

Coastal and Marine Ecological Classification Standard (CMECS) Publications and Reports Inventory: Papers

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Title	Journal/Report	Authors	Date	Geography	CMECS Components	Links
Application of the coastal and marine ecological classification standard using satellite-derived and modeled data products for pelagic habitats in the Northern Gulf of Mexico	Ocean & Coastal Management 88 (2014) 13e20	R. Allee, J. Kurtz, R. Gould Jr., D. Ko, M. Finkbeiner, K. Goodin	2014	Gulf of Mexico	Water Column Modifiers	
Standardized geomorphic classification of seafloor within the United States Atlantic canyons and continental margin		Derek Sowers, Giuseppe Masetti, Larry Mayer, Paul Johnson, James Gardner, and Andrew Armstrong		Atlantic continental shelf and slope	Geoform Biotic	
Ecological classification of southern intertidal zones of Qeshm Island, based on CMECS model	Iranian Journal of Fisheries Sciences 13(1)-19	Ansari, Z.; Seyfabadi, J.; Owfi, F.; Rahimi, M.; and Allee, R.	2014	Qeshm Island, Persian Gulf	Geoform, Substrate	
Ecological Classification of Southern Limnetic Part of the Caspian Sea from Babolsar to Bahnamir Using CMECS	Iranian Journal of Agricultural Science and Technology (JAST)	Arash Joghtae, Fatemeh Ghane, Mina Sadough, Mark Finkbeiner	2013	Caspian Sea	Substrate	
Coastal and Marine Ecological Classification Standard (CMECS) geoforms of the Oregon outer continental shelf (OCS) proposed wind farm site	ScienceBase	Cochrane, G.R.	2017	Oregon outer continental shelf	Geoform	https://doi.org/10.5066/F7000069
Application of the Coastal and Marine Ecological Classification Standard to Gosnold Seamount, North Atlantic Ocean	Seafloor Geomorphology as Benthic Habitat (book)	Authors: Sowers, D, Dijkstra, JA, Mello, K, Masetti, G, Malik, MA, Mayer, LA; Editor: Harris, P., Baker, E.	2020	N. Atlantic	Biotic, Substrate, Geoform	http://dx.doi.org/10.1016/B978-0-12-814960-7.00056-7
Using CMECS to Create Benthic Habitat Maps for Pleasant Bay, Cape Cod, Massachusetts	Northeastern Naturalist	Agnes Mittermayr, Bryan J. Legare, Cristina G. Kennedy, Sophia E. Fox, Mark Borrelli	2020	Pleasant Bay, Cape Cod, Massachusetts	Biotic, Substrate	https://doi.org/10.1656/045.027.s1002
Applications of the Coastal and Marine Ecological Classification Standard (CMECS) in a Partially Restored New England Salt Marsh Lagoon	Estuaries and Coasts	Mittermayr, A., Legare, B. & Borrelli, M.	2022	East Harbor on Cape Cod, MA	Geoform, Substrate, Biotic, and Water	https://doi.org/10.1007/s12237-020-00707-2
Linking the Coastal and Marine Ecological Classification Standard (CMECS) to ecosystem services: an application to the US Gulf of Mexico	International Journal of Biodiversity Science, Ecosystem Services & Management	Cristina Carollo, Rebecca J. Allee, & David W. Yoskowitz	2013	Gulf of Mexico		https://doi.org/10.1080/21513732.2013.811701
Nearshore Benthic Mapping in the Great Lakes: A Multi-Agency Data Integration Approach in Southwest Lake Michigan	Remote Sensing Volume 13 Issue 15 10.3390/rs13153026	Reif, Molly K., Brandon S. Krumwiede, Steven E. Brown, Ethan J. Theuerkauf, and Joseph H. Harwood	2021	Great Lakes	Biotic, Substrate	https://www.mdpi.com/2072-4292/13/15/3026
Modeling Sand Shoals on the U.S. Atlantic Shelf: Moving Beyond a Site-by-Site Approach	Journal of Coastal Research, 37(2), 227–237. Coconut Creek (Florida), ISSN 0749-0208.	Pickens, B.A.; Taylor, J.C.; Finkbeiner, M.; Hansen, D., and Turner, L.,	2021	Atlantic and Gulf of Mexico	Geoform	https://doi.org/10.2112/JCOASTRES-D-20-00084.1
Comparison of methods for integrating biological and physical data for marine habitat mapping and classification	Continental Shelf Research Volume 30, Issue 16, 30 September 2010, Pages 1717-1729	E.J. Shumchenia, J.W. King	2010	Narragansett Bay, RI	All	https://www.sciencedirect.com/science/article/pii/S0278434310002256?via%3Dihub
Evaluating the NOAA Coastal and Marine Ecological Classification Standard in estuarine systems: A Columbia River Estuary case study	Estuarine, Coastal and Shelf Science Volume 78, Issue 1, 1 June 2008, Pages 89-106	Matthew L. Keefer, Christopher A. Peery, Nancy Wright, William R. Daigle, Christopher C. Caudill, Tami S. Clabough, David W. Griffith, Mark A. Zacharias	2008	Columbia River Estuary, OR	All	https://www.sciencedirect.com/science/article/pii/S027277140700515X?via%3Dihub

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Tools for implementing the Coastal and Marine Ecological Classification Standard	Ocean Solutions/Earth Solutions, ESRI press; Chapter 4.	Lori Scott, Kathleen Goodin, Mark Finkbeiner	2014	N/A	All	
Application of the coastal and marine ecological classification standard to Gosnold Seamount, North Atlantic Ocean	Seafloor Geomorphology as Benthic Habitat (Second Edition) GeoHab Atlas of Seafloor Geomorphic Features and Benthic Habitats, 2020, Pages 903-916	D. Sowers, J.A. Dijkstra, K. Mello, G. Masetti, M. Malik, and Larry Mayer	2020	Gosnold Seamount		https://www.sciencedirect.com/science/book/9780128149607
New Frontiers in Ocean Exploration	Oceanography; Vol 31, number 1, supplement	Peter Etnoyer, Mashkoor Malik, Derek Sowers, Caitlin Ruby, Rachel Bassett, Jennifer Dijkstra, Nikolai Pawlenko, Susan Gottfried, Kristen Mello, Mark Finkbeiner, and Angela Sallis	2018		Substrate	
Application of the Coastal and Marine Ecological Classification Standard (CMECS) to Deep-Sea Benthic Surveys in the Northeast Pacific: Lessons from Field Tests in 2015.	NOAA Technical Memorandum NOS NCCOS 228	Bassett, R.D., Finkbeiner, M. and Etnoyer, P. J.	2017	U.S. Pacific Coast and Hawaii	Substrate	http://dx.doi.org/http://doi.org/10.7289/V5/TM-NOS-NCCOS-228
Assessment of shallow-water habitat mapping tools and methods: A pilot study at Fire Island National Seashore	Natural Resource Technical Report NPS/NERO/NRTR—2010/323	Emily Shumchenia, John King	2010	Fire Island, NY	Geoform, Substrate, Biotic	https://irma.nps.gov/DataStore/Reference/Profile/664668
Benthic habitat mapping and assessment in the Wilmington-East Wind Energy Call Area: Final Report	NOAA Technical Memorandum NOS NCCOS 228		2016	Wilmington East Wind Energy Call Area, NC		
Benthic Substrate Classification Map: Gulf Islands National Seashore	USGS Open File Report 2012-1051	Dawn Lavoie, James Flocks, Dave Twichell, and Kate Rose	2013	Gulf Islands Nat. Seashore, MS	Substrate	https://pubs.usgs.gov/ofr/2012/1051/pdf/ofr2012-1051.pdf
California Deepwater Investigations and Groundtruthing (Cal DIG) I, Volume 3—Benthic Habitat Characterization Offshore Morro Bay, California	USGS Open-File Report 2022-1035	Guy R. Cochrane, Linda A. Kuhn, Lisa Gilbane, Peter Dartnell, Maureen A. L. Walton, and Charles K. Paul	2022	Morro Bay Area, CA	Geoform, Substrate, Biotic	https://pubs.er.usgs.gov/publication/ofr20221035
Ecological Classification of Florida Bay: Using the Coastal Marine Ecological Classification Standard (CMECS) Version 2	NatureServe report; Arlington, A	Madden C.J., Goodin K.L.	2007	Florida Bay, FL	Unknown	https://www.natureserve.org/publications/ecological-classification-florida-bay-using-coastal-marine-ecological-classification
Standard Operating Procedures Mapping Land Use and Habitat Change in the National Estuarine Research Reserve System-Version 2	OCM Internal Report	Nina Garfield, Kiersten Madden, Sandra Upchurch, Suzanne Shull, Nate Herold, Matt Ferner, Chris Weidman	2015	NERR Reserves	Geoform, Substrate, Biotic	https://coast.noaa.gov/data/docs/nerrs/Standard_Operating_Procedures_Mapping_Land_Use_and_Habitat_Change_in_the_NERRS.pdf
Marine Benthic Habitat Mapping of Muir Inlet, Glacier Bay National Park and Preserve, Alaska—With an Evaluation of the Coastal and Marine Ecological Classification Standard III	U.S. Geological Survey Scientific Investigations Map 3122, 4 sheets, various scales, 1 pamphlet, 26 p.	Trusel, Luke D., Cochrane, Guy R., Etherington, Lisa L. Powell, Ross D., and Mayer, Larry A.	2010	Muir Inlet and Glacier Bay, AK	Geoform, Substrate, Biotic	https://pubs.usgs.gov/sim/3122/
Core CMECS GIS Processing Methods Oregon Estuary Project of Special Merit Phase II	Oregon Dept. of Land Conservation and Development, Oregon Coastal Program. PSM Grant Report	Andy Lanier, Tanya Haddad, Laura Brophy, Craig Cornu, Allison Bailey	2018	Oregon Coast	Geoform, Substrate, Biotic	https://www.coastalatlantis.net/documents/cmeecs/PhaseII/EPMS_Core_Methods_PhaseII_20181231.pdf
The South Atlantic Bight Marine Assessment: Species, Habitats and Ecosystems. The Nature Conservancy, Eastern Conservation Science.	TNC Marine Assessment Report	Mary F. Conley, Mark G. Anderson, Nancy Steinberg, and Analie Barnett	2017	South Atlantic Bight, USA	Geoform, Substrate, Biotic	http://easterndivision.s3.amazonaws.com/Marine/SABMA/SABMA_Report_11April2018.pdf
Submerged Marine Habitat Mapping at Assateague Island National Seashore - A Post-Hurricane Sandy Study	Natural Resource Report NPS/NCBN/NRR—2019/1871	Arthur C. Trembanis and Douglas C. Miller, Elimujiang Ebula, Hannah M. Rusch and Ella R. Rothermel	2019	Assateague Island Nat. Seashore, MD	Substrate, Biotic	https://irma.nps.gov/DataStore/Reference/Profile/2259164
Application of the Coastal and Marine Ecological Classification Standard (CMECS) to the Northwest Atlantic	White paper	Weaver, K.J., E.J. Shumchenia, K.H. Ford, M. A. Rousseau, J.K. Greene, M.G. Anderson and J.W. King.	2013	NW Atlantic Coast	Biotic, Substrate, Geoform	http://easterndivision.s3.amazonaws.com/Marine/CMECS_02062014/CMECS_Final_Report_02052014.pdf

Includes crosswalks from other datasets to CMECS

Coastal and Marine Ecological Classification Standard (CMECS) Publications and Reports Inventory: Theses-Dissertations

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Augmenting Benthic Habitat Mapping with Low-Cost Imagery: An Application of the Coastal and Marine Ecological Classification Standard (CMECS)	Masters Thesis	Terrill, Sean V.	2021	Herring Cove in Provincetown, MA	Biotic, Substrate	https://scholarworks.umb.edu/masters_theses/698/
Application of Coastal and Marine Ecological Classification Standard (CMECS) to Remotely Operated Vehicle (Rov) Video Data for Enhanced Geospatial Analysis of Deep Sea Environments	Masters Thesis	Ruby, Caitlin A.	2017	Gulf of Mexico	Substrate	https://www.proquest.com/docview/1889833726/abstract/CD80E5F855A341E9PQ/1?accountid=28258
Utilizing Extended Continental Shelf (ECS) and Ocean Exploration Mapping Data for Standardized Marine Ecological Classification of the U.S. Atlantic Margin	Doctoral Dissertation	Sowers, Derek	2020	Western Atlantic	Geoform	https://www.proquest.com/docview/2488121680/abstract/43DDD3C416F84E03PQ/1?accountid=28258

Coastal and Marine Ecological Classification Standard (CMECS) Publications and Reports Inventory: Posters

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Title	Journal/Report	Authors	Date	Geography	CMECS Components
OS51A-1847 Use of the Coastal and Marine Ecological Classification Standard (CMECS) for Geological Studies in Glacier Bay, AK	AGU 2012	Guy Cochrane, Timothy Hodson, Mark Finkbeiner, Rebecca Allee, Gary Mayer, Giancarlo Cicchetti, Kathleen Goodin, Christopher Madden, Lawrence Handley, and Emily Shumchenia	2012	Glacier Bay, AK	Substrate Geoform
Utilizing new multibeam sonar datasets to map potential locations of sensitive benthic habitats in the U.S. Atlantic potential Extended Continental Shelf	AGU 2017	Derek Sowers, Larry Mayer, and James Gardner	2017	Atlantic continental shelf and slope	Geoform
Mapping and Geomorphic Characterization of the Vast Cold-Water Coral Mounds of the Blake Plateau	8th International Symposium for Deep-Sea Corals	Derek Sowers, Larry Mayer, Giuseppe Masetti, Erik Cordes, Ryan Gasbarro, Elizabeth Lobecker, Kasey Cantwell, Shannon Hoy, Michael White, Sam Candio, Mashkoor Malik, Matt Dornback	2023	Blake Plateau	Substrate, Geoform