

2020 GOMA Tools Café Descriptions

November 17, 2020 Webinar

The COASTAL Act Wind and Water Event Database (CWWED) developed on Amazon's Web Services (AWS) Cloud Platform

Presenters: Stephen Del Greco¹, Danny Flack²

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INTENDED AUDIENCE

Primary stakeholder is FEMA. However, the CWWED geographical web services tool, data and any derived products will be in the public domain and available to both the public and private sectors.

MIAN USE

The Consumer Option for an Alternative System to Allocate Losses (COASTAL) Act was signed into law on July 6, 2012, to help the Federal Emergency Management Agency (FEMA) determine the extent to which wind vs. water was the cause of damage in cases where little tangible evidence exists beyond a building's foundation following a tropical cyclone. This determination is needed for the proper and timely adjustment of insurance claims, as water damage is covered by FEMA's National Flood Insurance Program, while wind damage is covered by private insurers. The COASTAL Act requires the National Oceanic and Atmospheric Administration (NOAA) to produce detailed "Post Storm Assessments (PSA)" in the aftermath of a damaging tropical cyclone that strikes the U.S. or its territories. NOAA's National Center for Environmental Information (NCEI) in partnership with the Cooperative Institute for Research in Environmental Sciences (CIRES) and NOAA's National Weather Service (NWS) is developing the COASTAL Wind and Water Event Database (CWWED) and Geographical Web-based mapping Services (GWS) that support the COASTAL Act.

GEOGRAPHY & SCALE

Currently the prototype includes all CONUS coastal areas with plans to also support Alaska, Hawaii and U.S. territories coastal areas. CWWED serves as an interactive database that provides access to all data used by the Named Storm Event Model (NSEM) to derive PSAs and serves as an accessible repository for the PSA output so it can be referenced by all relevant stakeholders. CWWED receives the NSEM input from NOAA, the United States Geological Survey (USGS), and academic members of the Digital Hurricane Consortium (DHC) as well as the derived PSA data products that are generated from the NSEM. To meet this need, CWWED was developed on the Amazon Web Services (AWS) cloud platform. The CWWED Architecture includes an Amazon Relational Database Service (RDS + PostgreSQL) and THREDDS Data

Server (TDS) and leverages AWS Elastic Cloud Computing and Open Source Geographical Information Services tools. This presentation details the functionality of the CWWED and GWS, on AWS and highlights the partnerships involved in ensuring the CWWED is successfully implemented on a cloud platform as part of the COASTAL Act process.

ACCESSIBILITY

This tool is available on-line. However currently not advertised. A live demo of the capabilities will be demonstrated.

"For Official Use Only – Pre-decisional information"

Resilience Dialogues Tool Kit

Presenter: Dr. Chris Feurt

Director Coastal Training Program, Wells National Estuarine Research Reserve cfeurt@une.edu

(Web address under development available June 30th. Temporary project page:

<https://www.wellsreserve.org/project/the-resilience-dialogues>)

INTENDED AUDIENCE

Resilience Dialogues are conversations that occur among people with diverse perspectives who have agreed to collaborate to improve a situation that contributes to building social and ecological resilience.

The Resilience Dialogues toolkit is for people who organize, design, facilitate and evaluate resilience dialogues for diverse groups of stakeholders. Developed from 10 years of experience in the National Estuarine Research Reserve system, the toolkit synthesizes lessons learned about dealing with conflict during collaborative projects. Government agencies, coastal managers, planners, researchers, community leaders and facilitators are the target audience.

MAIN USE

The toolkit includes the Resilience Dialogues Resources Guide, Case Studies and Activity Templates for implementing Stakeholder Assessments, Collaborative Learning processes, Mental and Cultural Models Situation Mapping, and Creating Shared Language for Stakeholders. The toolkit focuses on the science-based processes underlying successful conflict management and collaboration and is designed to help practitioners at all levels of expertise by providing step by step guidance that can be adapted for a variety of coastal management situations.

The toolkit is designed to be used with an in-person training and is being adapted for on-line training.

A pilot of the in-person training was hosted by Weeks Bay and Grand Bay NERRs in October 2019 and was very well received by the target audience. Experienced facilitators can use the resources “off the shelf” like a cookbook. Dr. Feurt can work with anyone interested in remote support to use the toolkit. In-person trainings will resume after the pandemic.

GEOGRAPHY & SCALE

The toolkit was designed with input from 14 National Estuarine Research Reserves across the US. It is usable across scales for community-based projects as well as collaborative projects across regional and national scales.

ACCESSIBILITY

The final products for the Resilience Dialogues toolkit are undergoing final edits and graphic design and will be available on-line by June 30th. Preliminary materials used to develop and pilot the toolkit are available from: <https://www.wellsreserve.org/project/the-resilience-dialogues>

Final products will include a PowerPoint presentation used in the training; Resources workbook; case studies and Activity Templates for the 4 skills described above.

For more information contact Dr. Chris Feurt 207-604-6760 (cell at home) or cfeurt@une.edu

ShoalMATE (Shoal Map Assessment Tool for EFH)

Presenter(s):

Deena Hansen, Bureau of Ocean Energy Management, deena.hansen@boem.gov
J. Christopher Taylor, NOAA, National Centers for Coastal Ocean Science
Bradley Pickens, CSS-Inc. and NOAA, National Centers for Coastal Ocean Science

Web address:

The tool itself is internal to the Bureau of Ocean Energy Management. Information on the project:

<https://coastalscience.noaa.gov/project/geospatial-assessment-u-s-atlantic-gulf-mexico-essential-fish-habitat-relation-offshore-sand-features/>

INTENDED AUDIENCE:

Coastal managers, National Marine Fisheries Service, Bureau of Ocean Energy Management, US Army Corps of Engineers

MAIN USE

The purpose of the tool is to guide wise use and dredging of offshore sand shoals. ShoalMATE (Shoal Map Assessment Tool for EFH) was developed as an interactive mapping and reporting tool to aide in the Essential Fish Habitat (EFH) assessments to minimize impacts to habitats. The tool combines geospatial data on sand shoals, oceanography, seafloor characteristics, Essential Fish Habitat designations, and modeled marine fish distributions in federal waters.

GEOGRAPHY & SCALE

The tool covers the northern Gulf of Mexico and US Atlantic coasts in federal waters. The scale is focused on individual sand shoals and sand resources.

ACCESSIBILITY

The tool itself is available as an internal tool to BOEM, but output reports will be given to NOAA National Marine Fisheries and other organizations involved with sand dredging projects. Shoal data underlying tool is available through BOEM's [MMIS](#). Fish and shoal data will soon be available through [Marine Cadastre](#).