

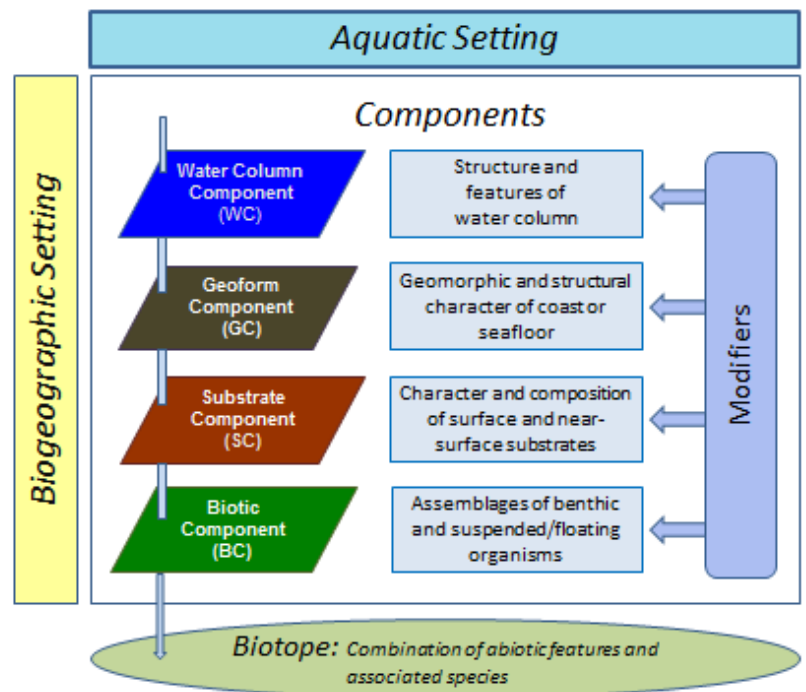


# Coastal and Marine Ecological Classification Standard Receives Federal Approval

(June, 2012) The Federal Geographic Data Committee (FGDC) has approved the Coastal and Marine Ecological Classification Standard (CMECS) as the first-ever comprehensive federal standard for classifying and describing coastal and marine ecosystems.

## CMECS Provides a Common Language

CMECS offers a simple, standard framework and common terminology for describing natural and human influenced ecosystems from the upper tidal reaches of estuaries to the deepest portions of the ocean. The framework is organized into two settings, biogeographic and aquatic, and four components, water column, geoform, substrate, and biotic. Each describes a separate aspect of the environment and biota. Settings and components can be used in combination or independently to describe ecosystem features. The hierarchical arrangement of units of the settings and components allows users to apply CMECS to the scale and specificity that best suits their interests. Modifiers allow users to customize the classification to meet specific needs. Biotores can be described when there is a need for more detailed information on the biota and their environment.



## CMECS Meets a Broad Set of Needs

The design of CMECS aspires to meet the needs of many users, including coastal resource managers and planners, development interests, engineers, mappers, and researchers from government, industry, and academia. The system was also developed to address applications on scales ranging from local and regional to national and beyond.



### Practical Applications

- Ecosystem inventory and mapping
- Coastal and marine spatial planning
- Marine Protected Area selection, evaluation, and assessment
- Resource management and monitoring
- Conservation status assessment
- Habitat modeling
- Ecosystem services evaluation

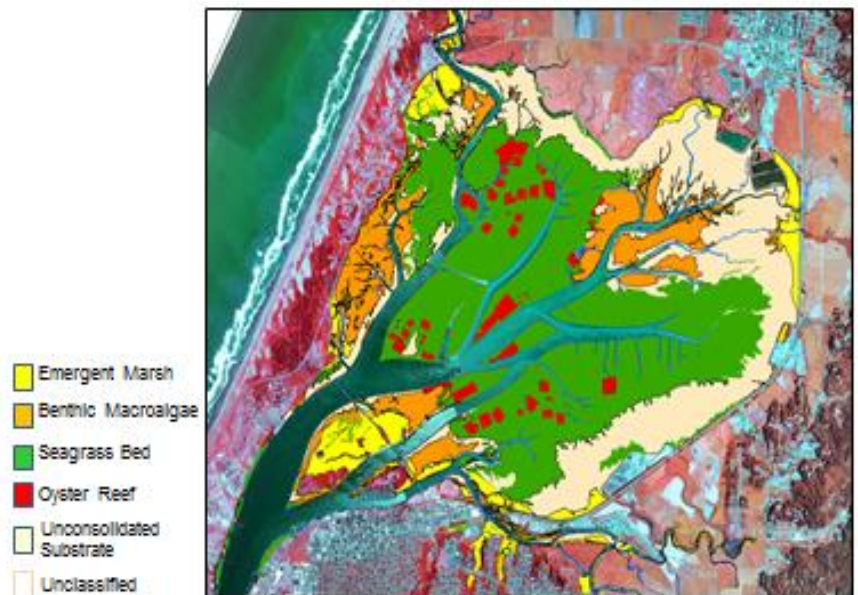
## CMECS Reflects Wide Stakeholder Input

The National Oceanic and Atmospheric Administration, NatureServe, the U.S. Environmental Protection Agency, and the U.S. Geological Survey have worked with over a hundred scientists and coastal managers to develop and implement the standard. CMECS has been implemented in projects in a variety of geographies. A rigorous four month public and peer review process led to consideration and response to more than 800 individual comments from 31 individuals and organizations.

### Sample Pilot Study Locations:

- Narragansett Bay, RI
- Long Island, NY
- Chesapeake Bay, MD
- Florida Bay, FL
- Mobile Bay, AL
- Redfish Bay, TX
- Northern Gulf of Mexico
- Columbia River, OR
- Humboldt Bay, CA
- Southeastern Alaska

Humboldt Bay, California, USA



Source Data: Aerial multi-spectral imagery

## CMECS Is a Dynamic Content Standard

The use and application of CMECS will improve our knowledge of marine ecosystems and may bring to light other necessary additions and adjustments to the standard. Users will be encouraged to provide suggestions about possible changes to CMECS, which will follow a regular peer review and revision cycle. Protocols and tools for this process are currently in development.

## CMECS is Ready to Use

Documentation for the standard is available for download at [www.csc.noaa.gov/benthic/cmeecs](http://www.csc.noaa.gov/benthic/cmeecs). A searchable online catalog of CMECS units and their descriptions is available at [www.cmeccatalog.org](http://www.cmeccatalog.org).

For more information contact: [NOS.CSC.CMECS\\_IG@noaa.gov](mailto:NOS.CSC.CMECS_IG@noaa.gov)

