2025 Tools Café Descriptions

Beach Conditions Reporting System (BCRS)

Presenter: Aspen Cook, Mote Marine Laboratory.

WEB: www.visitbeaches.org

OVERVIEW
The Beach Conditions Reporting System (BCRS) is a volunteer-driven program that offers free, regularly updated beach condition reports accessible through a website, mobile application, email subscriptions, and an automated hotline. In addition to real-time reports, the website and mobile app feature community reporting tools, links to local resources, and educational materials to further enhance public awareness and beach safety.

INTENDED AUDIENCE
Anyone who visits, works, or recreates in coastal waters.

MAIN USE
This decision-making tool is available to the public for free via website (visitbeaches.org) and mobile application (BCRS - Mote Marine Laboratory) with the goal of protecting public safety and enhancing beach-goer experience by promoting informed decision-making. Data collected through the BCRS is also shared with local, state, and federal government agencies to aid in forecast modeling and resource management. The BCRS also serves as an early detection system for the occurrence of harmful algal blooms, such as red tide caused by *Karenia brevis*.

GEOGRAPHY & SCALE
The BCRS includes regular conditions reports from over 70 locations across 9 states (NC, SC, GA, FL, AL, LA, TX, CA, & OH) and growing.

ACCESSIBILITY
Online at www.visitbeaches.org

Gulf Coast Monitoring and Assessment Portal (GCMAP)

Presenters: Jacob Howell[1], Asmita Shukla[1], Bethany Pertain[1], Sarah Hile[1], Christopher Jeffrey[1], Randy Clark[2], Steve Giordano[3]
[1] CSS, Inc.
[2] NOAA NCCOS.
[3] NOAA Fisheries Southeast Regional Office

WEB: https://noaa.maps.arcgis.com/apps/dashboards/5765b83e6ad247a58ca5cc09e7986185

OVERVIEW
The Gulf Coast Monitoring and Assessment Portal (GCMAP) is an ArcGIS Online dashboard developed to improve discovery and accessibility of existing monitoring data and ensure collected information supports management decision-making. The portal currently contains programmatic metadata from water quality, habitat, mapping, and living marine resource monitoring programs.

INTENDED AUDIENCE
GCMAP was designed to be used by monitoring practitioners and resource managers within the public, private, and academic spheres.

MAIN USE
GCMAP is a publicly accessible and georeferenced inventory of monitoring program metadata. The tool is intended to increase accessibility and discoverability of monitoring data that has been or is being generated across the Gulf region by being a one-stop-shop for water quality, habitat, and living marine resource monitoring and mapping information.

GEOGRAPHY & SCALE
GCMAP's area of interest is the entire Gulf region from the coastal zone out to the EEZ.

ACCESSIBILITY
Online at https://noaa.maps.arcgis.com/apps/dashboards/5765b83e6ad247a58ca5cc09e7986185

Sea Level Calculator

Presenter: Heidi Stiller, NOAA OCM.

WEB: https://coast.noaa.gov/digitalcoast/tools/sea-level-calculator.html

OVERVIEW
The Calculator provides authoritative historical, current, and future sea level information in multiple formats based on expressed needs of users responding to present and future inundation challenges in coastal communities. Users can get location-specific data, maps, and graphics on trends, projections, flood frequency, seasonal variations, and extreme water level probabilities.

INTENDED AUDIENCE
Resilience officers, land use planners, floodplain administrators, public works departments, emergency managers, civil engineers, and restoration practitioners.

MAIN USE
The information in the calculator can inform the design of individual structures or restoration projects, guide community-scale policies and planning, and provide graphics to aid in risk communication. Practitioners need information specific to their locations, and they want automated outputs in multiple formats that can be fed into project designs, reports, and presentations. The

calculator allows users to quickly generate tables, graphs, and maps. Technical users will set their own location-specific flooding thresholds, convert information to desired datums, and access the underlying data for use in their own applications. Others will appreciate the explanations of concepts and functionality in the videos that accompany each of the "quick views" that pre-package information on trends, projections, flood frequency, seasonal variations, and extreme water level probabilities.

GEOGRAPHY & SCALE
The calculator is a national tool. For Version 1, most data are specific to tide gauge locations, but regional sea level rise projections are provided at a 1-degree (~60 miles) grid resolution from the 2022 Interagency SLR Technical Report. Future versions will include additional gridded data as modeling advances.

ACCESSIBILITY
Online at https://coast.noaa.gov/digitalcoast/tools/sea-level-calculator.html

GulfSeeLife

Presenters: Michael Christopher[1], Kayleigh Mazariegos[2], Brian Sherwood[3], Robert Gruba[3]
[1] Elemental Methods LLC.
[2] University of Mississippi.
[3] Mississippi Department of Marine Resources.

WEB: www.gulfseelife.org

OVERVIEW
GulfSeeLife is a natural history and citizen science application used to document and monitor changes in coastal populations of coastal and marine organisms. Users can submit observations of species, get help identifying species, and build a customizable data collection platform.

INTENDED AUDIENCE
GulfSeeLife is designed for use by the general public, school teachers, and scientists who want to participate in an online community that shares their appreciation for understanding and sustainably managing coastal and marine organisms and their habitats.

MAIN USE
GulfSeeLife is designed to engage Gulf Coast residents and visitors in identifying, documenting, and studying coastal and marine organisms. GulfSeeLife users can:
a.) upload photos, measurements, GPS location and other data regarding specimens they have observed or photographed,
b.) use the species identification wizard to help them 'key out' species of the most common fishes, plants, invertebrates, birds and mammals, and vote on the species identification of the photos submitted by other users,
c.) track reports of species of interest seasonally and regionally,
d.) learn more about the biology of coastal species, and

e.) and participate in community science projects that use a customizable project platform to allow collection of many types of data in the field.

Teachers can create and conduct private projects in GulfSeeLife to facilitate STEM learning by children in a protected, interactive online environment. Users can also check the weather forecast, access fishing regulations, and quickly find contact information to report injured animals and catastrophic pollution.

GEOGRAPHY & SCALE
The most commonly encountered beach, marsh and marine species in the northern Gulf region are included.

ACCESSIBILITY
GulfSeeLife is a free mobile application available for iPhone, iPad, Android phones, and as a web portal at www.gulfseelife.org

Coastal Homeowner's Handbook

Presenters: Michael Christopher[1], John Mitchell[2]
[1] Elemental Methods LLC.
[2] Mississippi Department of Marine Resources.

WEB: www.gulfcoasthomeownershandbook.org

OVERVIEW
Designed specifically for homeowners, the "Coastal Homeowner's Handbook" is a critical resource for anyone wanting to reduce the risks to their family and property from natural hazards. The mobile application covers essential information on emergency preparedness, evacuation planning, flood/wind insurance, and steps to protect life and property.

INTENDED AUDIENCE
Gulf coast homeowners and community emergency responders.

MAIN USE
The original set of Homeowner Handbooks were developed in 2010 as part of The Alliance's Coastal Community Resilience Team, a partnership of federal, state, and local organizations that share a vision for healthy and resilient communities. In 2023, the "Coastal Homeowner's Handbook" mobile application was developed to expand the reach and usability of the tool by incorporating mobile technology and taking advantage of the proliferation of smartphone use in the United States. The implantation on smartphones (Apple and Android compatible) provides new opportunities to reach and assist the public and communities in preparing for and responding to disasters. Customizable electronic checklists allow users to create and update preparation checklists for multiple situations and properties. Incorporation of electronic messaging allows communities to have constant contact with the public. Community administrators can provide information and assistance in preparing the public for impending disasters, in addition to providing guidance and assistance after disasters.

GEOGRAPHY & SCALE
Gulf coastal states.

ACCESSIBILITY
Available in English and Spanish for the State of Texas; English in Louisiana, Mississippi, Alabaman, and Florida. This tool is a free mobile phone app available for Apple and Android devices. Online at www.gulfcoasthomeownershandbook.org

The Employment in Coastal Inundation Zones Data Viewer

Presenter: Nataly Medina, Lynker

WEB: Employment in Coastal Inundation Zones

OVERVIEW
The Employment in Coastal Inundation Zones data viewer visualizes the number of businesses and jobs at risk from different types of coastal inundation: FEMA Special Flood Hazard Areas, hurricane storm surge categories one to four, tsunami inundation zones, and sea level rise (1-10 feet).

INTENDED AUDIENCE
The tool is intended for city planners, floodplain managers, coastal managers, economic development professionals, emergency management personnel, and economic advisors.

MAIN USE
The main use of the ECIZ data viewer is to answer the critical question: for a given type and level of coastal inundation, how many jobs and employers are likely to be affected? Coastal regions account for a disproportionate share of the U.S. population and economic assets, and the inundation of these areas has significant economic consequences. This data viewer provides easy access to socioeconomic data, allowing them to identify risks associated with different coastal inundation scenarios. Instead of manually searching through spreadsheets, users can navigate a visually intuitive map to explore key statistics for their county of interest, making the ECIZ data accessible to a broad audience.

GEOGRAPHY & SCALE
The extent of the ECIZ data viewer boundary is based on coastal zone management (CZM) boundaries, NOAA's coastal assessment framework, and the designation of coastal counties for the lower 48 states and Hawaii.

ACCESSIBILITY
The tool is easily accessible online through the NOAA GeoPlatform. Online at Employment in Coastal Inundation Zones

Compilation of Environmental, Threat, and Animal Data for Cetacean Population Health Analyses Platform (CETACEAN)

Presenters: Jorge Brenner[1], Grant Craig[1], Felimon Gayanilo[1], Jerad King[1], Megan Howson[1]
[1] GCOOS

WEB: https://cetaceangis-tamu.hub.arcgis.com/

OVERVIEW
The Cetacean Platform is a data repository for marine mammal data in the Gulf of Mexico.

INTENDED AUDIENCE
Scientists, restoration planners, conservation managers, and stakeholders.

MAIN USE
Data on cetaceans in the Gulf is collected by various organizations and stored in different formats and systems. The Cetacean Data Atlas is an ESRI Hub data repository developed to host data in one central location and uniform format. Doing so allows for user-friendly access and the creation of data visualization tools that will allow restoration and conservation managers to assess the health of dolphin and whale stocks in the open ocean of the Gulf and better understand the stressors that threaten them over space and time. This tool will be released in intermediate versions to stakeholders to allow for adaptive development and management. The project will include anthropogenic (noise, fishing effort, vessel traffic) and environmental (weather events, loop currents/eddies, heat index, salinity, etc.) stressors. The project team collaborated with stakeholders to develop a list of data priorities that would best meet their needs to create efficient and effective responses and decision-making. This collaboration includes contributors and end-users throughout the process to ensure the end product is accessible and will meet everyone's needs.

GEOGRAPHY & SCALE
Gulf of America.

ACCESSIBILITY
Online at https://cetaceangis-tamu.hub.arcgis.com/

GRIIDC

Presenter: Rosalie Rossi, Harte Research Institute for Gulf of Mexico Studies at Texas A&M University-Corpus Christi.

WEB: griidc.org

OVERVIEW
GRIIDC is a multidisciplinary data repository that stores and shares data generated by Gulf researchers. GRIIDC's mission is to ensure a data and information legacy that promotes continual scientific discovery and public awareness of the Gulf ecosystem.

INTENDED AUDIENCE
Those interested in turning their data into citable research products or discovering data for reuse; Gulf of Mexico Research Initiative (GoMRI) funded investigators and administration; National Academy of Sciences Gulf Research Program funded investigators and administration; RESTORE Act Centers of Excellence funded investigators and administration; Harte Research Institute for Gulf of Mexico Studies funded investigators and administration; academic researchers; natural resource managers; policy makers; emergency responders; non-governmental organizations; and the general public.

MAIN USE
The tool was initially designed to manage and distribute data generated by Gulf of Mexico Research Initiative (GoMRI) funded projects. The data management applications that assist with planning, documenting, and submitting data to GRIIDC are designed for investigators and data managers. GRIIDC issues a DOI for discrete data packages that provides researchers with a citable reference for their efforts. The system allows data submissions to be tracked through the data package workflow by both investigators and program administration via the dataset monitoring application. The GRIIDC search and dataset landing pages are designed for anyone who is interested in obtaining data about the Gulf, including academic researchers, natural resource managers, policy makers, emergency responders, non-governmental organizations, and the public. The GRIIDC program is also developing new partnerships to continue our mission of ensuring a data and information legacy that promotes continual scientific discovery and public awareness of the Gulf of Mexico ecosystem. Potential partnerships with research institutions, oil and gas industry, and others will allow more investigators to use these tools to manage and share their data using the GRIIDC system.

GEOGRAPHY & SCALE
The tool is focused on Gulf data; however, limited datasets are available related to other locations including the North Sea and the Pacific Coast of North America.

ACCESSIBILITY
Online at griidc.org

Deepwater Horizon Project Tracker

Presenters: Jes Skillman,[1] Ali Robertson[2], David Highness[3]
[1] Ducks Unlimited.
[2] Gulf of America Alliance.
[3] The Trust for Public Land

WEB: ww.dwhprojecttracker.org

OVERVIEW
The Deepwater Horizon Project Tracker provides an easy and comprehensive way to track restoration, research, and recovery projects resulting from the 2010 Deepwater Horizon oil spill.

INTENDED AUDIENCE
Conservation planners, project implementers, funders, general public.

MAIN USE
To map and provide key information about research, restoration, and recovery projects funded by the Deepwater Horizon oil spill settlements, fines, and other payouts in the Gulf region.

GEOGRAPHY & SCALE
North America, focusing on the Gulf region, migratory flyways of birds impacted by the oil spill, and cities in which relevant research and policy work are occurring. The scale varies depending on the project / projects of interest to the user.

ACCESSIBILITY
Online at ww.dwhprojecttracker.org; tabular and GIS downloads, online maps, tables, and summaries, map service.

Resilient Housing Planning Guide

Presenters: Brooke Troxmondo[1], Julie Shiyou-Woodard[1], Candace Wheat[1]
[1] Smart Home America.

WEB: https://www.smarthomeamerica.org/our-work/research-and-projects/community-resilience-housing-guide

OVERVIEW
The Resilient Housing Planning Guide (RHPG) is a comprehensive tool designed to help communities of any size enhance housing resilience. It provides strategies for assessing vulnerabilities, reducing risks, and improving recovery efforts while integrating stakeholder engagement and funding guidance to support proactive disaster planning and long-term resilience.

INTENDED AUDIENCE
Local governments, urban planners, community leaders, emergency management officials, and non-profit organizations involved in housing resilience, disaster recovery, and community development.

MAIN USE
The Guide provides a structured approach to developing housing resilience plans, including assessing vulnerabilities, implementing risk reduction strategies, and planning for disaster recovery. It incorporates practical tools for engaging community members and stakeholders, optimizing land use, and securing funding. The primary purpose is to help communities plan and execute practical housing resilience projects that enhance long-term sustainability and expedite post-disaster recovery. The guide

is adaptable to any community with a coastline. It is also usable in other areas facing similar risks from natural hazards. It is suitable for use at the local, county, or regional level, allowing for flexibility in addressing various community sizes and housing challenges.

GEOGRAPHY & SCALE
Tailored for the Gulf Coast region.

ACCESSIBILITY
The RHPG is available in digital form, with an accompanying workbook to facilitate its application. The guide and workbook can be downloaded as PDFs, and they are designed to be printable. Users can access them online at https://www.smarthomeamerica.org/our-work/research-and-projects/community-resilience-housing-guide

NOAA Gulf Data Atlas: Updated Interactive Map Viewer & Data Access for the Gulf Ecosystem

Presenters: Heather McCullough[1] and Julie Bosch[1]
[1] NOAA National Centers for Environmental Information.

WEB: https://gulfatlas.noaa.gov

OVERVIEW
The NOAA Gulf Data Atlas is an online, interactive data and map tool that allows users to view a large, growing collection of ecosystem-related datasets. It was developed in 2011 by the National Centers for Environmental Information (NCEI) and the Gulf community.

INTENDED AUDIENCE
Scientists, natural resource managers.

MAIN USE
The NOAA Gulf Data Atlas is an online, interactive data and map tool that allows users to view a large, growing collection of ecosystem-related datasets. Initially developed in 2011 by the National Centers for Environmental Information (NCEI) and the Gulf of Mexico community, the Atlas provides over 200 map layers in over 60 subject areas resulting from collaborations between over 30 federal, state, non-governmental, and academic partners. Thematically, the Atlas provides long-term assessments of physical, biological, environmental, economic and living marine resource characteristics in the Gulf of Mexico, describing baseline conditions to inform restoration and monitoring efforts. Although some data updates have been made over the years, a major revision of the Atlas interface, expanded data collections and data access capabilities are now underway. Each map layer includes a descriptive summary authored by subject matter experts, as well as metadata and map service resources. We invite the community to test, interact with, and provide feedback on the revised NOAA Gulf Data Atlas, the inclusion of “new” datasets, and other data that would be beneficial to add. Like the original Atlas,

NCEI seeks to further develop this new Atlas with input from, and to meet the needs of, the Gulf community.

GEOGRAPHY & SCALE
Gulf region.

ACCESSIBILITY
Online at https://gulfatlas.noaa.gov

Conservation Reserve Program Menu Tool

Presenter: Leann Hopper, Mississippi State University Geosystems Research Institute.

WEB: https://crpmenu.gri.msstate.edu/

OVERVIEW
The CRP Menu Tool is a spatially-explicit web-based decision support tool that provides access to information regarding conservation practices available under the USDA's Conservation Reserve Program (CRP).

INTENDED AUDIENCE
Landowners and conservation practitioners.

MAIN USE
The CRP Menu Tool is a web-based tool designed for agricultural landowners and technical service providers, with the goal of enhancing engagement in the Conservation Reserve Program (CRP). The tool allows landowners to identify and assess practices and offer scenarios customized to their location and conservation goals.

GEOGRAPHY & SCALE
Mississippi, Missouri, Illinois, Iowa, Indiana, Ohio, Arkansas, and Louisiana.

ACCESSIBILITY
Online at https://crpmenu.gri.msstate.edu/

Gulf TREE: Climate Resilience Tool Selection Support for the Gulf

Presenter: Andrew Medhurst, Mississippi State University.

WEB: gulftree.org

OVERVIEW
Gulf TREE is a filter-based search engine designed to assist coastal decision makers throughout the Gulf of Mexico in finding the appropriate climate and resilience tools for their specific project conditions and needs.

INTENDED AUDIENCE
Coastal Decision Makers & Stakeholders; Community Officials, Natural Resource Managers, Researchers, Extension Educators.

MAIN USE
Coastal stakeholders identify guidance in tool selection as one of the biggest challenges in improving coastal resilience, decision making, and future planning. Gulf TREE was created in response to this challenge, by connecting users with the relevant climate resilience tools that are specific to their community or project needs. Gulf TREE is an interactive search-engine that allows users to filter through over 100 different various climate resilience tools and resources and match users to the tools that meet their specific search criteria.

GEOGRAPHY & SCALE
Florida, Alabama, Mississippi, Louisiana, Texas

ACCESSIBILITY
Online at gulftree.org

Waters to the Sea: Gulf Coast Adventure

Presenters: Tracy Fredin, Center for Global Environmental Education, Hamline University.

WEB: https://waterstothesea.org/GOM

OVERVIEW
The Waters to the Sea: Gulf Coast Adventure is an in-depth, web-based learning program for grades 6-12 and for general audiences focused on the natural systems, human history, and stewardship of the Gulf's coastal and marine environments.

INTENDED AUDIENCE
Regional K-12 and public audiences.

MAIN USE
The program offers original and curated videos, captioned image galleries, interactive maps, and multimedia learning modules that introduce the ecological functions of coastal and marine natural systems. It documents how resources in these environments have enriched and been impacted by human communities today and in the past. The program illuminates current issues impacting the health of natural systems, such as marine debris, coastal wetland loss, industrial and nonpoint-source pollution, and promotes environmental stewardship strategies.

GEOGRAPHY & SCALE
United States of America.

ACCESSIBILITY
Online at https://waterstothesea.org/GOM

NOAA Atlas 15 Pilot Data and Website

Presenters: 1. Sharon Mesick[1], Alexandria Smith[2], Joelle Godwin[2]
[1] NOAA National Centers for Environmental Information (NCEI). [2] Under NCEI Contract.

WEB: https://water.noaa.gov/precip-frequency/atlas15/pilot

OVERVIEW
The Atlas15 portal allows users to select and evaluate precipitation frequency data for an area of geographic interest, with the ability to select, view, and evaluate the impact of various climate scenarios. Data access options include interactive maps, tables, and charts. User feedback will be collected for portal co-development.

INTENDED AUDIENCE
Community planners, climate resilience extension agents, and professionals engaged in water resource and infrastructure planning intended to enhance community resilience to extreme precipitation.

MAIN USE
Atlas 15 is a long-anticipated update to NOAA's Atlas 14 precipitation frequency data, which is widely used to understand and mitigate risks from extreme precipitation. Most notably, the Atlas 15 update will enable communities to better prepare and plan for threats from severe storms and flooding, adapt to changing weather patterns, and mitigate disruptions for maximum community and environmental recovery, all while providing scenarios to account for future climate projections. In this session, participants will have the opportunity to evaluate NOAA's newly released Atlas 15 website for usability and functionality. The activity will be moderated by NOAA staff, and User experiences will be recorded and applied to product development following NOAA's service delivery / co-development model.

GEOGRAPHY & SCALE
The Atlas 15 Pilot includes two volumes of data for one U.S. State, fully developed for testing the methods and user interface. Planned release for the U.S. Gulf states is 2025-26. The 2027 release will encompass the contiguous United States as well as Alaska, Hawaii, and U.S. territories.

ACCESSIBILITY
NOAA Atlas 15 Pilot data and website are online. NOAA is sharing the Atlas 15 Pilot data and website to facilitate user understanding, and to gather early user insights to benefit the co-development - and ultimately the usability - of NOAA Atlas 15.

Data Managers Unite! Data Managers Forum Discourse Site

Presenters: Brittany Jensen[1], Lora Turner[2], Julie Bosch[3], Katie Wallace[4], Cheryl Clark[5], Jon French[6]
[1] The Water Institute. [2] BOEM. [3] NOAA NCEI. [4] Gulf of America Alliance. [5] Florida Department of Environmental Protection. [6] Florida Fish and Wildlife Research Institute.

WEB: https://datamanagers.gulfofmexicoalliance.org/

OVERVIEW
The Gulf of Mexico data managers forum is a community of data managers with the goal to enhance collaboration and communication among the organizations working in the Gulf region.

INTENDED AUDIENCE
Data managers.

MAIN USE
This data managers forum discourse site is a collaboration space that is easy to use and is accessible to data managers from various organizations that allows for collaboration outside of conferences. We have mediated conversations to promote community and collaboration within data management universe to enhance shared understanding, to contribute to a collective knowledge, and foster learning. Leveraging the knowledge of experienced data managers to improve processes, discuss best practices and roadblocks, data collection and challenges around promoting data or making data publicly available.

GEOGRAPHY & SCALE
United States of America.

ACCESSIBILITY
Online at https://datamanagers.gulfofmexicoalliance.org/

Gulf Coast Avian Data Monitoring Portal

Presenters: Jessica Henkel[1], Jon Wiebe[2]
[1] The Water Institute. [2] Louisiana Department of Wildlife and Fisheries.

WEB: www.avianmonitoring.com

OVERVIEW
The Gulf of Mexico Avian Data Monitoring Portal is a publicly available website that allows users to explore and download colonial waterbird aerial survey data collected from 2010-2023. The portal includes a geospatial dashboard that allows users to explore data by geographic areas, year, watershed and/or species.

INTENDED AUDIENCE
Scientists, avian researchers and ecologists, natural resource managers.

MAIN USE
Starting in 2010, Colibri Ecological Consulting, with support from the Deepwater Horizon Regionwide Trustee Implementation Group (RW-TIG) and Louisiana Trustee Implementation Group (LA-TIG), began collecting aerial survey photos along the Gulf coastline to document nesting bird colonies. This effort has resulted in more than 49,000 photographs that were then "dotted" by Colibri to count the species and nests across the survey area. The Water Institute compiled these photographs and the associated dotting data into this geospatially enabled and searchable portal.

The dashboard is powered by Environmental Systems Research Institute (Esri) Enterprise Geographic Information Systems (GIS) software linked to a Web Mapping Service. The dashboard ingests the multiyear dataset and displays visualizations including a graphical depiction of counts of total nests and birds observed by species. This data can be interactively modified by query selections such as by year, geographic region, watershed and colony.

GEOGRAPHY & SCALE
Gulf coast.

ACCESSIBILITY
Online at www.avianmonitoring.com

Florida DEP Statewide Vulnerability Assessment (SVA)

Presenter: Joseph Bauer, Florida Department of Environmental Protection.

WEB: https://prodapps.dep.state.fl.us/orcp-sva/

OVERVIEW
Determine vulnerability of critical assets and infrastructure under various flood scenarios.

INTENDED AUDIENCE
General public, municipal government staff, project contractors.

MAIN USE
An interactive tool that shows critical assets and their vulnerability to various flood scenarios. The SVA tool can be used to create projects to prioritize critical assets based on vulnerability and to submit Sea Level Impact Projection (SLIP) Studies to Florida DEP. The tool can be used by anyone with the main goal of providing information to local and regional governments to aid in applying for Resilient Florida grant funds.

GEOGRAPHY & SCALE
Statewide in Florida.

ACCESSIBILITY
Online at https://prodapps.dep.state.fl.us/orcp-sva/

Marine Monitor

Presenter: Keith VanGraafeiland, Esri.

WEB: TBA

OVERVIEW
Marine conservation areas need a reliable mechanism for monitoring vessel traffic in remote locations. Understanding vessel traffic, the patterns and the impacts are essential for marine spatial planning and allow resource managers to gain a spatial perspective to potential problem areas and strategize on enforcement.

INTENDED AUDIENCE
Marine transportation stakeholders.

MAIN USE
The Marine Monitor (M2) is a comprehensive vessel monitoring platform developed by ProtectedSeas. M2 offers marine resource managers and conservationists a live data tool for monitoring and reporting vessel activity in coastal regions. To further enhance its utility for users across various communities of practice who depend on M2 data, ProtectedSeas has partnered with Esri to integrate M2 data within the ArcGIS platform. This integration maintains demonstrates the real-time vessel tracking capabilities through a dashboard while enabling users to interact and gain additional spatial awareness.

GEOGRAPHY & SCALE
Global.

ACCESSIBILITY
TBA

Louisiana CPRA's Master Plan Data Access Portal

Presenter: Ashley Cobb, Louisans Coastal Protection and Restoration Authority.

WEB: https://mpdap.coastal.la.gov/

OVERVIEW
The Master Plan Data Access Portal (MP-DAP), an interactive data tool developed to enable online visualization and download access, serves as a central location for all of the modeling data sets used to develop the 2023 Coastal Master Plan. The MP-DAP will be updated as new modeling data sets become available.

INTENDED AUDIENCE
The MP-DAP is intended for those who already have a good grasp on the types of master plan data and their application allowing researchers, academics, and practitioners of all types to be able to dig deeper into the data and select a variety of variables for online visualization.

MAIN USE
The MP-DAP is a new interactive data tool and central location for all of the modeling data sets used to develop the 2023 Coastal Master Plan. The MP-DAP builds off of the Master Plan Data Viewer and further enhances data access and transparency. The portal is intended for those who already have a good grasp on the types of master plan data and their application allowing researchers, academics, and practitioners of all types to be able to dig deeper into the data and select a variety of variables for online visualization. These images are able to be exported, or users can download the data and create graphics to meet their specific needs.

GEOGRAPHY & SCALE
Coastal Louisiana, including 24 parishes (all or portions of the parish): Acadia, Ascension, Assumption, Calcasieu, Cameron, Iberia, Iberville, Jefferson, Jefferson Davis, Lafayette, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, and Vermilion.

ACCESSIBILITY
Online at https://mpdap.coastal.la.gov/ All 2023 Coastal Master Plan color schemes have been updated in order to allow for increased legibility for those who experience a color vision deficiency. CPRA promoted the tool during its development in a series of public meetings across the coast and continues to share and train partners on how to use and communicate about the MP-DAP and the master plan data sets.

The Gulf Online Mapping Open Data Platform (GOMOD)

Presenter: Drew Stephens, The GIS Institute.

WEB: https://gmod-portal-gomalliance.hub.arcgis.com/

OVERVIEW
The Gulf Online Mapping Open Data Platform (GOMOD) is an established ArcGIS Hub site for sharing data across the GOAA membership and beyond.

INTENDED AUDIENCE

MAIN USE
The Gulf Online Mapping Open Data Platform is intended to increase access to geospatial data across Gulf of America Alliance Priority Teams, researchers, students, and the public at large. GOMOD includes a variety of data layers presented in Theme Maps that cover the NOAA Coastal Watershed

Counties, the coastal zone, and areas well offshore in the Gulf of America. GOMOD is an open online resource, running on any standard browser.

GEOGRAPHY & SCALE
Gulf of America.

ACCESSIBILITY
Online at https://gmod-portal-gomalliance.hub.arcgis.com/

Total Water Level and Coastal Change Forecast Viewer

Presenters: Michael Slattery[1], Michael Slattery[1], Ashley Moss[1], Zachary Hough Solomon[1]
[1] USGS

WEB: https://coastal.er.usgs.gov/hurricanes/research/twlviewer/

OVERVIEW
Interactive viewer providing 6-day forecast of hourly coastal water level hazards that could alter beach morphology and/or impact coastal communities.

INTENDED AUDIENCE
Natural resource managers, planners, emergency managers.

MAIN USE
The Total Water Level and Coastal Change Forecast Viewer (TWL&CC) is a web-based tool that includes an interactive map interface allowing users to visualize local coastal threats related to elevated water levels and potential beach change. Originally developed to enhance support for the National Weather Service, the tool has expanded in extent and usability for emergency managers, community planners and a number of additional, local stakeholders. Users can apply this tool to assess local impacts up to six days prior to a coastal storm event that will produce elevated maximum water levels for their community.

GEOGRAPHY & SCALE
United States of America.

ACCESSIBILITY
The forecast's raw data output is accessible for download in three common open-source formats (JSON, XML, and CSV). The Application Programming Interface (API) is also publicly available and users can request an API key. Online at https://coastal.er.usgs.gov/hurricanes/research/twlviewer/

Marine Debris Monitoring and Assessment Project (MDMAP)

Presenter: Jessi James-Barry, NOAA Marine Debris Program.

WEB: https://mdmap.orr.noaa.gov and https://marinedebris.noaa.gov/monitoring/marine-debris-monitoring-and-assessment-project

OVERVIEW
The Marine Debris Monitoring and Assessment Project (MDMAP) is a methodology and resource toolbox for monitoring the amount and types of macro marine debris on shorelines. Using this standardized collection method allows for the monitoring of marine debris locally while contributing to a global dataset.

INTENDED AUDIENCE
Resources in the online toolbox target different audiences, from data contributors to data users, to formal and informal educators wanting to engage youth in MDMAP.

MAIN USE
Public participation in monitoring marine debris is a powerful platform for education and generates important data for understanding trends and solutions for marine debris. Shoreline surveys document debris loads, and when conducted repeatedly over time and geography, allow for detection of patterns in abundance, geographic distribution, and composition. The Marine Debris Monitoring and Assessment Project (MDMAP), established by NOAA's Marine Debris Program in 2012, engages NOAA partners and volunteers in a standardized, national shoreline monitoring network to gather high quality data to address key marine debris questions. Data are used by researchers, NGOs and government agencies to understand and communicate about the state of marine debris. MDMAP was designed for anyone wanting to monitor marine debris locally while contributing to a global standardized and openly available dataset. The methodology is scientifically rigorous but simple. Surveys involve counting and categorizing debris within sub samples of a 100-meter shoreline site. To date, over 600 sites have been surveyed from more than 7000 sites spread across 12 countries. Data can be collected using paper datasheets or via a web application.

GEOGRAPHY & SCALE
Global.

ACCESSIBILITY
An offline mobile option is in development with anticipated launch in summer 2025.

The Louisiana Coastal Protection and Restoration Authority's Coastal Information Management System (CIMS)

Presenter: Rocky Wager, Louisiana Coastal Protection and Restoration Authority (CPRA).

WEB: https://cims.coastal.la.gov
OVERVIEW
The Coastal Information Management System (CIMS) is a comprehensive web framework developed to support CPRA's coastal resource management and decision-making in Louisiana's coastal area. The system integrates various data sources, on-line tools, and technologies to provide stakeholders with

timely and accurate information related to the state's coastal protection and restoration initiatives. The platform serves as a centralized hub to access a wide range of resources (e.g., GIS, reports, analysis tools, etc.) for effective coastal protection and restoration planning.

INTENDED AUDIENCE
CIMS is publicly accessible and designed for a diverse group of stakeholders who are involved in coastal resource management, protection, restoration, and policy-making in Louisiana. Stakeholders consist of local, state, and federal agencies for coastal management, non-governmental organizations, scientists, students, researchers, the general public and more.

MAIN USE
The primary purpose of CIMS is to facilitate effective data driven coastal resource management and decision-making in coastal Louisiana. CIMS offers a robust data repository along with powerful visualization tools designed to help users interpret and understand complex coastal data through graphical and interactive representations.

GEOGRAPHY & SCALE
CIMS supports large-scale geographic and temporal analysis of Louisiana's coastal environment, including 35 parishes within CPRA's coastal jurisdiction area: Acadia, Allen, Ascension, Assumption, Avoyelles, Beauregard, Calcasieu, Cameron, Concordia, East Baton Rouge, East Feliciana, Evangeline, Iberia, Iberville, Jefferson, Jefferson Davis, Lafayette, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Landry, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, Vermilion, West Baton Rouge, and West Feliciana. Geophysical data is also available offshore extending into federal waters.

ACCESSIBILITY
CIMS is available online and has been formatted to function on tablets and mobile devices. To promote user accessibility, CIMS contains FAQs, along with video tutorials to help users navigate.

Enhancing resilience of Infrastructure Along the Texas Coast

Presenters: Bezad Nazari[1], Madgellen Cleary[2]
[1] University of Arlington.
[2]Texas Sea Grant

WEB: https://hydromet.uta.edu/enhancing-resilience-of-energy-and-water-supply-infrastructures-along-the-texas-coast-against-catastrophic-coastal-flooding-through-integration-of-climate-informed-adaptation-strategies/

OVERVIEW
Map of the flood risk exposure of major energy and water infrastructure along the Texas coast in current and future climates with differentiation of saline/freshwater flooding.

INTENDED AUDIENCE
The tool targets local, regional, and state stakeholders, including energy and water infrastructure operators, policymakers, and coastal Managers in Southeast Texas.

MAIN USE
The tool integrates climate-informed risk assessments and economic evaluations to guide decision-making on flood resilience. It provides maps of flood risk exposure, identifies cost-effective adaptation measures, and fosters engagement with vulnerable communities. The purpose is to improve preparedness and resilience of critical energy and water systems while supporting equitable disaster planning.

GEOGRAPHY & SCALE
The tool focuses on the Southeast Texas coast, including Jefferson and Orange Counties (Golden Triangle). It operates at a regional scale, addressing both current and future flood risks influenced by climate change, sea-level rise, and extreme weather events.

ACCESSIBILITY
Online at https://hydromet.uta.edu/enhancing-resilience-of-energy-and-water-supply-infrastructures-along-the-texas-coast-against-catastrophic-coastal-flooding-through-integration-of-climate-informed-adaptation-strategies/

Climate Tools for NOAA's Southern Region

Presenter: William J Baule, Texas A&M University.

WEB: srcc.tamu.edu

OVERVIEW
Multiple web tools for coastal resilience in the Gulf Region utilizing NOAAs climate information.

INTENDED AUDIENCE
Tools were designed for stakeholders and decision makers in the Gulf Region.

MAIN USE
The main functionality of the tools is to process and display complex climate information in a useful format.

GEOGRAPHY & SCALE
Geography is the six-state NOAA Southern Region (Texas, Oklahoma, Arkansas, Mississippi, Louisiana, and Tennessee).

ACCESSIBILITY
Online at srcc.tamu.edu