TOWARD A COMMON LANGUAGE OF MARINE PROTECTED AREAS

Faced with widespread declines in ocean health, many nations are turning to marine protected areas (MPAs) to protect their most important marine habitats and species. Familiar examples of MPAs in the U.S. include national marine sanctuaries, parks and wildlife refuges, fisheries closures, and many state parks and conservation areas. Although MPAs have long been used as a management tool by federal and state resource agencies, the nation still lacks a consistent and straightforward way to describe the many types of MPAs occurring in our waters or to understand how they affect marine ecosystems and associated human uses. For example, the official programmatic names of many U.S. MPAs rarely reflect their actual purpose, use restrictions or impacts on users. Consequently, MPAs having similar names may, in fact, differ fundamentally in their effectiveness in protecting the habitats and resources they encompass. A frequent manifestation of the ambiguity in MPA terminology is the misperception that all MPAs are “no take” area, which are, in fact, extremely uncommon in the U.S.

The growing confusion over MPA terminology continues to complicate the critically important national dialogue about whether, when and how to use this promising management tool to sustain the health of the nation’s marine ecosystems. To improve this situation, the National Marine Protected Areas Center has developed a functional classification system for MPAs that provides agencies and stakeholders with a simple and objective means to understand, describe and evaluate the many different types of MPAs found in the United States. The system uses five purely objective criteria to describe any MPA, rather than relying on formal programmatic names or popular terminology that may be inconsistent or misleading. This approach is derived from a number of existing approaches used by IUCN, state governments, the Ocean Conservancy and others to describe MPAs. The proposed classification characteristics are the MPA’s:

- Primary conservation goal
- Level of protection
- Permanence of protection
- Constancy of protection
- Scale of protection

For most MPAs in the U.S., these five characteristics provide a clear picture of why the site was established, what it protects, and how it may affect marine ecosystems and associated human uses. This approach should help overcome several long-standing obstacles to our collective understanding and effective use of MPAs. To this end, the proposed classification system is intended to:

- Provide a straightforward common language about MPAs for public policy discussions
- Clarify confusion over the wide variety of types and terms
- Allow meaningful assessments of how we currently use different types of MPAs in the U.S.
- Provide a way to assess the likely conservation impacts of existing and proposed MPAs
- Inform the effort to develop a framework for an effective national system of MPAs
WHAT IS AN MPA? THE U.S. DEFINITION

“Marine protected area” is a broad umbrella term that encompasses a wide variety of approaches to place-based management in the U.S. The official federal definition of an MPA derived from Executive Order 13158 is: “any area of the marine environment that has been reserved by Federal, State, tribal, territorial, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein”.

In practice, MPAs are specific places in the ocean and the Great Lakes within which the natural and/or cultural resources are afforded a higher-level protection than in surrounding waters. MPAs in the U.S. span a surprising range of habitats including areas in the open ocean, in coastal areas, in the inter-tidal zone, in estuaries and in the Great Lakes waters. U.S. MPAs also vary widely in their purpose, legal authorities, agencies and management approaches, level of protection and restrictions on human uses. The proposed MPA classification system simplifies this often confusing diversity by focusing on a few key functional features that together describe those aspects of the MPA that are of greatest concern to stakeholders, agencies and scientists.

OVERVIEW OF THE MPA CLASSIFICATION SYSTEM

Outlined below are the five fundamental design characteristics used to describe an MPA, and the mutually exclusive options within each category. In practice, the first two characteristics – (a) the primary conservation goal and (b) the level of protection (highlighted below) – address most of the issues and concerns underlying the national MPA policy dialogue. These terms are defined in the following section.

<table>
<thead>
<tr>
<th>Primary Conservation Goal</th>
<th>Level of Protection Afforded</th>
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<tbody>
<tr>
<td>☐ Natural Heritage</td>
<td>☐ Restricted Access</td>
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<tr>
<td>☐ Cultural Heritage</td>
<td>☐ No Impact</td>
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<td>☐ Sustainable Production</td>
<td>☐ No Take</td>
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<td></td>
<td>☐ Zoned Multiple Use</td>
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<td>☐ Non-zoned Multiple Use</td>
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<table>
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<tr>
<th>Permanence of Protection</th>
<th>Constancy of Protection</th>
<th>Scale of Protection</th>
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<tr>
<td>☐ Permanent</td>
<td>☐ Year-round</td>
<td>☐ Ecosystem</td>
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<td>☐ Conditional Upon Performance</td>
<td>☐ Seasonal</td>
<td>☐ Focal Resource</td>
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<td>☐ Temporary</td>
<td>☐ Rotating</td>
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DEFINITION OF TERMS USED IN THE CLASSIFICATION SYSTEM

This section defines the five characteristics of the classification system, and describes the mutually exclusive options within each.

PRIMARY CONSERVATION GOAL

While many MPAs in the US have multiple objectives, most are established to achieve a primary overarching conservation goal that reflects their statutory mandates, implementing regulations and management plans. The primary conservation goal also determines many fundamental aspects of the site’s design, location, size, scale and management strategies.

- **Natural Heritage MPAs** — established 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.
  
  **Applications:** most national marine sanctuaries, national parks, national wildlife refuges, and many state MPAs.

- **Cultural Heritage MPAs** — established principally to protect, understand and interpret submerged cultural resources that reflect the nation’s maritime history and traditional cultural connections to the sea.
  
  **Applications:** some marine sanctuaries, national and state parks and national historic monuments.

- **Sustainable Production MPAs** — 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.
  
  **Applications:** most federal and state fisheries MPAs and many national wildlife refuges.

LEVEL OF PROTECTION AFFORDED

MPAs in the U.S. vary widely in the level and type of legal protections provided to the site’s natural and cultural resources and to the natural environmental processes that sustain them. The five levels of protection described below largely determine both the effectiveness an MPA and its impacts on human uses and activities.

- **No Access** — MPAs that prohibit all significant ecological disturbances in the protected area by restricting access, unless specifically permitted for designated special uses such as research, monitoring or restoration.
  
  **Applications:** extremely rare in the U.S., occurring mainly as small research-only zones within larger multiple use MPAs. Other commonly used terms for no access MPAs include wilderness areas or marine preserves.

- **No Impact** — MPAs that allow access but prohibit all harmful impacts to the MPA or to the ecological or cultural services it provides. Prohibited activities often include resource extraction; discharge of pollutants; disposal of materials; and any significant alteration of submerged cultural resources, biological assemblages, ecological interactions, protected habitats, or the natural processes that support them.
  
  **Applications:** very rare in U.S. waters, occurring mainly as small isolated MPAs or in small zones within larger multiple use MPAs. Other commonly used terms include fully protected marine (or ecological) reserves.
No Take – MPAs that allow access and some potentially harmful human uses but prohibit the extraction or significant destruction of natural or cultural resources.

Applications: rare in the U.S., occurring mainly in state MPAs and in some areas closed for either fisheries management or the protection of endangered species. Other commonly used terms include marine reserves or ecological reserves.

Zoned Multiple Use – MPAs that employ marine zoning to manage a range of human activities, including resource extraction, by allocating specific uses to compatible places or times in order to reduce user conflicts and adverse impacts while providing an overall level of protection that exceeds that of surrounding waters.

Applications: increasingly common in U.S. waters, including some marine sanctuaries, national parks, national wildlife refuges, and state MPAs.

Non-Zoned Multiple Use – MPAs that apply a consistent level of protection and allowable activities across the entire protected area.

Applications: among the most common MPA types in the US; typical of many marine sanctuaries, national and state parks; many fisheries and cultural resource MPAs.

PERMANANCE OF PROTECTION

Not all MPAs are permanently protected. Many vary widely in how long their protections remain effective, which in turn, profoundly affects their ultimate impacts on ecosystems and users.

Permanent Protection – MPAs whose legal authorities protect special places in the ocean in perpetuity for future generations.

Applications: some marine sanctuaries, all national parks.

Conditional Protection -- MPAs that have the potential, and often the expectation, to persist administratively over time, but whose legal authority has a finite duration and must be renewed or ratified based on periodic governmental reviews of performance.

Applications: some national marine sanctuaries, parks and monuments with ‘sunset clauses’.

Temporary Protection -- MPAs that are designed to address relatively short-term conservation and/or management needs by protecting a specific habitat or species for a finite duration, with no expectation or specific mechanism for renewal

Applications: some fisheries closures and rotating fisheries reserves.

CONSTANCY OF PROTECTION

Not all MPAs provide year-round protection to the enclosed area. Three levels of “constancy” are seen among MPAs in the U.S.

Year-Round Protection – MPAs that provide constant protection throughout the year.

Applications: all marine sanctuaries, national parks, refuges, monuments, and some fisheries sites.
Seasonal Protection -- MPAs that protect specific habitats and resources, but only during certain seasons when human uses may disrupt ecologically sensitive processes such as spawning, breeding or feeding aggregations.

*Applications*: some fisheries and endangered species closures around sensitive habitats.

Rotating Protection -- MPAs that persist for a finite duration and are then de-designated and moved to another location to fulfill similar conservation or management goals.

*Applications*: fisheries closures created for the purpose of recovering a localized population to harvestable levels.

**SCALE OF PROTECTION**

MPAs in the U.S. vary widely in the ecological scale targeted by the site’s legal protections. Examples range from entire ecosystems as the conservation target, to sites that target a single focal species of economic or ecological importance. Scale of protection reflects the MPA’s underlying legal authorities and, in turn, influences the area’s design, siting and management approach.

- **Ecosystem** – MPAs whose legal authorities and management measures are intended to protect the entire ecosystem or habitat within its boundaries.

  *Applications*: most marine sanctuaries, national parks and national monuments.

- **Focal Resource** – MPAs whose legal authorities and management measures specifically target one or a limited suite of identified resources (either natural or cultural).

  *Applications*: many fisheries and cultural resource sites, some national wildlife refuges and sanctuaries.

**EXAMPLES OF REAL MPAs CLASSIFIED BY THE SYSTEM**

Following are some illustrative examples of how the proposed Classification System can be applied to a variety of existing MPAs in U.S. waters. For each of the MPAs classified here, the five characteristics listed above are presented in two groups. The first bulleted line listed under each site reflects the two fundamental design characteristics – primary conservation goal and level of protection – that often best reflect the overall purpose and impact of the site. The second bulleted line, describes the permanence, constancy and scale of protections afforded by the site. Unique aspects of each site are underlined to illustrate how the proposed classification system distinguishes among different types of MPAs.

Together, these five characteristics provide a clear and objective picture of the underlying purpose, rationale, management strategy and likely impacts of most MPAs in the U.S. The proposed classification system can also be used to describe special management zones embedded within larger multiple use MPAs. In such cases – which are becoming increasingly prevalent in the U.S. – the overall MPA is described as being “zoned”, and each zone is described separately as a subset.

**Channel Islands National Park:**
- A zoned multiple use, natural heritage MPA
- With permanent, year-round, ecosystem protection
Florida Keys National Marine Sanctuary:
- A zoned multiple use, natural heritage MPA
- With conditional, year-round, ecosystem protection

Research-Only Zone Within The Florida Keys NMS:
- A no access, natural heritage zone
- With permanent, year-round, ecosystem protection

MONITOR National Marine Sanctuary:
- A no impact, cultural heritage MPA
- With permanent, year-round, focal resource protection

Spawning Ground Closure (generic):
- A no take, sustainable production MPA
- With permanent, seasonal, ecosystem protection

Fisheries Closures (generic):
- A non-zoned multiple use, sustainable production MPA
- With conditional, year-round, focal resource protection

Marine Mammal Critical Habitat (generic):
- A no impact, natural heritage MPA
- With permanent, seasonal, focal-species protection

COMMENTS

The National MPA Center is seeking input from the MPA Federal Advisory Committee on the proposed MPA classification system. We are especially interested in the Committee’s views on the practicality of this approach and on how best to use it, or a modified version, to help clarify and confusion about the types and uses of MPAs in the United States. Please convey your comments to:

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June 21, 2003