



# Theme Implementation Plan for Water – Oceans and Coasts Theme

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National Oceanic and Atmospheric  
Administration (NOAA)

**Federal Geographic Data Committee (FGDC)**

October 31, 2018



# Water – Oceans and Coasts Theme FY18 Implementation Plan Report



## Overview

As part of meeting the requirements under [OMB Circular A-16 Supplemental Guidance](#) and [OMB Circular A-16 Appendix E - NGDA Data Themes, Definitions, and Lead Agencies](#) for NGDA Portfolio Management and NGDA Theme Management, NGDA Themes Leads for a Theme, in coordination with associated NGDA Dataset Managers, have developed Theme Strategic Plans and corresponding implementation plans for each Theme in the NGDA Portfolio. This report provides information on implementing the goals, objectives, and actions outlined in the Theme’s Strategic Plan (link below). The report includes information on Theme Personnel (Table 1), National Geospatial Data Asset (NGDA) Datasets associated with the Theme (Table 2), and the human and financial resources needed to manage the Theme (Table 3). Table 4 provides a status update on progress made in in the current reporting period toward meeting Theme Strategic Plan goals and objectives. Table 5 provides details on the Theme Implementation Plan.

## Theme Strategic Plan

[https://communities.geoplatform.gov/ngda-waterocean/wp-content/uploads/2018/04/Water\\_Oceans\\_Coasts\\_Theme\\_Strategic\\_Plan\\_20160826.pdf](https://communities.geoplatform.gov/ngda-waterocean/wp-content/uploads/2018/04/Water_Oceans_Coasts_Theme_Strategic_Plan_20160826.pdf)

## Theme Personnel

Theme personnel play a vital role in the operation and maintenance of a Theme. They are “individuals who provide interdepartmental leadership and coordination at the NGDA Theme level. They work with component NGDA Dataset Managers to develop standards and provide guidance. The NGDA Theme Lead, or designee, chairs the NGDA Theme’s Thematic Committee and manages the annual process of providing NGDA Dataset collaboration and funding recommendations to the FGDC Steering Committee for those NGDA Datasets within their NGDA Theme. Additionally, the NGDA Theme Lead reports to the Executive NGDA Theme Champion and the FGDC Coordination Group on the NGDA Theme’s activities and investments (both current and planned).” Table 1 provides a summary of current Theme Personnel followed by Table 2 that lists the NGDA Datasets that comprise the Theme.

<b>Theme Personnel</b>	
<b>Theme Lead (Co-Leads):</b>	Patrick Keown, NOAA Office of Coast Survey
<b>Theme Lead Agency(ies):</b>	<b>NOAA</b>
<b>Executive Theme Champion(s):</b>	Zachary Goldstein, NOAA CIO
<b>Executive Champion Agency(ies):</b>	<b>NOAA</b>

Table 1. Personnel Involved in Theme Management.

<b>Water – Oceans and Coasts Theme <a href="#">NGDA Datasets</a></b>	<b>NGDA Agency</b>
Coastal Mapping Shoreline Products	DOC-NOAA
NOAA Electronic Navigational Charts (ENC)	DOC-NOAA
NOAA Raster Navigational Charts (RNC)	DOC-NOAA
Maritime Limits and Boundaries of the United States of America	DOC-NOAA
ODIN: Observational Data Interactive Navigation, an interactive map of all CO-OPS active stations	DOC-NOAA
OCSLA Sec. 8(g) Revenue Zone Boundary - Alaska Region NAD83	DOI-BOEM
OCSLA Sec. 8(g) Revenue Zone Boundary - Atlantic Region NAD83	DOI-BOEM
OCSLA Sec. 8(g) Revenue Zone Boundary - Gulf of Mexico Region NAD27	DOI-BOEM
OCSLA Sec. 8(g) Revenue Zone Boundary - Pacific Region - West Coast NAD83	DOI-BOEM
Outer Continental Shelf 200 Nautical Mile Limit - Gulf Of Mexico Region NAD27	DOI-BOEM
Outer Continental Shelf Submerged Lands Act Boundary - Alaska Region NAD83	DOI-BOEM
Outer Continental Shelf Submerged Lands Act Boundary - Gulf of Mexico Region NAD27	DOI-BOEM
Outer Continental Shelf Submerged Lands Act Boundary - Pacific Region - West Coast NAD83	DOI-BOEM
Sea Levels Online: Sea Level Variations of the United States Derived from National Water Level Observation Network Stations	DOC-NOAA
U.S. Marine Protected Areas Boundaries: MPA Inventory	DOC-NOAA

**Table 2. NGDA Datasets within the Theme.**

## Human and Financial Resources Needed for Theme Management

The following table provides an estimate of resources needed for managing this Theme. It includes different activities, the roles that support them, as well as an estimated decimal Full Time Equivalent (FTE) and FTE grade. This estimate does not include the resources required for the agency to develop and maintain the NGDA Dataset(s) that make up the Theme to meet the agency’s core mission requirements.

Reporting Period for Human and Financial Resources<sup>1</sup>: 10/2017 – 09/2018

<b>Description of Theme Management Activities</b>	<b>Role</b> <i>(Theme Lead, Dataset Manager, Coordinator, other as specified)</i>	<b>FTE<sup>2</sup></b>	<b>FTE Grade</b>
NGDA Theme management (e.g., attend meetings, review NGDA documents, develop Theme Strategic Plans, etc.)	Theme Lead	0.10	GS-14 (equivalent)
Other Theme administration activities (e.g., Dataset Manager completing Lifecycle Maturity Assessment, etc.)	Dataset Managers (in total across all NGDA)	0.25	Various

**Table 3. Human and Financial Resources Needed for Theme Management.**

<sup>1</sup> Reporting period should align with October 1 – September 30 and be submitted by October 31.

<sup>2</sup> A full-time employee was available a maximum of 1952 hours during the inclusive period of October 1 – September 30; assuming a Monday-Friday schedule with 8-hour workdays and not counting Federal Holidays. The FTE was determined by taking actual number of hours worked in support of Theme Management divided by 1952 hours, rounded to the nearest 0.01.

## Progress against Goals and Objectives

The following table shows the progress status made toward achieving the Theme’s Strategic Plan goals and objectives since the last reporting period. Status categories include 'Not Started' for those activities that have not gotten underway in the reporting period; 'In Progress' for those activities underway which will continue into the next year; 'Complete' for the activities finished, or 'Recurring (completed for the current reporting period).

Goals and Objectives undertaken during 2018	Status
<b>Goal 1: Promote the collection and distribution of key coastal and ocean datasets.</b>	
Objective 1.1. Ensure W-O&C NGDAs are compliant with all A-16 Portfolio Data Management requirements for metadata, data access, web services, archiving, and maturity assessments.	Recurring (completed for 2018)
Objective 1.2. Review scope of existing NGDAs and explore adding new NGDAs to the W-O&C Theme that fulfill authoritative framework data requirements for a national Marine NSDI.	Recurring (completed for 2018)
Objective 1.3. Coordinate with other A-16 Theme Leads on NGDAs that are applicable to the W-O&C Theme to enhance cross-theme efficiencies and benefits and improve data product design, management and utilization.	Recurring (completed for 2018)
Objective 1.4. Increase the overall availability of coastal and ocean datasets by encouraging authoritative data stewardship agencies to provide metadata and standards-compliant mapping services, as well as register content in Geoplatform.gov.	Recurring (completed for 2018)
Objective 1.5. Gather and evaluate requirements from a diverse community of end-users for critical coastal and ocean datasets that don’t currently exist, or are unavailable, that could be future candidates for national data development initiatives [e.g., integrated habitat data, high-resolution coastal bathymetry].	In Progress
Objective 1.6. Support the Interagency Working Group on Ocean and Coastal Mapping (IWG-OCM) in the development and implementation of a National Coastal Mapping Strategy, as directed by Congress in the Coastal and Ocean Mapping Integration Act of 2009.	In Progress
<b>Goal 2: Promote tools that increase the usefulness of coastal and ocean geospatial data to address critical societal issues.</b>	
Objective 2.1. Work in partnership with other groups, such as the regional ocean portal teams and Digital Coast, to identify inventories of existing tools and decision support systems for the coastal and marine environment.	Recurring (completed for 2018)
Objective 2.2. Seek out opportunities to promote high-value tools through a variety of outreach existing mechanisms (e.g., webinars, list servers, newsletter stories, conference presentations).	Recurring (completed for 2018)
Objective 2.3. Identify and promote examples where geospatial data and technologies are critical in addressing complex coastal issues [e.g., sea level rise simulations, off-shore alternative energy siting alternatives analysis, acidification, sustainable fisheries, safe navigation].	Recurring (completed for 2018)

<b>Goal 3: Increase awareness of new geospatial data, collection systems, and innovative approaches to manage and share these resources.</b>	
Objective 3.1. Provide leadership and participate in national-scale standards efforts in thematic areas relevant to the coastal and ocean geospatial community.	Recurring (completed for 2018)
Objective 3.2. Support the NOAA IOOS Office in providing new tools and forecasts to improve safety, enhance the economy, and protect the environment through a national-regional partnership for ocean observing systems.	Recurring (completed for 2018)
Objective 3.3. Participate with the NOAA IOOS office as they lead a nationwide program for modeling development, undersea glider operations, highfrequency radar, and animal telemetry to include providing resources to partner organizations through a competitive funding program.	Recurring (completed for 2018)
Objective 3.4. Identify coastal and ocean use cases that could potentially benefit from advances being made in the high-performance computing and Big Data fields.	Recurring (completed for 2018)
Objective 3.5. Partner with the academic community, private sector, and government research agencies in the development and testing of new geospatial technologies and approaches [e.g., Joint Airborne Lidar Bathymetry Technical Center of Expertise (JALBTCX), Center for Coastal and Ocean Mapping/Joint Hydrographic Center (CCOM/JHC)].	Not Started
Objective 3.6. Explore opportunities for shared services, for example cloud hosting or enterprise contracting vehicles, to improve efficiencies and coordination.	Not Started
<b>Goal 4: Foster the growth of an informed and productive coastal and ocean geospatial community.</b>	
Objective 4.1. Reconstitute the Marine and Coastal Spatial Data Subcommittee to provide a coordination focal point for communicating the diverse activities and developing shared requirements for the coastal and marine geospatial community [e.g., IWG-OCM, IOOS, MPPN, ICAN].	(In Progress)
Objective 4.2. Ensure close coordination with the wide range of regional ocean planning data portals and coastal atlas teams with an emphasis on sharing requirements and lessons learned on data, technology, decision support tools, and use cases.	Recurring (completed for 2018)
Objective 4.3. Leverage existing coordination opportunities such as the Coastal GeoTools Conference, Esri’s Oceans Conference, and related events to promote the goals of and gather feedback on the W-O&C Theme and related activities.	Recurring (completed for 2018)
Objective 4.4. Seek out all opportunities and venues to expand interactions and solicit feedback from all sectors on the current state of the national Marine NSDI.	Recurring (completed for 2018)
Objective 4.5. Advertise and support peer-to-peer sharing of both information and opportunities, using the example of the NOAA Digital Coast’s “Stories from the Field” and the “GeoZone Blog.”	Recurring (completed for 2018)
Objective 4.6. Participate actively in applicable international organizations dealing with Marine NSDI and related topical areas [e.g., International Hydrographic Office [IHO], United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), Group on Earth Observations [GEO]].	Recurring (completed for 2018)

**Table 4. Theme Implementation Plan Progress Status.**

## Theme Implementation Plan

The following table provides details for achieving Theme Strategic Plan goals and objectives over the multi-year planning period. These include roles and responsibilities, specific actions, milestones, performance indicators and projected completion dates.

<b>Goal 1: Promote the collection and distribution of key coastal and ocean datasets.</b>				
<p><b>Objective 1.1:</b> Ensure W-O&amp;C NGDAs are compliant with all A-16 Portfolio Data Management requirements for metadata, data access, web services, archiving, and maturity assessments.</p> <p><b>Agency and/or Stakeholders Involved:</b> All coastal and ocean NGDA data owners and users.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased access to critical coastal and ocean datasets that will improve the health and use of the coastal and marine environments.</li> <li>Enhanced marine spatial data infrastructure to support diverse community of users and uses.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
1.1.1 Semi-annually assess all theme NGDAs to ensure compliance with all requirements	Assessment of NGDA compliance	Percentage of theme NGDAs that are compliant with A-16 requirements	Theme Lead and NGDA Managers	Ongoing, twice per year
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
Theme Lead & Data Owners		Ensured all NGDAs were in compliance. Updated NGDAs when notified of changes from data owners.		
<p><b>Objective 1.2:</b> Review scope of existing NGDAs and explore adding new NGDAs to the W-O&amp;C Theme that fulfill authoritative framework data requirements for a national Marine NSDI.</p> <p><b>Agency and/or Stakeholders Involved:</b> All coastal and ocean NGDA data owners and users.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased access to critical coastal and ocean datasets that will improve the health and use of the coastal and marine environments.</li> <li>Enhanced marine spatial data infrastructure to support diverse community of users and uses.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
1.2.1 On an as-needed basis, evaluate adding new NGDAs to theme	No time-specific milestone, completed on an as-needed basis	Number of new NGDAs added annually to the theme	Theme Lead and NGDA Managers	Ongoing

<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
N/A		No new datasets added.		
<p><b>Objective 1.3:</b> Coordinate with other A-16 Theme Leads on NGDAs that are applicable to the W-O&amp;C Theme to enhance cross-theme efficiencies and benefits and improve data product design, management and utilization.</p> <p><b>Agency and/or Stakeholders Involved:</b> All coastal and ocean NGDA data owners and users.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased access to critical coastal and ocean datasets that will improve the health and use of the coastal and marine environments.</li> <li>Enhanced marine spatial data infrastructure to support diverse community of users and uses.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
1.3.1 Participate in A-16 Theme Lead discussions to explore opportunities for closer cross-theme collaboration	No time-specific milestone, completed on an as-needed basis	Number of new cross-theme connections identified	Theme Lead and NGDA Managers	Ongoing
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
Theme Lead		Participated in monthly Theme Lead calls.		
<p><b>Objective 1.4:</b> Increase the overall availability of coastal and ocean datasets by encouraging authoritative data stewardship agencies to provide metadata and standards-compliant mapping services, as well as register content in Geoplatform.gov.</p> <p><b>Agency and/or Stakeholders Involved:</b> All coastal and ocean NGDA data owners and users.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased access to critical coastal and ocean datasets that will improve the health and use of the coastal and marine environments.</li> <li>Enhanced marine spatial data infrastructure to support diverse community of users and uses.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
1.4.1 Add coastal and ocean NGDA and other datasets to geoplatform.gov	No time-specific milestone, completed on an as-needed basis	Number of new coastal and ocean datasets added to geoplatform.gov	Theme Lead and NGDA Managers	Ongoing
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
NOAA (dataset owner)		Initiate NGDA name change to reflect update in data contained within NGDA.		



<p><b>Objective 1.5:</b> Gather and evaluate requirements from a diverse community of end-users for critical coastal and ocean datasets that don't currently exist, or are unavailable, that could be future candidates for national data development initiatives [e.g., integrated habitat data, high-resolution coastal bathymetry].</p> <p><b>Agency and/or Stakeholders Involved:</b> All coastal and ocean NGDA data owners and users.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased access to critical coastal and ocean datasets that will improve the health and use of the coastal and marine environments.</li> <li>Enhanced marine spatial data infrastructure to support diverse community of users and uses.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
1.5.1 Synthesize coastal and ocean data requirements analysis from existing working groups	Develop a year-end summary of coastal and ocean data needs	Number of coastal and ocean datasets identified	Theme Lead and NGDA Managers	FY18 / Q4
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
		No progress - Move task to FY19 / Q4		
<p><b>Objective 1.6:</b> Support the Interagency Working Group on Ocean and Coastal Mapping (IWG-OCM) in the development and implementation of a National Coastal Mapping Strategy, as directed by Congress in the Coastal and Ocean Mapping Integration Act of 2009.</p> <p><b>Agency and/or Stakeholders Involved:</b> All coastal and ocean NGDA data owners and users.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased access to critical coastal and ocean datasets that will improve the health and use of the coastal and marine environments.</li> <li>Enhanced marine spatial data infrastructure to support diverse community of users and uses.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
1.6.1 Collaborate with the IWG-OCM leadership to ensure theme activities support the IOCM goals and objectives	No time-specific milestone, completed on an as-needed basis  Support 3D Elevation study	Number of IWG-OCM support activities completed	Theme Leads and NGDA Managers	Ongoing
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
All		Supported 3D Elevation study, participate when necessary and publicize when appropriate.		



**Goal 2: Promote tools that increase the usefulness of coastal and ocean geospatial data to address critical societal issues.**

**Objective 2.1:** Work in partnership with other groups, such as the regional ocean portal teams and Digital Coast, to develop an inventory of existing tools and decision support systems for the coastal and marine environment.

**Agency and/or Stakeholders Involved:** Coastal and Ocean geospatial communities of practice.

**Anticipated Outcome:**

- Access to analytical tools that support effective utilization of coastal and ocean data to enhance the data investment value.
- Proven examples and best practices in the use of decision support technologies for coastal and marine management.

<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
2.1.1 Add links to existing resources to the W-O&C Theme Page on geoplatform.gov	URL links added to W-O&C Theme Page	Number of resources added	Theme Lead	Ongoing

**Agency and/or Stakeholder**      **Activity through FY 18 Q4**

No activity to report

**Objective 2.2:** Seek out opportunities to promote high-value tools through a variety of outreach existing mechanisms (e.g., webinars, list servers, newsletter stories, conference presentations).

**Agency and/or Stakeholders Involved:** Coastal and Ocean geospatial communities of practice.

**Anticipated Outcome:**

- Access to analytical tools that support effective utilization of coastal and ocean data to enhance the data investment value.
- Proven examples and best practices in the use of decision support technologies for coastal and marine management.

<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
No Action – might consider deleting due to duplication with other existing groups				

**Objective 2.3:** Identify and promote examples where geospatial data and technologies are critical in addressing complex coastal issues [e.g., sea level rise simulations, off-shore alternative energy siting alternatives analysis, acidification, sustainable fisheries, safe navigation].

**Agency and/or Stakeholders Involved:** Coastal and Ocean geospatial communities of practice.

**Anticipated Outcome:**

- Access to analytical tools that support effective utilization of coastal and ocean data to enhance the data investment value.
- Proven examples and best practices in the use of decision support technologies for coastal and marine management.

<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
2.3.1 Link to Digital Coast Stories from the Field and Regional Ocean Data Portal Use Cases from W-O&C Theme Page	URL links added to the W-O&C Theme Page	Number of resources added	Theme Lead	FY19 / Q4

**Agency and/or Stakeholder**

**Activity through FY 18 Q4**

No progress - Move task to FY19 / Q4

**Goal 3: Increase awareness of new geospatial data, collection systems, and innovative approaches to manage and share these resources.**

**Objective 3.1:** Provide leadership and participate in national-scale standards efforts in thematic areas relevant to the coastal and ocean geospatial community.

**Agency and/or Stakeholders Involved:** Coastal and Ocean geospatial communities of practice.

**Anticipated Outcome:**

- Potential to take full advantage of new technologies to lower the cost of collecting and disseminating data.
- Access to new methods for data management and provision of datasets, models, and analytical tools.

<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
3.1.1 Explore coastal and ocean standards activities as available	No time-specific milestone, completed on an as-needed basis	Number of standards supported	Theme Lead	Ongoing

Agency and/or Stakeholder		Activity through FY 18 Q4		
Theme Lead / All Data Owners		Regularly participate in Standards working groups such as FGDC Metadata, OGC, etc.		
<p><b>Objective 3.2:</b> Support the NOAA IOOS Office in providing new tools and forecasts to improve safety, enhance the economy, and protect the environment through a national-regional partnership for ocean observing systems.</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>• Potential to take full advantage of new technologies to lower the cost of collecting and disseminating data.</li> <li>• Access to new methods for data management and provision of datasets, models, and analytical tools.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
No Action – might consider deleting due to duplication with other existing groups				
<p><b>Objective 3.3:</b> Participate with the NOAA IOOS office as they lead a nationwide program for modeling development, undersea glider operations, high-frequency radar, and animal telemetry to include providing resources to partner organizations through a competitive funding program.</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>• Potential to take full advantage of new technologies to lower the cost of collecting and disseminating data.</li> <li>• Access to new methods for data management and provision of datasets, models, and analytical tools.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
3.3.1 TBD – objective might be deleted				

<p><b>Objective 3.4:</b> Identify coastal and ocean use cases that could potentially benefit from advances being made in the high-performance computing and Big Data fields.</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>• Potential to take full advantage of new technologies to lower the cost of collecting and disseminating data.</li> <li>• Access to new methods for data management and provision of datasets, models, and analytical tools.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
3.4.1 Participate in NOAA Big Data Project and explore coastal and ocean use cases	Report on potential coastal and ocean use cases	Number of use cases identified	NOAA GIO	FY18 / Q4
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
NOAA GIO		Participated in NOAA Big Data Project and still currently exploring use cases.		
<p><b>Objective 3.5:</b> Partner with the academic community, private sector, and government research agencies in the development and testing of new geospatial technologies and approaches [e.g., Joint Airborne Lidar Bathymetry Technical Center of Expertise (JALBTCX), Center for Coastal and Ocean Mapping/Joint Hydrographic Center (CCOM/JHC)].</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>• Potential to take full advantage of new technologies to lower the cost of collecting and disseminating data.</li> <li>• Access to new methods for data management and provision of datasets, models, and analytical tools.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
3.5.1 TBD – objective might be deleted				
<p><b>Objective 3.6:</b> Explore opportunities for shared services, for example cloud hosting or enterprise contracting vehicles, to improve efficiencies and coordination.</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p>				

<ul style="list-style-type: none"> <li>• Potential to take full advantage of new technologies to lower the cost of collecting and disseminating data.</li> <li>• Access to new methods for data management and provision of datasets, models, and analytical tools.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
3.6.1 Participate in FGDC ExComm and NOAA Big Data Project discussions	No time-specific milestone, completed on an as-needed basis	Number of joint cloud hosting opportunities explored	NOAA GIO	Ongoing
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
NOAA GIO		Actively participating in FGDC ExComm and NOAA Big Project Discussions.		

**Goal 4: Foster the growth of an informed and productive coastal and ocean geospatial community.**

**Objective 4.1:** Reconstitute the Marine and Coastal Spatial Data Subcommittee to provide a coordination focal point for communicating the diverse activities and developing shared requirements for the coastal and marine geospatial community [e.g., IWG-OCM, IOOS, MPPN, ICAN].

**Agency and/or Stakeholders Involved:** Coastal and Ocean geospatial communities of practice.

**Anticipated Outcome:**

- Increased communication between all sectors (government, private, academia, and non-profit) involved in the use of geospatial data and technologies for coastal and ocean planning.
- Identification of best practices and common technology approaches and platforms for coastal and ocean data management.
- Potential development of common best practices, technical assistance, and training materials for geospatial practitioners.

<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
4.1.1 Hold joint MCSD and W-O&C meeting to discuss future coordination	Host joint meeting of MCSD and W-O&C leads	Number of meetings held	Theme Lead and MCSD Chair	FY18 / Q2

Agency and/or Stakeholder		Activity through FY 18 Q4		
Theme Lead & MCSD Chair		<p>Lead and Chair met on multiple occasions to discuss the future of the MCSD Subcommittee.</p> <p>Held meeting with stakeholders to understand the future need for the MCSD Subcommittee.</p> <p>Plan to recommend dissolving the MCSD Subcommittee.</p>		
<p><b>Objective 4.2:</b> Ensure close coordination with the wide range of regional ocean planning data portals and coastal atlas teams with an emphasis on sharing requirements and lessons learned on data, technology, decision support tools, and use cases.</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased communication between all sectors (government, private, academia, and non-profit) involved in the use of geospatial data and technologies for coastal and ocean planning.</li> <li>Identification of best practices and common technology approaches and platforms for coastal and ocean data management.</li> <li>Potential development of common best practices, technical assistance, and training materials for geospatial practitioners.</li> </ul>				
Actions <i>(Describe discrete activities)</i>	Milestones <i>(A significant change in development with associated date)</i>	Performance Indicators <i>(A metric to assess progress of the action)</i>	Action Responsibility <i>(Agency, individuals, and/or groups leading the action)</i>	Projected Completion Date <i>(FY / Quarter)</i>
4.2.1 Add links to regional ocean portal and coastal atlas resources to W-O&C theme page	URL links added to the W-O&C Theme Page	Number of resources added	Theme Lead	FY19 / Q4
Agency and/or Stakeholder		Activity through FY 18 Q4		
		No progress – Move to FY19 Q4		
<p><b>Objective 4.3:</b> Leverage existing coordination opportunities such as NOAA’s Coastal GeoTools Conference, Esri’s Oceans Conference, and related events to promote the goals of and gather feedback on the W-O&amp;C Theme and related activities.</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased communication between all sectors (government, private, academia, and non-profit) involved in the use of geospatial data and technologies for coastal and ocean planning.</li> <li>Identification of best practices and common technology approaches and platforms for coastal and ocean data management.</li> <li>Potential development of common best practices, technical assistance, and training materials for geospatial practitioners.</li> </ul>				

<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
4.3.1 Participate in applicable conferences and workshops; promote W-O&C Theme	Ongoing throughout the year	Number of conferences and workshops attended	Theme Lead	Ongoing
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
Theme Lead		Participated in Esri Federal Users Conference		
<p><b>Objective 4.4:</b> Seek out all opportunities and venues to expand interactions and solicit feedback from all sectors on the current state of the national Marine NSDI.</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased communication between all sectors (government, private, academia, and non-profit) involved in the use of geospatial data and technologies for coastal and ocean planning.</li> <li>Identification of best practices and common technology approaches and platforms for coastal and ocean data management.</li> <li>Potential development of common best practices, technical assistance, and training materials for geospatial practitioners.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
4.4.1 Participate in applicable conferences and workshops; promote W-O&C Theme	Ongoing throughout the year	Number of conferences and workshops attended	Theme Lead	Ongoing
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
Theme Lead & Dataset Owners		Participated in Marine Spatial Data Concept Development Study		
Theme Lead & Dataset Owners		Participated in Joint HIFLD / GeoPlatform Session		
<p><b>Objective 4.5:</b> Advertise and support peer-to-peer sharing of both information and opportunities, using the example of the NOAA Digital Coast’s “Stories from the Field” and the “GeoZone Blog.”</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p>				



<ul style="list-style-type: none"> <li>Increased communication between all sectors (government, private, academia, and non-profit) involved in the use of geospatial data and technologies for coastal and ocean planning.</li> <li>Identification of best practices and common technology approaches and platforms for coastal and ocean data management.</li> <li>Potential development of common best practices, technical assistance, and training materials for geospatial practitioners.</li> </ul>				
<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
4.5.1 Add resources to W-O&C Theme page	Ongoing	Number of resources added	Theme Lead	FY19 / Q4
<b>Agency and/or Stakeholder</b>		<b>Activity through FY 18 Q4</b>		
		No Progress – Move to FY19 Q4		
<p><b>Objective 4.6:</b> Participate actively in applicable international organizations dealing with Marine NSDI and related topical areas [e.g., International Hydrographic Office [IHO], United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), Group on Earth Observations [GEO]].</p> <p><b>Agency and/or Stakeholders Involved:</b> Coastal and Ocean geospatial communities of practice.</p> <p><b>Anticipated Outcome:</b></p> <ul style="list-style-type: none"> <li>Increased communication between all sectors (government, private, academia, and non-profit) involved in the use of geospatial data and technologies for coastal and ocean planning.</li> <li>Identification of best practices and common technology approaches and platforms for coastal and ocean data management.</li> <li>Potential development of common best practices, technical assistance, and training materials for geospatial practitioners.</li> </ul>				

<b>Actions</b> <i>(Describe discrete activities)</i>	<b>Milestones</b> <i>(A significant change in development with associated date)</i>	<b>Performance Indicators</b> <i>(A metric to assess progress of the action)</i>	<b>Action Responsibility</b> <i>(Agency, individuals, and/or groups leading the action)</i>	<b>Projected Completion Date</b> <i>(FY / Quarter)</i>
4.6.1 Attend UN GGIM 8 <sup>th</sup> Session including Marine Information Working Group meeting	Attend UN GGIM 8 <sup>th</sup> Session in NYC	Attendance at UN GGIM 8 <sup>th</sup> Session	NOAA GIO	FY18 / Q4
<b>Agency and/or Stakeholder</b>	<b>Activity through FY 18 Q4</b>			
NOAA GIO	Attended UN GGIM 8 <sup>th</sup> Session in NYC and first meeting of the UN GGIM Working Group on Marine Geospatial Information.			
Theme Lead	Attended 9 <sup>th</sup> IHO Marine Spatial Data Infrastructure Working Group (MSDIWG9) meeting			

**Table 5. Theme Implementation Plan.**