2020 GOMA Tools Café Descriptions

<u>October 20, 2020 Webinar</u>

<u>A Word from our Sponsor:</u>
Keith VanGraafeiland, Esri KVanGraafeiland@esri.com

Database and Decision Support for Sustainable Development Goal 14
"The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace, and justice."

To be effective and actionable, Sustainable Development Goals (SDGs) require timely and objective reporting. For the past year, Esri has supported the GEO Blue Planet Team's SDG 14.1.a initiative -- Index of coastal eutrophication. Eutrophication is a process driven by enrichment of waters by nutrients, especially compounds of nitrogen or phosphorus, leading to increased growth, primary production, and biomass of algae resulting in adverse changes in the balance of organisms and water quality.

Esri's primary role has been to implement, in ArcGIS Pro, a workflow to identify and quantify the number and severity of eutrophication events in nearshore waters globally. In this discussion we will cover the workflow, storing the results in a database, reporting to the UN, and how the products will be used in a supporting web app.

Gulf TREE, your ultimate climate resilience guide

Presenter(s): Mikaela Heming, Renee Collini, Sara Martin, Sonia Vedral
Institution(s) and Email: Northern Gulf of Mexico Sentinel Site Cooperative, Mississippi State University; Mississippi-Alabama Sea Grant Consortium; m.heming@msstate.edu

Web Address: www.gulfTREE.org

INTENDED AUDIENCE
This resource is relevant for users of all experience levels across the climate resilience spectrum including, but not limited to, natural resource professionals, planners, local and regional government agencies, Extension and outreach professionals, researchers, and restoration and conservation specialists.

MAIN USE
Gulf TREE (Tools for Resilience Exploration Engine) is a filter-based search engine designed to match users with relevant climate resilience tools quickly, easily, and confidently. With over 100 tools relevant to the Gulf of Mexico (and more being added all the time), Gulf TREE sorts

through the plethora of options to match users with a climate resilience tool that meets their specific criteria. The web resource was created by the Northern Gulf of Mexico Sentinel Site Cooperative, Gulf of Mexico Alliance, and Gulf of Mexico Climate and Resilience Community of Practice. Developed through an end-user driven process, Gulf TREE is user-friendly despite the complex nature of its content and was created to be a solution to common obstacles faced by Gulf of Mexico stakeholders interested in climate resilience.

GEOGRAPHY & SCALE
Many tools on Gulf TREE are national in scale, but there are also many that are specific to regional, state, or local (county-level or occasionally smaller) geographies. Gulf TREE includes all climate resilience tools relevant to Gulf of Mexico shoreline and watershed counties.

ACCESSIBILITY
Gulf TREE is available online at www.gulfTREE.org and is accessible by most web browsers. For full functionality, be sure to view the web resource on a computer. Due to the complex nature of Gulf TREE, we can only provide limited functionality on the mobile version and some tablet computers do not auto-display properly.

Gulf of Mexico Research Initiative Information & Data Cooperative (GRIIDC) Data Management System

Presenter: Rosalie Rossi
Institution: Gulf of Mexico Research Initiative Information & Data Cooperative, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi, Rosalie.Rossi@tamucc.edu

WEB ADDRESS: https://data.gulfresearchinitiative.org/

INTENDED AUDIENCE
Gulf of Mexico Research Initiative (GoMRI) funded investigators and administration; RESTORE Act Centers of Excellence funded investigators and administration; academic researchers; natural resource managers; policy makers; emergency responders; non-governmental organizations; and the general public.

DESCRIPTION/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 also 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 of Mexico, including academic researchers, natural resource managers, policy makers, emergency responders, non-governmental organizations, and the general public. These tools are available to GoMRI, Florida RESTORE

Act Centers of Excellence Program (FLRACEP), Mississippi Based RESTORE Act Center of Excellence (MBRACE), the National Academy of Science Gulf Research Program, and the Harte Research Institute for Gulf of Mexico Studies. 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 Louisiana and Alabama RESTORE Act Centers of Excellence, 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 of Mexico data; however, limited datasets are available related to other locations including the North Sea and the Pacific Coast of North America. Most data available through the tool have been generated after the 2010 Deepwater Horizon incident. Datasets available through the tool have been produced through lab, field, and modeling activities describing phenomenon ranging from microscopic fluid dynamics to large scale ocean currents, bacteria to marine mammals, and detailed observations to synoptic mapping.

ACCESSIBILITY
This tool is available online only.

The Deepwater Horizon Project Tracker

Presenter: Jes Skillman
Institutions: Gulf of Mexico Alliance, Ducks Unlimited, The Trust for Public Land
jskillman@ducks.org

Web address: www.dwhprojecttracker.org

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 of Mexico.

GEOGRAPHY / SCALE:
North America, focusing on the Gulf of Mexico 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 website, tabular and GIS downloads, online maps, tables, and summaries, map service.