

# Project Goals

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# Ocean and Coastal Mapping Integration Act

Public Law 111-11, Title XII, Subtitle B - 2009

- *Ocean and coastal mapping is the acquisition, processing, and management of physical, biological, geological, chemical, and archeological characteristics and boundaries of ocean and coastal areas, resources, and sea beds using a variety of mapping technologies.*
- *The IWG-OCM is charged with collaborating with federal and state mapping agencies to implement the practice of coordinated planning, acquisition, management, integration, and dissemination of Federal Ocean and Coastal Mapping (OCM) data and derivative products in a manner that permits easy access to and use by the greatest range of consumers.*

## Ocean and Coastal Mapping Integration Act:

- (1) *an inventory of ocean and coastal mapping data within the territorial sea and the exclusive economic zone and throughout the Continental Shelf of the United States, noting the age and source of the survey and the spatial resolution (metadata) of the data.*
- (2) *identification of priority areas in need of survey coverage using present technologies.*

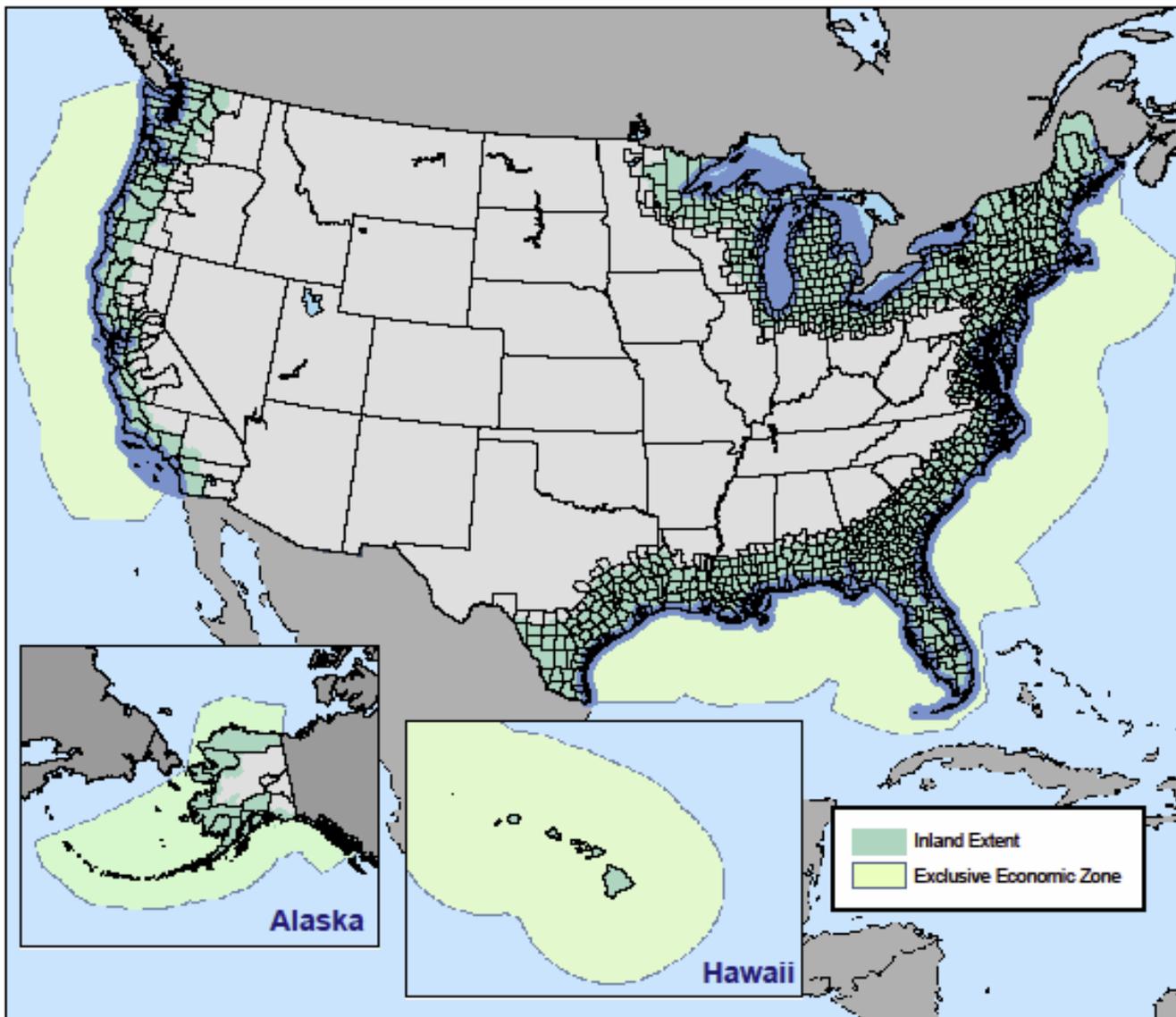
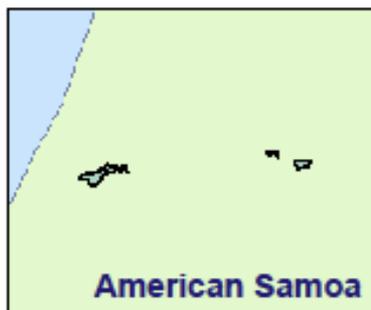
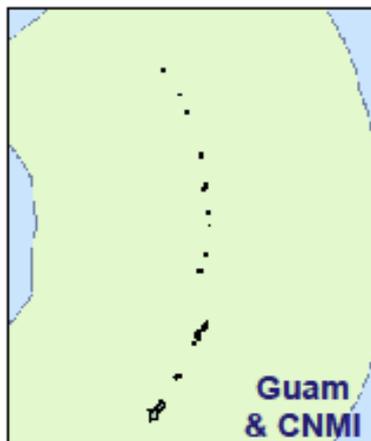
## Ocean and Coastal Mapping Integration Act:

- (3) *a resource plan that identifies when priority areas in need of modern ocean and coastal mapping surveys can be accomplished;*
- (8) *a statement of resource requirements for organizations to meet the goals of the program, including technology needs for data acquisition, processing, and distribution systems;*

## Ocean and Coastal Mapping Integration Act:

- (5) *a description of any products resulting from coordinated mapping efforts under this subtitle that improve public understanding of the coasts and oceans, or regulatory decision making;*
- (6) *documentation of minimum and desired standards for data acquisition and integrated metadata;*

# Ocean and Coastal Mapping Geographic Extent



# Requirements Development Document – 2011

## Section 1: Inventory Contents and Components

### The Inventory will consist of:

- A comprehensive collection of **metadata records** that describe existing data, interpretive information, and online data services ;  
#1 of the Act
- A **registry of data collection activities** including those planned, in-progress, and completed, as well as requirements for new data;  
#2 & #3 of the Act
- **Capabilities to ingest** FGDC and ISO compliant **metadata files** and to automatically update the metadata collection to reflect changes in data repositories;
- **Search and discovery capabilities** if these cannot be provided by existing external tools.

# Requirements Development Document – 2011

## Section 2: Metadata Details

- The metadata collection should allow inventory users to answer the basic question, ***“Are the data useful for and in a format that supports my purposes?”*** Additionally, the registry of data collection activities should provide users with the ***capability to develop data collection partnerships*** by providing information regarding what organizations need OCM data or are planning to collect data, where and when data are to be collected, and for what purposes.

#6 of the Act

# Requirements Development Document – 2011

## Section 2: Metadata Details

- Certain fields in future metadata records should rely upon a ***standardized vocabulary***. Additionally, a ***translator*** is needed to relate the standardized vocabulary to ***synonyms*** in legacy records.
- ***Dates*** must all be defined formats.
- ***Positional data*** from input metadata files and ***data services*** should be converted to a ***common reference system*** to facilitate searches.

# Requirements Development Document – 2011

## Section 3: User Search Needs

### Spatial Searches -

- Users must be able to *specify limits of desired data* through graphical entry on a map, importing a boundary file (i.e. shape file), or by manual entry of bounding coordinates.
- The user should be able to *specify if results* are to be *within, overlapping or outside* the provided *boundary*.
- Users should be able to *specify the region* of interest by providing its *geographic name*.

# Requirements Development Document – 2011

## Section 3: User Search Needs

### Text Matching -

- Users must be able to easily *search for records by matching key words or phrases*. The user may be presented a *drop-down lists* for certain fixed vocabulary searches. Users should be allowed to *enter their own text* for free text search capabilities.
- The text matching should be able to operate on *alpha and numeric text searches*.

# IWG-OCM Technical Workshop – June 2011

## Purpose:

- Recommend technical methods and standards;
- Provide estimates of time requirements;
- Identify nontechnical risks and challenges.

# IWG-OCM Technical Workshop – June 2011

## Recommendations for General Approach

- The inventory use the **Esri Geoportal Server**
  - 1) Flexible, allowing *multiple metadata formats*;
  - 2) Geospatial *search and display* features;
  - 3) Likely to be widely implemented;
  - 4) *Both a portal and a service* that can be harvested or linked into a network of federated portals.

# IWG-OCM Technical Workshop – June 2011

## Recommendations for minimizing risks & obstacles:

- Standards and methods used must be *adaptive to multiple portal developments*;
- Consult with the technical teams setting up *regional information systems* for coastal and marine spatial planning;
- Start with an approach that can make use of metadata in either form, with the intention of *providing efficient, low-cost metadata translators* when they are available.

# IWG-OCM Technical Workshop – June 2011

## Recommendations for minimizing risks & obstacles:

- The Inventory will use and *build on work that has been done before*;
- The Inventory will be developed in *partnership with other efforts*;
- *Agencies can partner* to host their data or metadata in web services (IWG-OCM can assist by providing a list of federal metadata repositories);

# IWG-OCM Technical Workshop – June 2011

## Recommendations for minimizing risks & obstacles:

- The Inventory guidance should be considered a set of guidelines, examples and best practices ***to ensure metadata can be discovered***, not a set of requirements for submitting metadata to the Inventory.