

IMPROVING THE MPA INVENTORY

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The information provided here is current as of August 2011, and is from the Marine Protected Areas Inventory (MPA Inventory) – a comprehensive geospatial database designed to catalog and classify marine protected areas within U.S. waters. The MPA Inventory was developed from information provided by state, territorial, tribal and federal MPA programs, and other publicly available data.

WHAT IS A MARINE PROTECTED AREA?

According to Executive Order 13158 (May 2000), an MPA is “an area of the marine environment that has been reserved by federal, state, territorial, tribal or local laws or regulations to provide lasting protection to part or all of the natural and cultural resources therein.”

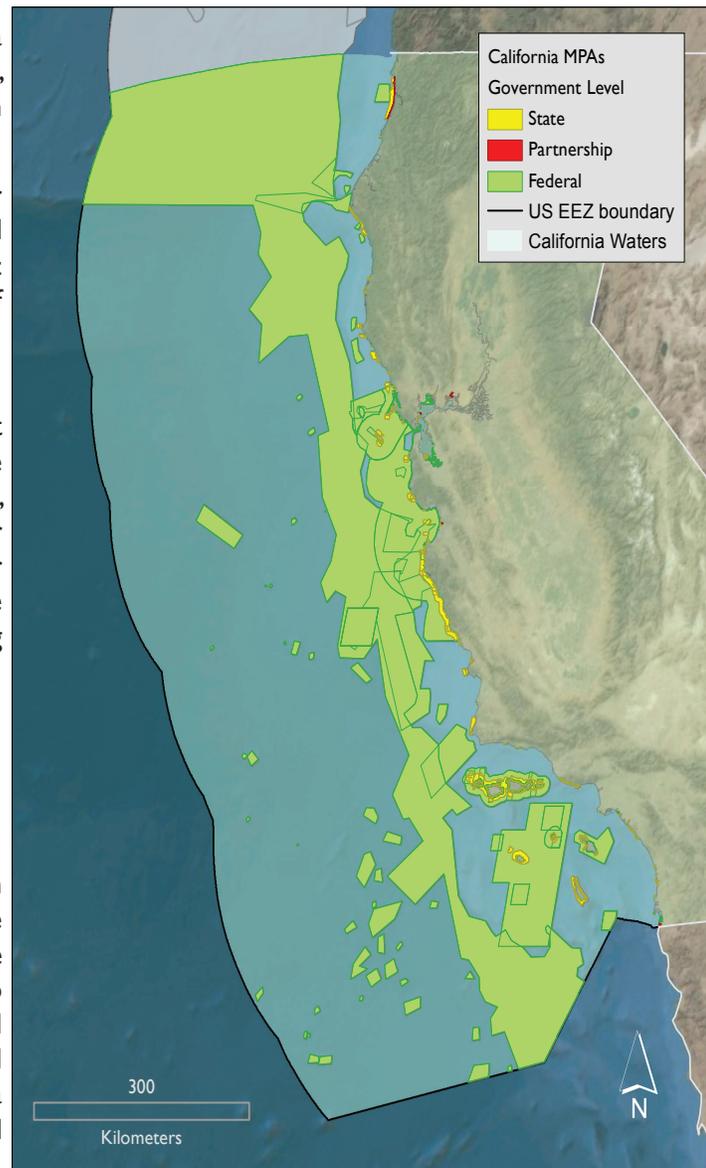
The MPA Inventory is a geospatial database that stores information for over 1600 MPAs nationwide. The Inventory is updated annually and is hosted online in various formats to enable users to view boundaries and basic classification information about MPAs and to assist in the development of a National System of MPAs, as defined in Executive Order 13158.

MPA INVENTORY EXPANSION

To improve the capabilities of the Inventory database and to reflect the best available information on MPA resources and management, the Inventory is currently being expanded to incorporate data on physical, cultural and ecological resources, scientific monitoring activities, major management activities, and legal authority data at the site level. In order to create a repeatable and robust protocol for data collection and storage that can be replicated on a regional or national scale, this effort is being undertaken in phases:

- Phase I: California MPAs (completed)
- Phase II: US West Coast MPAs (completed)
- Phase III: National System MPAs (ongoing)
- Phase IV: All Remaining US MPAs

While aimed at improving the quality and depth of the information available for MPAs, this effort is not designed to characterize all the specific resources within each site, but rather to summarize the resource groups present and the variety of management strategies applied to protect natural and cultural resources in MPAs at regional and national scales. These improvements to the MPA Inventory will link existing spatial data with new cultural and natural resource (presence/ absence) data to better understand the legal protection, biological composition and resource representation of US MPAs.



NOAA's National Marine Protected Areas (MPA) Center's mission is to facilitate the effective use of science, technology, training, and information in the planning, management, and evaluation of the nation's system of marine protected areas. The MPA Center works in partnership with federal, state, tribal, and local governments and stakeholders to develop a science-based, comprehensive national system of MPAs. These collaborative efforts will lead to a more efficient, effective use of MPAs now and in the future to conserve and sustain the nation's vital marine resources.



RESEARCH PROCESS

Existing and readily available data are sourced primarily from online repositories. The datasets are mined, compiled and stored using a Microsoft Access (2007) database to facilitate future analysis, data management and manipulation. Repeatable online searches give each site equal effort regardless of MPA size or internet presence. The search protocol uses a set of search keywords related to MPA resources to mine online databases for relevant information. By only using these keywords when data mining, each site receives an equal search effort.

Building a common framework to capture and store a broad range of data in a uniform way is one of the primary challenges of this type of database effort. The project addressed this problem by identifying standardized Resource Groups that represent broad scale environmental and cultural features, habitats and species. Resource groups of interest were identified based on the National System of MPAs Priority Conservation Objectives (PCO) together with input from MPA management agencies and the National System of MPAs partners. Our goal in defining these groups was to capture details about resources within MPAs, but represent that detail in broader categories to allow for easy site summaries, comparability between sites, and regional and national analyses.

MPA INVENTORY: WHAT WE CAN SAY

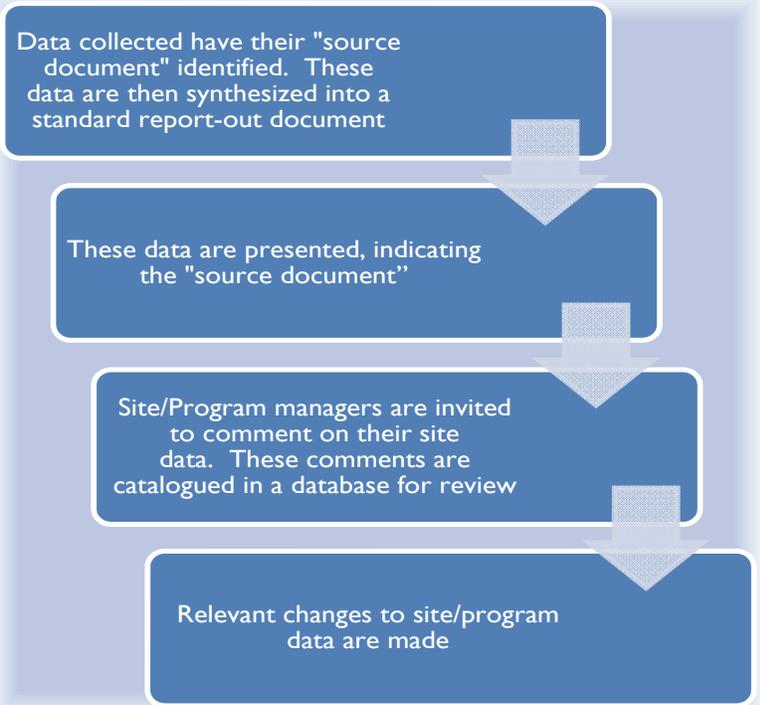
Through this project, the MPA Inventory can now provide more detailed spatial and descriptive statistics about MPA size, location program management, and resource representation. For example, we can now say:

- There are 213 MPAs in California waters out to the US EEZ
- About 32% of California waters out to the US EEZ, are in some form of MPA
- Around 3/4 (75%) of California MPAs are designated with multiple uses allowed
- 25% of these MPAs are no take, representing just 0.15% of California waters out to the US EEZ
- 53 MPAs are managed by federal agencies, accounting for 98% of the MPA area coverage
- 62% protect a target species on the Endangered Species Act (ESA)
- 28% have nesting areas for migrating birds
- Just 13% contain wetlands/marshes, with publicized nesting habitat
- Just over half (51%) have an ongoing, monitoring program with biological parameters
- Only 20% contain anadromous fish species
- 43% contain kelp forest and groundfish species

DATA QUALITY CONTROL

To ensure accurate resource representation by MPA site or program, MPA site/ program managers are invited to review the information gathered for each site. As the final step of the data gathering process, this provides an opportunity for feedback, clarification or comments to ensure that site data are as accurate as possible.

DATA VERIFICATION STEPS INVOLVED IN MPA INVENTORY EXPANSION



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