



**Good Metadata Guidance
makes CMECS resources more accessible**

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Good Metadata Guidance, NOAA's National Centers for Environmental Information

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NOAA Satellite and Information Service | National Centers for Environmental Information



What is CMECS?





What are CMECS Resources?

- CMECS Document
- CMECS Implementation Guidance
- CMECS Data
- CMECS Maps and Products
- Published Research



Where to find CMECS data?

- [NOAA Data Catalog](#)
- [NOAA OneStop](#)
- [NCEI Archive Geoportal](#)
- [Data.gov](#)
- [USGS ScienceBase](#)



Basic Search Terms

"CMECS"

"Coastal and Marine Ecological
Classification Standard"

Catalog Search Results

The screenshot displays a search interface for a data catalog. At the top, there are logos for NOAA U.S. Department of the Interior and DATA.GOV. The search bar contains the text 'CMECS' and shows '20 results (167ms)'. Below the search bar, there are navigation options like 'Home / Datasets' and 'Organizations'. A sidebar on the left shows a map of the United States with a search filter for 'CMECS' and a list of 97 datasets. The main content area displays search results for 'CMECS', including a 'Filters' section with 'Date Range', 'Extensions', and 'Types'. The first result is 'CMECS Crosswalk for NAMERA Benthic Habitat Model', which is a data product created for the project titled 'Application of the Coastal and Marine Ecological Classification Standard (CMECS) to the Northwest Atlantic'. The second result is 'Final Report - Application of the Coastal and Marine Ecological Classification Standard (CMECS) to the Northwest Atlantic', which is a report developed for the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of the Interior. The third result is 'Coastal and Marine Ecological Classification Standard (CMECS) geofoms of the Oregon outer continental shelf (OCS) proposed wind farm site'.

DATA.CATALOG

CMECS

20 results (167ms)

Filters

Date Range

- Past year (19)
- Past month (7)
- Past week (0)
- Past day (0)
- Custom range...

Extensions

- Citation (8)
- Shapefile (4)
- ArcGIS Service Definition (2)
- Raster (2)
- Budget (1)
- Project (1)

Types

- Citation (14)
- Downloadable (8)
- Map Service (8)
- OGC WFS Layer (4)
- OGC WMS Layer (4)
- More...

CMECS Crosswalk for NAMERA Benthic Habitat Model

This data product was created for the project titled: "Application of the Coastal and Marine Ecological Classification Standard (CMECS) to the Northwest Atlantic" which was partially funded by the U.S. Department of the Interior, Fish and Wildlife Service and a joint collaborative project with The Nature Conservancy (Eastern Division Conservation Science), University of Rhode Island (Graduate School of Oceanography), and Massachusetts Department of Fish and Game (Division of Marine Fisheries). In the Northeast United States region, efforts are underway to better organize and integrate spatial marine data to support ocean planning and management efforts. An important step in this process is translating existing...

Categories: Data; Types: ArcGIS REST Map Service, ArcGIS Service Definition, Downloadable, Map Service; Tags: North Atlantic Landscape Conservation Cooperative, NAMERA, Substrate, environment, Benthic Habitats, *All tags...*

Final Report - Application of the Coastal and Marine Ecological Classification Standard (CMECS) to the Northwest Atlantic

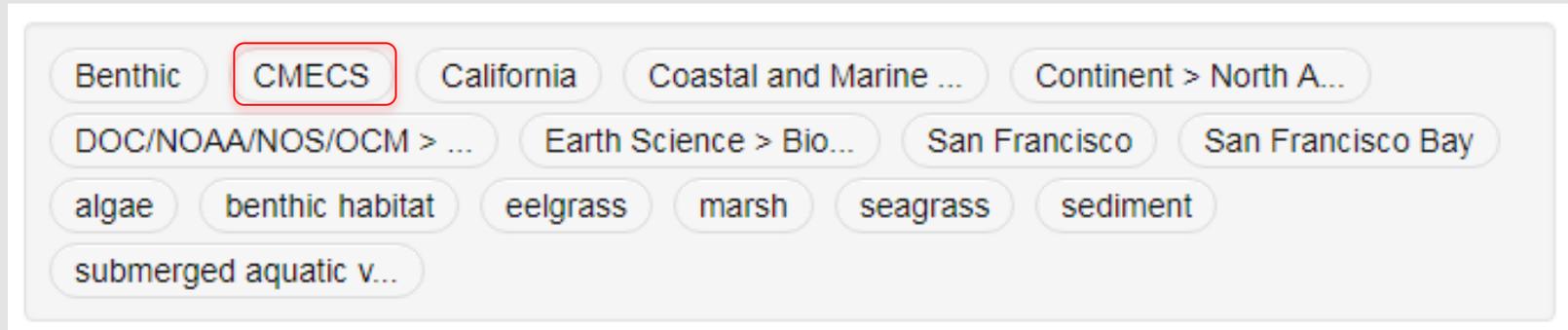
In the Northeast United States region, efforts are underway to better organize and integrate marine ecosystem data to support ocean planning and management efforts. An important step in this process is translating existing data to a common language so that heterogeneous data can be viewed in a common framework region-wide to better facilitate decision-making. In September 2013, the Northeast Regional Ocean Council Habitat Working Group agreed that crosswalking (i.e., translating) existing seafloor habitat data to the Federal Geographic Data Committee (FGDC)-approved United States Coastal and Marine Ecological Classification Standard (CMECS) should be a priority. At that time, the work presented here was already well...

Categories: Data; Tags: North Atlantic Landscape Conservation Cooperative, Report, LCC Network Science Catalog, LCC Network Science Catalog, completed

Coastal and Marine Ecological Classification Standard (CMECS) geofoms of the Oregon outer continental shelf (OCS) proposed wind farm site

Linked Keywords in NOAA Catalog

Links to other records with the same keywords



Access Formats in NOAA Catalog

CMECS



106 datasets found for "CMECS"

Shallow benthic habitats of San Francisco Bay, Cal

This dataset has been developed for the National Oceanic and
for Coastal Management (OCM) as a collaborative and cooper

ZIP

▼ **Formats**

ZIP (94)



HTML (9)

Esri REST (6)





Metadata for Understanding

- The CMECS document
- Project Websites
- Ancillary information
- Source Data Sets
- Published Research

Data and Resources in NOAA Catalog

Data and Resources



<https://iocm.noaa.gov/cmecs>

Online Resource

↪ Explore ▾



<https://coast.noaa.gov/digitalcoast/>

Online Resource

↪ Explore ▾



https://coast.noaa.gov/htdata/Benthic/Benthic_Cove...

Online Resource

↪ Explore ▾



<http://www.cmecscatalog.org/>

Online Resource

↪ Explore ▾

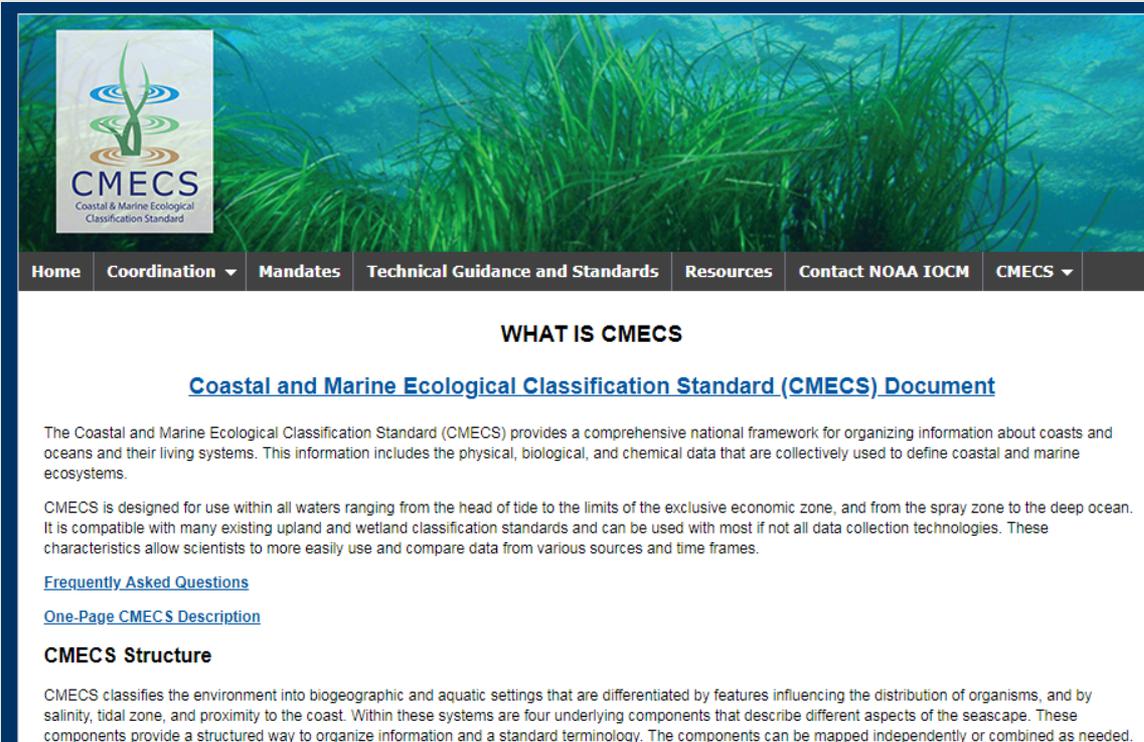


...

Online Resource

↪ Explore ▾

Link to CMECS Website



WHAT IS CMECS

[Coastal and Marine Ecological Classification Standard \(CMECS\) Document](#)

The Coastal and Marine Ecological Classification Standard (CMECS) provides a comprehensive national framework for organizing information about coasts and oceans and their living systems. This information includes the physical, biological, and chemical data that are collectively used to define coastal and marine ecosystems.

CMECS is designed for use within all waters ranging from the head of tide to the limits of the exclusive economic zone, and from the spray zone to the deep ocean. It is compatible with many existing upland and wetland classification standards and can be used with most if not all data collection technologies. These characteristics allow scientists to more easily use and compare data from various sources and time frames.

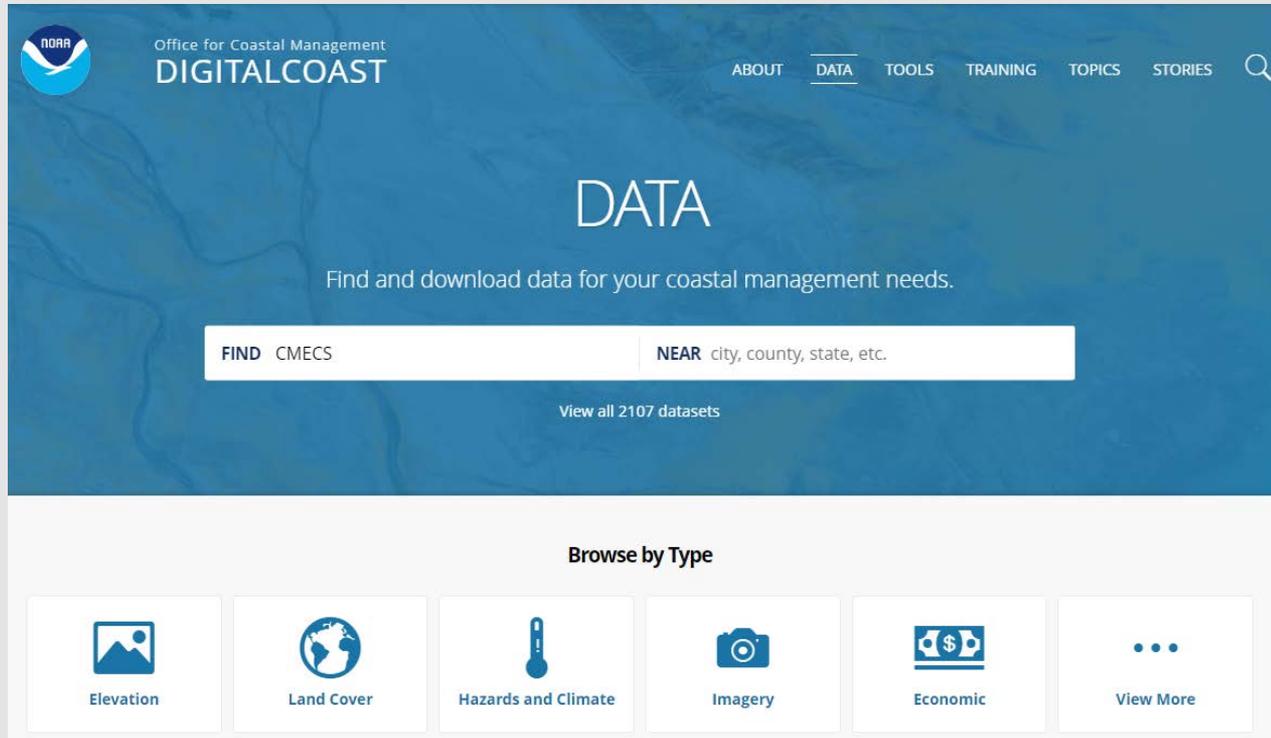
[Frequently Asked Questions](#)

[One-Page CMECS Description](#)

CMECS Structure

CMECS classifies the environment into biogeographic and aquatic settings that are differentiated by features influencing the distribution of organisms, and by salinity, tidal zone, and proximity to the coast. Within these systems are four underlying components that describe different aspects of the seascape. These components provide a structured way to organize information and a standard terminology. The components can be mapped independently or combined as needed.

Links to Data Catalogs



The screenshot shows the NOAA Digital Coast Data Catalog website. The header includes the NOAA logo, the text "Office for Coastal Management DIGITALCOAST", and navigation links for "ABOUT", "DATA", "TOOLS", "TRAINING", "TOPICS", and "STORIES". A search icon is also present. The main content area features the word "DATA" in large letters, followed by the text "Find and download data for your coastal management needs." Below this is a search bar with the text "FIND CMECS" and "NEAR city, county, state, etc." and a link to "View all 2107 datasets". The "Browse by Type" section includes icons and labels for "Elevation", "Land Cover", "Hazards and Climate", "Imagery", "Economic", and "View More".

NOAA Office for Coastal Management
DIGITALCOAST

ABOUT DATA TOOLS TRAINING TOPICS STORIES

DATA

Find and download data for your coastal management needs.

FIND CMECS NEAR city, county, state, etc.

[View all 2107 datasets](#)

Browse by Type

- Elevation
- Land Cover
- Hazards and Climate
- Imagery
- Economic
- [View More](#)

Link to Download Zip file

🏠 / Organizations / National Oceanic and ... / Shallow benthic habitats of ... / <https://coast.noaa.gov/htdata/...>

🔗 Go to resource

https://coast.noaa.gov/htdata/Benthic/Benthic_Cove...

URL: https://coast.noaa.gov/htdata/Benthic/Benthic_Cover_Data/CA_SanFranciscoBay.zip

Online Resource

There are no views created for this resource yet.

🔗 Resources

<https://iocm.noaa.gov/cme...>

<https://coast.noaa.gov/di...>

<https://coast.noaa.gov/ht...>

<http://www.cmeccatalog.o...>

...

...

...

Additional Information

Field	Value
Last updated	March 5, 2018
Created	March 5, 2018
Format	ZIP
License	No License Provided
Show more	

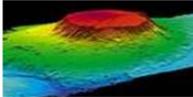


Link to CMECS Catalog

CMECS Coastal and Marine Ecological Classification Standard
The Common Language for Marine Ecosystems *Catalog of Units*

Welcome to the CMECS Catalog of Units!

Use this database to browse the CMECS classification and to get definitions for individual CMECS Units. This database contains the units that were published in the [Coastal and Marine Ecological Classification Standard](#).

 <p>Water Column Component</p>		Search/Browse classification About the classification Download the CMECS Standard Download the Data: Excel Access 2007
 <p>Geoform Component</p>		NEW: Propose update to classification NEW: Search for proposals
 <p>Substrate Component</p>		
 <p>Biotic Component</p>		

CMECS 1.1 • Website design and maintenance by [NatureServe](#) 

[Editor Login](#)

Source ISO Metadata



National Oceanic and Atmospheric Administration, Department of Commerce

Contact

coastal.info@noaa.gov

Share on Social Sites

Google+

Twitter

Facebook

Shallow benthic habitats of San Francisco Bay, California CMECS biotic component

Metadata Updated: February 7, 2018

This dataset has been developed for the National Oceanic and Atmospheric Administration's (NOAA) Office for Coastal Management (OCM) as a collaborative and cooperative project with the California State Coastal Conservancy (SCC) on behalf of the Ocean Protection Council (OPC) to collect and delineate habitat data in the San Francisco Bay area. Data is intended for use in coastal management applications such as sea level rise. The mission of the Center is to promote the economic well-being of the coast by linking people, information, and resources.

Access & Use Information

License: U.S. Government Work

Downloads & Resources



Zip File

CA_SanFranciscoBay.zip

Download



Web Page

Visit page

Metadata Source



ISO-19139 Metadata

[Download Metadata](#) · [View Full Metadata](#)



Metadata Guidance for CMECS

- Minimum Mapping Unit
- CMECS units used
- Date/Time and duration of the study
- Ancillary data used to support the analysis
- Resolution/Sampling density of the source data

- See CMECS Community site

CMECS Metadata Resources



CMECS Implementation Group

Pages

SPACE SHORTCUTS

- Community Forum
- File lists

PAGE TREE

- CMECS News and Upcoming Ev...
- Rules and Guidelines
- CMECS IG Forums
- CMECS Resources
 - CMECS-Related Maps, Apps, a...
 - CMECS-Related Documents
 - CMECS-Related Presentations
 - Metadata Resources**
 - CMECS Standard as aggreg...
 - Metadata References in CM...
- File lists
- Community Forum

Space tools

Pages / CMECS Community Forum Home / CMECS Resources

Metadata Resources

Created by Kate Rose, last modified by Kathy Martinolich on Feb 19, 2018

CMECS Metadata Map for use with CSDGM Metadata

The CSDGM standards includes seven sections of descriptive metadata information. This CMECS Metadata Map outlines the sections that include information helpful in documenting datasets that use CMECS for classification or for other CMECS products. This [PDF](#) file contains the original graphical representation for CSDGM with suggested CMECS implementation content outlined in [red](#).

CMECS Metadata Map for use with ISO Metadata

The ISO 19115-2 standard uses UML class diagrams to visualize the metadata content. This CMECS Metadata Map outlines the sections that correlate to the same metadata content that is recommended for use with CSDGM metadata. This [PDF](#) file contains the ISO metadata sections that are suggested for CMECS implementation. The suggested sections to use are outlined in the UML diagrams in [red](#).

Metadata References in CMECS

The Coastal and Marine Ecological Classification Standard (FGDC-STD-018-2012) has several references to metadata within the document. These references will need to be considered if/when the CMECS document is updated. This [table](#) includes the reference to "metadata" and the page number where the reference is made.

John Lazar likes this

No labels

2 Comments



Kathy Martinolich

This will be the most exciting page on this site!

3 people like this Jan 23, 2018



Lightsom, Frances L.

Here is the current version of advice for including CMECS terms as keywords for CSDGM metadata records in the USGS Coastal and Marine Geology Program. [CMECS keywords for CMGP metadata 20180309.pdf](#)





Some Thoughts...

- Always include good search terms in
 - Title, Abstract, and Keywords
- Fully describe URLs
 - Name, description, function
- Document for more than discovery!
 - Source Data Sets, Process Description, Content Description



Questions?

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