerial Council
- Commonwealth Government Agencies
- Queensland Government Agencies
- Consultation and Community Involvement

5) *What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?*

One of the primary tools for managing use and protecting the marine habitats and species within the GBRMP, as specified by the Great Barrier Reef Marine Park Act 1975, is zoning. Zoning plans are the

product of conciliation and compromise to arrive at the best environmental outcomes that provide for ecologically sustainable use. Marine Park zoning is not dissimilar to planning schemes prepared for local government areas. Zoning separates activities that may conflict with each other, such as commercial fishing and tourism. Zoning also allows areas that need permanent high-level protection by being generally placed 'off limits' to users to minimize exposure to potentially threatening processes. Each 'zone' specifies which activities can or cannot be undertaken and whether or not permission is required to undertake those activities.

6) *How are NGOs and other stakeholders/users involved?*

Management and consultation was planned and conducted so that all stakeholders had an opportunity to be involved. The GBRMPA undertook intensive community information programs and also publicized widely with television announcements, distribution of brochures, website, phone calls, and newspaper advertisements.

Consultation was tailored to facilitate input from each stakeholder group, from the commercial user to the occasional visitor.

7) *How does it relate to historic and/or traditional uses and users?*

Historic uses and users in the GBR include fishing and fishers, respectively. As with all other stakeholders, these users were included in the re-zoning program. Following the re-zoning the GBRMPA is rebuilding a sound and mutually respectful relationship with these groups (see response to question 11).

8) *Are there associated monitoring, research, or evaluation efforts? If yes, what are they?*

[From J.Day] The Reef CRC and the Australian Institute of Marine Science undertakes much of the monitoring. In 2002, 56 monitoring/assessment programs were underway in the GBRMP across a broad range of physical, biological and socio-economic areas, including long-term (site specific and regional scales), reactive/impact assessment (generally site-specific), compliance and community perceptions (issue-specific). Most programs were very task-specific and were undertaken as 'stand-alone' monitoring or research tasks. Key Performance Indicators were developed for a more holistic MPA-wide evaluation. These KPIs provide a 'broad-brush' evaluation in a form useful for public reporting. The KPIs also provide a systematic basis against which the agency's budget statement is presented annually to Parliament.

9) *The effort (rezoning) enhanced coordination and cooperation among the agencies and/or partners.*

c. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

d. *List examples of how coordination is working and has not worked.*

A close working partnership between Queensland and the GBRMPA has evolved over 30 years, including such aspects as complementary zoning and joint permits. This strong working partnership has ensured the effective management of the complex and inter-related mix of marine, coastal and island issues, and provides for integrated management of the Great Barrier Reef on a whole-of-ecosystem basis. This situation is unique in terms of management of marine and coastal areas involving multiple jurisdictions around the world.

In addition to the Day-to-Day Management (DDM) arrangements, Queensland Government agencies with State responsibilities for policy co-ordination, environment, local government, maritime matters, catchment and land use and fisheries are actively involved in administration and management of issues pertinent to the health and operation of the Marine Park. To carry out its functions effectively, the GBRMPA maintains comprehensive liaison and policy co-ordination arrangements with all of these, both at the operational and strategic levels. Queensland Premier's Department chairs an Interdepartmental Committee which co-

ordinates the various state agencies input into the State Government's policy position on the Marine Park and the GBR World Heritage Area. The Director-General of Premiers Department is the Queensland nominee on the Authority (ie the Board of the Federal agency).

In addition to working closely with the Federal Department of Environment and Heritage, the GBRMPA works closely with a wide range of other Australian Government agencies and Departments.

10) *This effort provided benefits to the region and the larger group of entities that participated*

e. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

f. *If agree, what benefits to the region and larger group of entities from participating in the umbrella program cooperation (to users, enhanced efficiency, etc.)*

[From J.Day] The region appears to have benefited because the rezoning program removed inconsistencies and developed new objectives. Prior to the effort, terms management provisions, zone objectives, and zone names differed slightly across the Marine Park.

11) *What lessons were learned from your effort? What would you do differently if you were doing it over?*

Positively engage all people who have an interest in the area. Use a non-confrontational approach. Engage them and engage them often (on a continuing, frequent basis).

[From J.Day] Since 1998, the Authority has recognized there are a number of critical issues facing the future of the Great Barrier Reef, and therefore continues to focus the Authority's efforts to address the following:

- Minimizing water quality impacts
- Ensuring sustainable tourism
- Ensuring sustainable fisheries
- Ensuring species conservation (espec. threatened species such as dugong & turtle)
- Minimize impacts of coastal development
- Increase resilience to cope with climate change

Following the recent rezoning, rebuilding a sound and mutually respectful relationship with the fishing industry and local communities has become a key priority for the GBRMPA. As well as the new Community Partnership arrangements recently introduced, there is also comprehensive range of expert and local advisory committees feeding into locally relevant decision-making. This includes:

- ten geographically-focused Local Marine Advisory Committees;
- four issue-focused Reef Advisory Committees; and
- the GBR Consultative Committee that includes a range of expertise and representation, and provides another link to Marine Park stakeholders whilst also reporting directly to the Federal Minister.
- regular reporting undertaken on the GBR, eg State of Reef report and other communication products, such as the GBRMPA newsletter (SeaRead).

12) *A regional or national system of MPAs would help advance your efforts.*

g. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

h. *If help, how? If hinder, why?*

It has helped advance the efforts.

## All Islands Coral Reef Initiative Coordinating Committee

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The United States All Islands Coral Reef Committee was established in 1994 to develop regional mechanisms to improve communication, increase island influence in federal coral conservation, and share lessons learned and expertise. The Committee meets regularly, encourages input from stakeholders at meetings, and participates in the US Coral Reef Task Force Steering Committee which includes members from the US federal and state governments.

*1) What are the reasons, purpose, and/or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?*

Threatened by a growing number of natural and anthropogenic stresses, coral reef ecosystems are deteriorating worldwide at alarming rates. As most of the U.S. coral reefs (approximately 90 percent) are located within the jurisdiction of the seven member states, territories and commonwealths of the U.S. All Islands Coral Reef Initiative Coordinating Committee, this collaborative initiative was established in 1994 as a response to halt and reverse further destruction of coral reef ecosystems.

The All Islands Committee provides a focus through which island concerns and interests can be heard through a unified voice, helps clarify the process by which the islands and their federal partners can more effectively communicate and cooperate, and develops a means by which collaborative sharing can improve coral reef management and protection at all levels

The initial purpose (in the mid to late 1990's) was to raise the profile of U.S. coral reefs to the federal government, which at the time was looking only in the international arena for developing a coral reef initiative.

The goal was to get the federal government to focus on U.S. coral reefs, and recognize the important role of its states and territories in managing these resources. The committee also formulates issues and policy positions for consideration by the U.S. Coral Reef Task Force, whose membership includes the Governors and federal agency representatives.

In response to the growing global environmental crisis, President William Jefferson Clinton issued the Coral Reef Protection Executive Order 13089 on June 11, 1998 recognizing the importance of conserving coral reef ecosystems. The Executive Order also recognized that the existing U.S. All Islands Coral Reef Initiative strategy covered approximately 90 percent of U.S. coral reef ecosystems and was a key element of the overall US Coral Reef Initiative.

*2) What is the geographic scope of your effort, what was it based on, and why is it defined that way?*

The U.S. flag islands of the Pacific and Caribbean – American Samoa, Hawaii, Guam, the Commonwealth of the Northern Mariana Islands, U.S. Virgin Islands, and Puerto Rico. Florida is an associate member and the Freely Associated States of Palau, the Federated States of Micronesia and Republic of the Marshall Islands are affiliate members.

*3) What types of resources (e.g., fisheries, cultural, corals, etc.) are the focus of your effort?*

The focus is broad on coral reef ecosystems – from the tops of watersheds to waters beyond the reefs.

*4) What agency/government entities are involved?*

Governor-appointed points of contact are the official members of this All Islands initiative – one from each jurisdiction.

5) *What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?*

The committee meets often by phone, as issues and agendas dictate, and also meets in person at least twice a year. In addition, the USCRTF adopted the “Puerto Rico Resolution” in 2002 which in part made provision for the establishment of the All Islands Coral Reef Secretariat to provide policy support and coordinate the Committee’s participation in the U.S. Coral Reef Task Force. The Secretariat is also establishing a website for the Committee to enhance communication amongst members and federal partners.

The Puerto Rico Resolution also provided for the development of three-year Local Action Strategies (LAS) by each of the seven member states, territories and commonwealths. These LAS are locally driven roadmaps for collaborative and cooperative action among federal, state, territory and non-governmental partners who identify and implement priority actions needed to reduce key threats to valuable coral reef resources.

6) *How are NGOs and other stakeholders/users involved?*

Input from stakeholders and NGOs is done in a number of ways. For example, each jurisdiction has established local advisory committees or working groups to provide input and guidance to the Local Action Strategies. These committees usually include a range of NGOs and local stakeholders. Also, each point of contact is responsible for gathering and transmitting relevant stakeholder input from their respective jurisdiction to the Committee. In addition, when high priority, relevant issues dictate, the committee will invite representatives of the particular stakeholder group to make a presentation to and discuss the issue with the committee, in person where possible.

7) *How does it relate to historic and/or traditional uses and users?*

Each jurisdiction has its own related traditional and historic coral reef ecosystem users and uses. Each point of contact is responsible for relating information and perspectives from those stakeholders.

8) *Are there associated monitoring, research, or evaluation efforts? If yes, what are they?* N/A

9) *The effort enhanced coordination and cooperation among the agencies and/or partners.*

a. *Underline one: strongly agree – agree – neutral – disagree – strongly disagree*

b. *List examples of how coordination is working and has not worked.*

Coordination for the All Islands Committee is working well. The Committee provides a focus through which island concerns and interests are heard through a unified voice, and helps to coordinate coral reef conservation planning efforts in the jurisdictions. Collaborative sharing improves coral reef management and protection at all levels, allowing managers to learn through the experiences and best practices of others.

These planning efforts have resulted in two strategic action plans. In 1997 the results of a workshop to coordinate the islands coral reef initiative were published in the U.S. Islands Coral Reef Initiative Summary Report, (the “Blue Book”), which outlined strategies for coral reef management in each jurisdiction.

In 1999, the Committee produced the U.S. All Islands Coral Reef Initiative Strategy (or “Green Book”) which included vision and mission statements, a sustainability statement, and proposals for local action strategies. The Committee is currently working on another five year strategic action plan.

- 10) *This effort provided benefits to the region and the larger group of entities that participated*
- a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*
  - b. *If agree, what benefits to the region and larger group of entities from participating in the umbrella program cooperation (to users, enhanced efficiency, etc.*

The effort provides the seven jurisdictions with a stronger voice to advocate priorities to funders and potential partners. Frequent meetings and conference calls also allow for greater dissemination of ideas and lessons learned.

- 11) *What lessons were learned from your effort? What would you do differently if you were doing it over?*

(no response)

- 12) *A regional or national system of MPAs would help advance your efforts.*
- a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*
  - b. *If help, how? If hinder, why?*

A national system of MPAs could serve to further promote the issues and priorities of the All Islands Committee, and would stimulate additional exchange of ideas, information and best practices.

## South Florida Restoration

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The South Florida Ecosystem Restoration Task Force was established by Congress in 1996. Its mission is to preserve the natural heritage of 18,000 miles of uplands, wetlands, and coral reefs. The Task Force is supported by a Working Group which consists of government, tribal, and local representatives. A Science Coordination Group was established to assist the Task Force in technical research to support the restoration efforts.

Notes from interview with Billy Causey. Billy Causey is the Regional Director of the National Marine Sanctuary Program of NOAA including the Florida Keys, Gray's Reef and Flowergarden Banks.

1. *What are the reasons, purpose, and or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?*

A South Florida Restoration Task Force and Working Group was created to coordinate Federal and state agency participation in restoration of the greater Everglades restoration project. This is a complex effort extending from the Upper Kissimmee Basin in Central Florida to the Florida Keys. Success depends upon the work and cooperation of many agencies, and so cooperation is critical to avoid wasted and conflicting activities. In addition a Water Quality Steering Committee of Federal, state and local agencies was created in conjunction with the Florida Keys National Marine Sanctuary. Its purpose has been to coordinate agency action with respect to improving water quality in the area of the Sanctuary.

2. *What is the geographic scope of your effort and why is it defined this way?*

The Greater Everglades ecosystem including the Florida Keys and reef tract.

3. *What types of resources are involved?*

The South Florida Restoration Task Force is concerned with restoration of the Everglades ecosystem. This includes restoration, insofar as possible, of the flow of freshwater from the Upper Kissimmee Basin just south of Orlando, down the Kissimmee River into Lake Okeechobee and then through the Everglades into Florida Bay. It also includes the now artificially created flows of water east and west out of Lake Okeechobee as well as the marine systems surrounding the Florida Keys. Associated with restoration of more natural water flows and improved water quality the effort includes conservation or restoration of natural habitat within this same area.

4. *What agencies/government entities are involved?*

Many Federal, state and regional agencies are involved the most important of which are:

- South Florida Water Management District
- U.S. Army Corps of Engineers
- Florida Department of Environmental Protection
- National Marine Sanctuary Program (NOAA)
- National Park Service
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- Florida Fish and Wildlife Conservation Commission
- U.S. Environmental Protection Agency

5. *What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?*

The South Florida Restoration Task Force and Working Group was established to participate in preparation of the Comprehensive Everglades Restoration Plan (CERP) and has been continued to help coordinate implementation of the CERP. The Task Force has an Executive Director (former ACOE Colonels) and a small staff. The mechanism for coordination are meetings of the task force around specific topics and concerns. While these meetings were regular and intensive during preparation of the CERP, they have become less regular since its adoption.

The Water Quality Steering Committee for the Florida Keys National Marine Sanctuary was created to coordinate water quality improvement efforts many of which were beyond the authority of the Sanctuary. It also accomplishes coordination by meetings on specific topics.

6. *How are NGOs and other stakeholders involved?*

NGOs and other stakeholders were involved in these efforts through advisory committees and hearings during the drafting of the CERP, but they are less involved today. The Florida Keys National Marine Sanctuary has a formal Advisory Committee that does involve NGOs and others in providing input to Sanctuary-related decisions.

7. *How does it relate to traditional uses and users?*

Traditional users (tribes, fishermen) were involved in CERP planning, but there have been disputes with traditional users in both the plan and implementation.

8. *Are there associated monitoring, research or evaluation efforts?*

Yes, there are extensive monitoring efforts associated with Everglades restoration and with the FKNMS.

9. *The effort enhanced coordination and cooperation among the agencies and/or partners—*

Agree, but it has become more hit or miss in recent years depending upon the interest of the participating agencies.

10. *This effort provided benefits to the region and the large group of entities that participated.*

Agree.

11. *What lessons ere learned from your effort? What would you do differently if you were doing it over?*

No comment on this.

12. *A regional or national system of MPAs would help advance your efforts—*

Mr. Causey has become Regional Director of three National Marine Sanctuaries. He is also in close touch with the National Estuarine Research Reserves in the southeast. He feels that this grouping /association of MPAs can be beneficial and should be the agent for seeking out additional sites particularly around the Gulf of Mexico. He feels that it is possible to identify other worthy sites, but that implementation will be difficult

without further Federal agency coordination particularly in view of additional petroleum exploration in the GOM. He suggests that some version of the Federal Regional Councils called for by the National Oceans Commission and the President's response to that Commission would be very helpful in allowing the Sanctuary system to relate effectively to other Federal agencies with a role in marine governance.

## Anacostia Watershed Restoration

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In 1987, the Anacostia Watershed Restoration Committee was created to address the deteriorating water and habitat quality of the Anacostia Watershed. The Committee is given policy support by the Metropolitan Washington Council of Governments. Restoration efforts are guided by a Six Point Action Plan which aims to have a healthy watershed by the year 2010. To increase stakeholder involvement and support the Anacostia Watershed Citizens Advisory Committee was formed.

*1) What are the reasons, purpose, and/or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?*

**Response 1:** Longstanding recognition by the District of Columbia and state of Maryland (going back to the early 1980's) that the Anacostia River is highly polluted and that it needs to be cleaned up. This recognition resulted in the signing of the landmark 1987 Anacostia Watershed Restoration Agreement, which was signed by Montgomery and Prince Georges's Counties, the District of Columbia and the state of Maryland and created the Anacostia Watershed Restoration Committee (AWRC) to help guide the effort. The latest 2001 Anacostia Restoration Agreement includes 50 restoration targets and companion indicators designed to help bring about a restored watershed by the year 2010. The common goal is a restored (by the year 2010), ecologically healthy river and tributary system which is a community asset.

**Response 2:** There is no cooperation under one umbrella. We're hopeful that it will evolve with the new organization.

*2) What is the geographic scope of your effort, what was it based on, and why is it defined that way?*

**Response 1:** 176 square miles (which, represents the size of the entire watershed).

**Response 2:** Scope of the effort is based on the urban watershed because the river is the product of its watershed and its major problem, unmanaged stormwater runoff, originates mainly in the 85% of the watershed that is in Prince George's and Montgomery Counties.

*3) What types of resources (e.g., fisheries, cultural, corals, etc.) are the focus of your effort?*

**Response 1:** Forests, resident and migratory fishes, tidal and non-tidal wetlands (including SAV's), birds (e.g., goose management). It should be noted that the Anacostia's fisheries resources are surprisingly diverse for such an urban watershed, and includes approximately 100 species ranging from a self-supporting brown trout fishery to springtime shad and herring runs.

**Response 2:** Focus of our efforts are on a) stormwater, b) suburban sanitary sewer pollution, c) the District's combined sewer outflow problem, d) legacy toxics in the tidal portion of the river, and e) the restoration of habitat.

*4) What agency/government entities are involved?*

**Response 1:** District of Columbia Department of the Environment, District of Columbia Water and Sewer Authority, Montgomery County Department of Environmental Protection, Prince George's County Department of Environmental Resources, Maryland Department of the Environment, Maryland Department of Natural Resources, Maryland State Highway Administration, USEPA, the National Park Service, US Army Corps of Engineers, the Maryland-National Capital Park and Planning Commission, USDA, NOAA, DOD, to name a few. There are approximately 60 government agencies, NGO's and municipalities involved.

**Response 2:** DC DOE, Montgomery County DEP, Prince George's County DER, Maryland DOE, DER. US EPA, Park Service, Army Corps of Engineers, DC WASA and others.

5) *What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?*

**Response 1:** As previously stated, the AWRC is the responsible, lead coordinating government body. It is administered through COG (which receives annual financial support from the AWRC membership). The AWRC also has a citizen arm (the Anacostia Watershed Citizens Committee) to provide a conduit to and for the watershed's citizenry. The nine member AWRC works on a voluntary basis, meets quarterly, and receives both technical and administrative support from COG. The "cooperation mechanism" is the 1987 restoration agreement.

**Response 2:** There is no coordination/cooperation of significance

6) *How are NGOs and other stakeholders/users involved?*

**Response 1:** The NGO's work through the AWRC's citizen arm (AWCAC), through partnerships with the AWRC or individual AWRC members and/or COG, and through their own networks, including political ones.

**Response 2:** NGO's generally cooperate on specific issues in informal coalitions. There is quite a lot of cooperation. Examples of some issues on which NGO's are engaged include a) the potential environmental impact of the new DC Baseball Stadium. b) safe development of the Anacostia Waterfront Initiative, c) The Maryland DOE TMDL for Bacteria in the Anacostia, d) the recognition by Maryland that the Anacostia is Trash Impaired (thus bringing the problem under the reach of the Clean Water Act)

7) *How does it relate to historic and/or traditional uses and users?*

**Response 1:** Historically, the Anacostia was once important from a commercial fisheries (herring), shipping and agricultural standpoint. All of this has been lost through centuries of change and environmental abuse. Today, only vestiges of the past remain.

**Response 2:** Don't understand the question. The stated use of the river is "swimmable and fishable" and we have a long way to go.

8) *Are there associated monitoring, research, or evaluation efforts? If yes, what are they?*

**Response 1:** There are concerted, on-going monitoring efforts including: 1) biological (macroinvertebrates, fishes and clams), 2) general water chemistry (both tidal river and tributaries), 3) toxics (both water column and river), 4) some groundwater, 5) stormwater management BMP performance, 6) stream temperature, 7) stream channel erosion, 8) forest cover/riparian buffer condition, 9) native plant communities and invasive plants, 10) herps, 11) birds, 12) trash, and 13) angler surveys.

**Response 2:** Yes, get the specifics from John Galli.

9) *The effort enhanced coordination and cooperation among the agencies and/or partners.*

a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*

b. *List examples of how coordination is working and has not worked.*

**Response 1:** Strongly Agree. Monitoring needs/efforts are determined on both the individual jurisdiction and watershed-wide levels. The AWRC's Restoration Potential Workgroup, the Anacostia Watershed Toxics Alliance and the Anacostia Goose Management Group provide a coordinating framework for many of the watershed-wide type activities.

**Response 2:**

I think the Anacostia Watershed Citizens Advisory Committee has nudged cooperation among the agencies somewhat but not nearly enough.

*10) This effort provided benefits to the region and the larger group of entities that participated*

- a. Underline one: strongly agree – agree—neutral – disagree—strongly disagree*
- b. If agree, what benefits to the region and larger group of entities from participating in the umbrella program cooperation (to users, enhanced efficiency, etc.*

**Response 1:** The Anacostia restoration effort is both a regional and national mode for urban river restoration. The management structure continues to both mature and evolve over time. Much has been accomplished, far more remains to be done and securing needed resources remains a huge challenge. Nevertheless, what has been learned is invaluable. For example, Anacostia trash survey methodology (and data) has proven useful to the region and has been instrumental in the listing of the Anacostia s trash impaired by both USEPA and MDE.

**Response 2:** Benefits are yet to be realized.

*11) What lessons were learned from your effort? What would you do differently if you were doing it over?*

**Response 1:** 1) Include the citizen component from the start, not 7-8 years later, 2) Include both an executive director and fulltime lobbyist, 3) Develop a comprehensive, subwatershed –specific, restoration plan early on, and 4) Seek greater regulatory authority from the start.

**Response 2:** Restoring an urban watershed is a land use issue. It cannot be done by environmental agencies alone, without an understandable plan, and without regional leadership. We hope to address these short comings in the Anacostia.

*12) A regional or national system of MPAs would help advance your efforts.*

- a. Underline one: strongly agree – agree—neutral – disagree—strongly disagree*
- b. If help, how? If hinder, why?*

**Response 1:** (no response)

**Response 2:** (no response)

## Wild and Scenic Rivers

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In 1968, Congress passed the Wild and Scenic Rivers Act to protect rivers from development that would alter their free flowing state. Congress and the Department of Interior are given the authority to designate rivers and over 150 rivers have protection under the Act. Rivers in the national system are either managed by federal agencies or state governments.

*1) What are the reasons, purpose, and/or driving force behind the effort? What is the goal of the cooperation of multiple entities under the one umbrella?*

For many years many organizations and individuals were concerned about construction of dams by many Federal state and local organizations for such purposes as irrigation, flood control, navigation, recreation and hydropower. Major federal entities such as the Corps of Engineers, Tennessee Valley Authority, Bureau of Reclamation and to a lesser extent the Soil Conservation Service as well as private companies and Utility Districts were actively planning or constructing significant water projects which included dams, canals, power plants, transmission lines, etc.

Initially the opposition to continued construction of major dams came from organizations and groups opposed to a particular water project. Sometimes these were conservation or environmental organizations but also in some cases included farmers who would lose land, recreational users of the stream including fisherman who would lose stream fishing opportunities or communities which would be flooded or access made more difficult by projects. In some cases they enlisted political figures or experts such as economists to argue that the expenditures were not justified by the benefits. Sometimes historic, cultural, community, or tribal impacts caused concerns.

Concern about the loss of free flowing streams and the loss of dispersed recreation opportunities gradually gained political support from this wide array of organizations that had been concerned about individual projects. The environmental movement of the 1960 included this concern They did not come together under one umbrella but cooperated in their opposition to continued construction of dams on high value rivers and streams.

*2) What is the geographic scope of the effort, what was it based on, and why is it defined that way?*

The scope of the effort was national. Major effort was directed at stopping either planning or construction on certain well known and high value streams primarily in rather undeveloped areas of the country particularly in the west. Many groups, organizations and individuals finally decided that by Congress designating certain rivers as wild or scenic rivers they could be protected in perpetuity. Political support was widespread at this point. When the Wild and Scenic Rivers Act (16 U.S.C. 1271-1278) was enacted in 1968, Congress declared in Section 1 that " certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreation, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free- flowing condition and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations".

Three categories of rivers were specified in the statute: "(1) wild river areas—those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted, (2) Scenic river areas-those rivers or sections of rivers that are free of impoundments, with shorelines largely undeveloped, but accessible in places by roads and (3) Recreational rivers areas-Those rivers or sections of rivers that are readily accessible by road or railroad that may have some development along their shorelines, and may have undergone some

impoundment or diversion in the past." Sections of an individual river could be designated as wild while other sections are designated as scenic or recreational.

Congress followed the pattern of the Wilderness Act of 1964 and the National Trails Act of 1968 by establishing a national system of Wild and Scenic Rivers with certain initial components, as well as provisions to add to the System. Fifteen rivers were added as initial components of the system and fifty eight other rivers were designated as potential addition. A specific study procedure was set up for these potential additions. The Secretary of Interior or where National Forest lands are involved, the Secretary of Agriculture or, in appropriate cases the two secretaries jointly were required to study and submit to the President reports on the suitability or unsuitability for addition to the national wild and scenic river system the rivers which were designated as potential additions to the system.

3) *What types of resources (e.g., fisheries, cultural, corals, etc.) are the focus of your effort?*

See the answer to question # 2. All of these values were cited although some were more important than others for a particular stream.

4) *What agency/government entities are involved?*

The Wild and Scenic Rivers system is a national system that includes both federal and state designated rivers. Thus it is similar to the National Trail System but different from the Wilderness System which is entirely federal land administered by the federal government.

The Secretaries of Interior and Agriculture are the two federal agencies charged with administration of the designated rivers. The Act not only provides for inclusion of rivers designate by Congress but also set forth a process for inclusion of those "that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or States through which they flow, that are to be permanently administered as wild, scenic or recreational rivers by an agency or political subdivision of the state or states concerned without expense to the United States....."

Interestingly the Act specifically prohibits the Federal Power Commission (now Federal Energy Regulatory Commission) from licensing" the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works.....directly affecting any river which is designated as a component of the national wild and scenic rivers system....." and "no department or agency of the United state shall assist by loan, grant, license or otherwise in the construction of any water resource project that would have a direct and adverse effect on the values for which such river was established ...."

5) *What is the coordination/cooperation mechanism for the umbrella effort? How does it work and how is it administered?*

There was no formal umbrella organization in the establishment or in the administration of the System

6) *How are NGOs and other stakeholders/users involved?*

Historically NGO's and other stakeholders were supporters of the establishment of the system and many of those organizations have been involved in the studies of the potential additions to the system. There are numerous volunteers who have historically been involved in studies or in undertaking work to further the objectives of the Act.

7) *How does it relate to historic and/or traditional uses and users?*

The designation of a river as a wild and scenic river in itself did little to change historical or traditional uses. What it did do was to prevent water resource development that many had counted on to meet future needs for such things as power, irrigation and transportation as well as to restrict land use and development including mining along the river. In addition the act specifically provides for acquisition in fee title of not more than 100 acres per mile on both sides of the river. In some instances that land was prime property for development for various purposes. Sometimes scenic easements were used to allow traditional uses such as farming while preventing other development.

8) *Are there associated monitoring, research, or evaluation efforts? If yes, what are they?*

The act does not contain any specific requirements for monitoring, research or evaluation efforts. Because the act does express concern for water quality or activities above the designated rivers that may adversely affect the stream, there have been numerous research projects, studies and evaluations of such impacts.

9) *The effort enhanced coordination and cooperation among the agencies and/or partners.*

- a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*
- b. *List examples of how coordination is working and has not worked.*

There has been a lot of cooperation, particularly between federal and state agencies, on the studies of potential additions to the system, on management of the rivers and the associated lands and on evaluation of potential upstream impacts. Ongoing coordination seems to work reasonably well except where the presence of the designated rivers interferes or hampers other potential uses.

10) *This effort provided benefits to the region and the larger group of entities that participated*

- a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*
- b. *If agree, what benefits to the region and larger group of entities from participating in the umbrella program cooperation (to users, enhanced efficiency, etc*

Although there is no umbrella group or program there have been benefits from joint studies, management planning and from federal and state agencies as well as interested organizations in seeking new ways to protect and enhance land and water..

11) *What lessons were learned from your effort? What would you do differently if you were doing it over?*

I do not have a sound basis for answers to this question. The effort to establish a national system with administration by both federal and state agencies seems to have worked reasonably well. The Act itself contains very firm direction on the expected protection of the rivers as free flowing and for use of associated lands. This has prevented a lot of problems. There have been numerous specific land use issues as well as access questions. Linear rights of ways for such things as pipelines, transmission lines and transportation facilities have presented some problems.

12) *A regional or national system of MPAs would help advance your efforts.*

- a. *Underline one: strongly agree – agree—neutral – disagree—strongly disagree*
- b. *If help, how? If hinder, why?*

Except for lessons learned in the establishment and management of a national system comprised of areas managed by both state and federal entities there doesn't seem to be any direct correlation. Experience with the Federal-state system specified for both National trails and Wild and Scenic Rivers indicates that such an arrangement works well and does provide for broader interest and support for the efforts.

13) *Other comments?* None



## Tribes/Western WA Marine Fishery Co-Management

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One of the most comprehensive and successful examples of tribal/state/federal cooperation in resource management is the management of salmon resources in the state of Washington. Tribal fishing rights guaranteed by treaty are found in the series of treaties negotiated in the 1850's by Territorial Governor Isaac Stevens with a number of tribes in the Northwest. These Indian fishing rights were ignored in the settlement and development of the region, leading tribes to seek redress in the courts.

Fisheries Management in the area was changed fundamentally in 1974 when Judge George Boldt issued his ruling *U.S. v Washington*. In this decision, Indian treaty fishing rights were reaffirmed and the tribes were established as co-managers of the resource. Legal battles with the state of Washington continued into the 1980's, however, as the salmon fishery resources continued to decline. By default, fishery management fell to the court, with state and tribal biologist constantly at odds. It was soon apparent to all parties that if fish resources were a primary concern, the job of managing it must be removed from the hands of the court and placed back into the hands of professional tribal and state managers.

In 1985 a tribal/state plan for cooperative management of fisheries in Puget Sound was jointly developed and approved by the federal court under *U.S. v Washington*. Today, litigation over fisheries is the exception rather than the rule in managing this key resource.

The tribal contribution to this partnership is substantial. Today, tribal biologists participate in all facets of fishery management and are expanding their efforts into broader habitat protection programs.

One example of tribal cooperative management in the context of habitat management and protection is in the realm of Forest Management and the Timber / Fish and Wildlife – Forests and Fish Program (TFW/FF).

The tribes in western Washington utilize the TFW/FF Program to address forest management issues in Washington State. Tribal forest management issues cover over 25 million acres of the state's landscape (45.6 million acres) including private, state, county, municipal, federal and tribal lands. Management of these lands varies by jurisdiction and is constantly changing due to political pressures and results of scientific adaptive management findings.

The majority of the coordinated work focuses on 9.1 million acres of private forestland being regulated under the Forest Practices Habitat Conservation Plan (FPHCP). The TFW/FF Program is made up of policy, science, and technical staff from 26 federally recognized Washington State Tribes. The program focuses on the private forest practices landscape primarily in regards to salmon recovery, water quality, wildlife, and cultural resources goals. The vehicle for accomplishing the salmon recovery goal is successful implementation of the TFW Agreement and the Forests and Fish Report within its evolving Adaptive Management Program (AMP). AMP is the institutional process where science and other field information is used to condition or change forest practices for the protection of resource goals.

Pacific Salmon are the heart of Northwest Indian culture and society. In treaties signed by the tribes and the United States in the 1850's, fish, wildlife and plants were reserved to the tribes to sustain their life and culture. As sovereign governments, the tribes believed then, as they continue to do now, that it is better to work in a collaborative, cooperative way with their counterparts in order to implement their treaty rights.

A few key points critical to the success of this approach are:

- **Engaging tribes as co-managers of the resource** as reaffirmed in 1974 when Judge George Bolt issued his ruling in *U.S. v Washington* that fundamentally changed salmon management in the State

of Washington. In this decision, Indian treaty rights of fishing and habitat protection in support of those fisheries were legally defined. In a separate action that same year, the state approved the Forest Practices Act to protect the environment while ensuring a viable timber industry. However, legal battles with the state of Washington continued into the 1980s as the salmon fishery and habitat continued to decline with state and tribal biologists constantly at odds.

- **Leadership and commitment** creates the foundation for successful partnerships. The TFW Agreement of 1987 was founded under President Ronald Regan and has evolved under the eras of both President George H.W. and George W. Bush. TFW and FFR's strategy to address endangered species is one of the most comprehensive and successful examples of cooperative conservation in forest resource management nationally. As sovereign governments, the tribes believe that it is more efficient and effective to work in a collaborative and cooperative management process with their counterparts to best implement their treaty-reserved management rights. The TFW cooperative strategy brings together tribes, state and federal agencies, environmental groups, and private forest landowners and has been successful at minimizing legal and legislative battles. Built into the Forest and Fish agreement is language committing to the imperative of tribal participation... *"The Forests and Fish Report provides for tribal participation in all phases of the regulation of forest practices... (FFR 1999).*
- **Adaptive management** rules were forged with tribal leadership and are their keystone to both the TFW and FFR strategies. Adaptive management provides a predictable and consistent process for advancing science and information to assist the Forest Practices Board in determining if and when it is necessary to adjust forest practices rules and guidance to achieve aquatic and forest resource goals. These rules were approved by the Forest Practices Board in 2001 to ensure that the cooperative conservation strategy is founded in law. Tribal leadership was also pivotal in the development of the Forest Practices Board's "Guidelines for Adaptive Management Program" manual that was just approved at their September 2005 meeting.
- **Acknowledging perspectives and role of tribes in cooperative conservation objectives.** Understanding and building from the common focus on compliance with the Endangered Species and Clean Water Acts, riparian habitat affecting fish, wildlife, and cultural resources, and maintaining the economic viability of the timber industry enabled a solid starting point. The tribal role extends from centralized participation to utilization of critical tribal experience applied within their watersheds in ways consistent with the TFW Agreement, FFR, and their treaty-reserved rights. To participate, tribes must be provided with certainty of implementation equal with that of the timber industry and the State of Washington, who have received a 50-year Habitat Conservation Plan (HCP) under the Endangered Species Act.
- **Funding.** The tribal role, as negotiated in the TFW Agreement and the FFR, recognizes that the value of tribal participation is both in the spotlight of the formal process at the table and out in each tribe's watershed where their experience extends thousands of years. As this money is uniformly dispersed among each tribe and also funds two coordinating entities, the amount of money per tribe at the \$4.6 million level in most cases is just sufficient for each tribe to hire, equip, and fund projects for one full time science staff or its equivalent.

## Presidential Documents

### Executive Order 13158 of May 26, 2000

#### Marine Protected Areas

By the authority vested in me as President by the Constitution and the laws of the United States of America and in furtherance of the purposes of the National Marine Sanctuaries Act (16 U.S.C. 1431 *et seq.*), National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-ee), National Park Service Organic Act (16 U.S.C. 1 *et seq.*), National Historic Preservation Act (16 U.S.C. 470 *et seq.*), Wilderness Act (16 U.S.C. 1131 *et seq.*), Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 *et seq.*), Coastal Zone Management Act (16 U.S.C. 1451 *et seq.*), Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*), Marine Mammal Protection Act (16 U.S.C. 1362 *et seq.*), Clean Water Act of 1977 (33 U.S.C. 1251 *et seq.*), National Environmental Policy Act, as amended (42 U.S.C. 4321 *et seq.*), Outer Continental Shelf Lands Act (42 U.S.C. 1331 *et seq.*), and other pertinent statutes, it is ordered as follows:

**Section 1. Purpose.** This Executive Order will help protect the significant natural and cultural resources within the marine environment for the benefit of present and future generations by strengthening and expanding the Nation's system of marine protected areas (MPAs). An expanded and strengthened comprehensive system of marine protected areas throughout the marine environment would enhance the conservation of our Nation's natural and cultural marine heritage and the ecologically and economically sustainable use of the marine environment for future generations. To this end, the purpose of this order is to, consistent with domestic and international law: (a) strengthen the management, protection, and conservation of existing marine protected areas and establish new or expanded MPAs; (b) develop a scientifically based, comprehensive national system of MPAs representing diverse U.S. marine ecosystems, and the Nation's natural and cultural resources; and (c) avoid causing harm to MPAs through federally conducted, approved, or funded activities.

**Sec. 2. Definitions.** For the purposes of this order: (a) "Marine protected area" means any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein.

(b) "Marine environment" means those areas of coastal and ocean waters, the Great Lakes and their connecting waters, and submerged lands thereunder, over which the United States exercises jurisdiction, consistent with international law.

(c) The term "United States" includes the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

**Sec. 3. MPA Establishment, Protection, and Management.** Each Federal agency whose authorities provide for the establishment or management of MPAs shall take appropriate actions to enhance or expand protection of existing MPAs and establish or recommend, as appropriate, new MPAs. Agencies implementing this section shall consult with the agencies identified in subsection 4(a) of this order, consistent with existing requirements.

**Sec. 4. National System of MPAs.** (a) To the extent permitted by law and subject to the availability of appropriations, the Department of Commerce and the Department of the Interior, in consultation with the Department

of Defense, the Department of State, the United States Agency for International Development, the Department of Transportation, the Environmental Protection Agency, the National Science Foundation, and other pertinent Federal agencies shall develop a national system of MPAs. They shall coordinate and share information, tools, and strategies, and provide guidance to enable and encourage the use of the following in the exercise of each agency's respective authorities to further enhance and expand protection of existing MPAs and to establish or recommend new MPAs, as appropriate:

(1) science-based identification and prioritization of natural and cultural resources for additional protection;

(2) integrated assessments of ecological linkages among MPAs, including ecological reserves in which consumptive uses of resources are prohibited, to provide synergistic benefits;

(3) a biological assessment of the minimum area where consumptive uses would be prohibited that is necessary to preserve representative habitats in different geographic areas of the marine environment;

(4) an assessment of threats and gaps in levels of protection currently afforded to natural and cultural resources, as appropriate;

(5) practical, science-based criteria and protocols for monitoring and evaluating the effectiveness of MPAs;

(6) identification of emerging threats and user conflicts affecting MPAs and appropriate, practical, and equitable management solutions, including effective enforcement strategies, to eliminate or reduce such threats and conflicts;

(7) assessment of the economic effects of the preferred management solutions; and

(8) identification of opportunities to improve linkages with, and technical assistance to, international marine protected area programs.

(b) In carrying out the requirements of section 4 of this order, the Department of Commerce and the Department of the Interior shall consult with those States that contain portions of the marine environment, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands, tribes, Regional Fishery Management Councils, and other entities, as appropriate, to promote coordination of Federal, State, territorial, and tribal actions to establish and manage MPAs.

(c) In carrying out the requirements of this section, the Department of Commerce and the Department of the Interior shall seek the expert advice and recommendations of non-Federal scientists, resource managers, and other interested persons and organizations through a Marine Protected Area Federal Advisory Committee. The Committee shall be established by the Department of Commerce.

(d) The Secretary of Commerce and the Secretary of the Interior shall establish and jointly manage a website for information on MPAs and Federal agency reports required by this order. They shall also publish and maintain a list of MPAs that meet the definition of MPA for the purposes of this order.

(e) The Department of Commerce's National Oceanic and Atmospheric Administration shall establish a Marine Protected Area Center to carry out, in cooperation with the Department of the Interior, the requirements of subsection 4(a) of this order, coordinate the website established pursuant to subsection 4(d) of this order, and partner with governmental and non-governmental entities to conduct necessary research, analysis, and exploration. The goal of the MPA Center shall be, in cooperation with the Department of the Interior, to develop a framework for a national system of MPAs, and to provide Federal, State, territorial, tribal, and local governments with the information, technologies, and strategies to support the system. This

national system framework and the work of the MPA Center is intended to support, not interfere with, agencies' independent exercise of their own existing authorities.

(f) To better protect beaches, coasts, and the marine environment from pollution, the Environmental Protection Agency (EPA), relying upon existing Clean Water Act authorities, shall expeditiously propose new science-based regulations, as necessary, to ensure appropriate levels of protection for the marine environment. Such regulations may include the identification of areas that warrant additional pollution protections and the enhancement of marine water quality standards. The EPA shall consult with the Federal agencies identified in subsection 4(a) of this order, States, territories, tribes, and the public in the development of such new regulations.

**Sec. 5. Agency Responsibilities.** Each Federal agency whose actions affect the natural or cultural resources that are protected by an MPA shall identify such actions. To the extent permitted by law and to the maximum extent practicable, each Federal agency, in taking such actions, shall avoid harm to the natural and cultural resources that are protected by an MPA. In implementing this section, each Federal agency shall refer to the MPAs identified under subsection 4(d) of this order.

**Sec. 6. Accountability.** Each Federal agency that is required to take actions under this order shall prepare and make public annually a concise description of actions taken by it in the previous year to implement the order, including a description of written comments by any person or organization stating that the agency has not complied with this order and a response to such comments by the agency.

**Sec. 7. International Law.** Federal agencies taking actions pursuant to this Executive Order must act in accordance with international law and with Presidential Proclamation 5928 of December 27, 1988, on the Territorial Sea of the United States of America, Presidential Proclamation 5030 of March 10, 1983, on the Exclusive Economic Zone of the United States of America, and Presidential Proclamation 7219 of September 2, 1999, on the Contiguous Zone of the United States.

**Sec. 8. General.** (a) Nothing in this order shall be construed as altering existing authorities regarding the establishment of Federal MPAs in areas of the marine environment subject to the jurisdiction and control of States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and Indian tribes.

(b) This order does not diminish, affect, or abrogate Indian treaty rights or United States trust responsibilities to Indian tribes.

(c) This order does not create any right or benefit, substantive or procedural, enforceable in law or equity by a party against the United States, its agencies, its officers, or any person.



THE WHITE HOUSE,  
May 26, 2000.





February 2008



The views and opinions expressed in this report are not necessarily those of the Department of Commerce or the Department of the Interior.