Core Area 5 Workshop: Living on the Edge -Enhancing the Sustainability of Coupled Human-Environment Systems in the Gulf of Mexico Region

A Workshop under the Gulf of Mexico Research Initiative's Synthesis and Legacy effort

July 10-12, 2019 Mobile, Alabama





Dear Colleagues,

Welcome to Mobile! We are delighted that you are here. Over the course of the last year, we have spent countless hours planning for this workshop. We are grateful for the support and encouragement of GoMRI—their confidence is appreciated.

We hope that this workshop will expose you to new ideas through high quality speakers and engaging discussions. We trust that you will develop new relationships that will extend beyond this workshop. We anticipate that the conversations you will have in sessions and during breaks will be meaningful to you individually as well as contributing to what is your collective experience.

In the lead up to this workshop, we made an effort to speak to all of you and gain a better understanding of your interests and motivations for working in the Gulf of Mexico. In varying capacities, each of you consider the situation in the Gulf of Mexico to be critical. You have said it is urgent and the right time for this conversation. All of you have expressed interest in partnering with colleagues from other disciplines in order to make a difference in saving the planet.

Over the next few days we will stimulate thinking, challenge you, and engage you to focus on solutions for producing behavioral changes among Gulf Coast residents as well as all those living upstream in the Greater Mississippi watershed. We believe the right people are in the room to translate scientific findings that contribute to social movements and influence human behavior regarding the environment. It's a big job, but one we have been greatly looking forward to since planning for this effort began. Thank you all for being a part of this process and helping develop solutions that can make a difference, together.

Sincerely,

David and Tim
On Behalf of the Steering Committee

Workshop Agenda

Day 1: Wednesday July 10, 2019

| 7:30 – 8:30 | Breakfast | | |
|---------------------------|--|----------------------------------|--|
| 8:30 – 9:00 | Welcome/Introductions; Workshop Overview | David Cochran and Tim Rehner | |
| 9:00 – 9:30 | Introductory Comments | Denis Wiesenburg and Burt Singer | |
| 9:30 – 10:30 | Current State of the Gulf of Mexico Region (Topic 1 Presentations) Robert Twilley; Louisiana State University and Louisiana Sea Grant State of the Environmental Systems Gregory Carter; University of Southern Mississippi Detecting Coastal Change Using Remote Sensing, GPS, and GIS Michael Forster; University of Southern Mississippi Divorced from Reality: The Bad Marriage of Psychology, Propaganda, and Power George Haddow; Tulane University The Human Costs Now and in the Future | | |
| 10:30 – 10:45 | Morning Break | | |
| 10:45 – 11:15 | Q & A with Topic 1 Presenters | | |
| 11:15 – 12:30 | Small Group Discussion for Topic 1 Discussion Questions: What perceptions/attitudes of Gulf Coast residents must be considered in order to increase personal/community engagement regarding solutions to the current environmental situation in the Gulf? How does the Gulf's history of surviving high frequency, rapid onset disasters hinder a sense of urgency and public concern about slow onset disasters (climate change and sea level rise)? | | |
| 12:30 – 1:30 | Working Lunch | | |
| 1:30 – 2:30 | Reporting Out by Topic 1 Small Groups | | |
| 2:30 –3:15 3:15 – 3:30 | Coupled Human-Environment Systems of the Gulf of Mexico (Topic 2 Presentations) Ariel Lugo; International Institute of Tropical Forestry; United States Forest Service The Gulf of Mexico as a Socio-Ecological-Technological System Bandana Kar; Oak Ridge National Laboratories Understanding Human-Environment Interaction Through the Lens of Resilience Framework and Smart Initiatives Bernard D. Goldstein; University of Pittsburgh It's Not Just GOMRI: The Challenges to Incorporating Public Health into the study of Coupled Human-Environment Systems Mid-Afternoon Break | | |
| 3:30 – 4:00 | Q & A with Topic 2 Presenters | | |
| | | | |

4:00 – 5:15 Small Group Discussion for Topic 2

Discussion Question:

 What structural elements complicate individuals/communities from more widely accepting the view of the Gulf of Mexico region as an interconnected humanenvironment system?

5:15 – 6:00 Reporting Out by Topic 2 Small Groups

6:00 Adjourn for the Day; Self-Organized Dinners

Day 2: Thursday, July 11, 2019

| 7.30 - | - 8:30 | Breakfast |
|--------|--------|-----------|
| 7.50 - | - 0.50 | Dicariasi |

8:30 – 9:00 Second-Day Welcome and Introductions

9:00 – 10:00 Translational Science for Transforming the Gulf (Topic 3 Presentations)

- Dominika Parry; 2° C Mississippi
 Framing Science: Challenges and Solutions for Climate Science Communication in Polarized Environments
- Bartow Elmore; Ohio State University
 Blue Empires: Partnering with Filmmakers to Bring Science and Water History to
 the Public
- Jeff Bielicki; Ohio State University Safe Operating Spaces for Academics
- Larry McKinney; Harte Research Institute
 Translational Challenges: A Perspective from Fifty Years of Trying to Bridge the
 Gap Between Science, Policy, and Effective Action

10:00 – 10:30 Q & A with Topic 3 Presenters

10:30 – 10:45 Morning Break

10:45 – 12:00 Small Group Discussion for Topic 3

Discussion Questions:

- How can the scientific community transition from documenting environmental crises to actively contributing to large-scale social interventions and solutions?
- How can the scientific community include non-traditional partners in translation and messaging of science? Who (with influence to foster social change) should be included in these conversations?

12:00 – 12:30 Reporting Out by Topic 3 Small Groups

12:30 – 1:30 Working Lunch

1:30 – 3:00 Small Group Discussion for Outcome 1

- Develop recommendations that could strengthen and expand interdisciplinary, shared spaces whose goal would be to translate scientific findings about coupled human-environment systems in the Gulf of Mexico region.
- Develop and rank priority areas and guidelines that could be adopted for funding coupled human-environment research in the future based on the successes and challenges of GoMRI initiatives.

| 3:00 - 3:15 | Late Afternoon Break |
|-------------|---|
| 3:15 – 3:45 | Reporting Out by Outcome 1 Small Groups |
| 3:45 – 5:30 | Full Group Discussion of Outcome 1 (Final Recommendations/Rankings) |
| 5:30 | Adjourn for the day: Self-Organized Dinners |

Day 3: Friday, July 12, 2019

| 7:30 - 8:30 | Breakfast |
|-------------|-----------|
| | |

8:30 – 9:00 Third-Day Welcome and Announcements

9:00 – 10:15 Small Group Discussion for Outcome 2

Discussion Questions:

- How can academic/funding institutions be more ethically responsible to the Earth and its living systems by creating and advocating for solutions to the human-environmental crisis?
- What partners are needed to create/sustain shared spaces that translate science into solutions to the human-environment challenges?
- How can science messaging about human-environment interactions contribute to social movements that bring about large-scale behavioral change?

| 10:15 - 10:30 | Morning Break |
|---------------|---|
| 10:30 – 11:00 | Reporting Out by Outcome 2 Small Groups |
| 11:00 – 12:00 | Full Group Discussion of Outcome 2 (Final Recommendations/Rankings) |
| 12:00 – 12:30 | Closing Comments and Adjournment |
| 12:30 – 1:30 | Lunch |
| 1:30 - 3:00 | Discussion of Post-Workshop Writing Projects |

- Drafts of Recommendations for Outcome 1 and Outcome 2
- Preliminary List of Contributors for Outcome 3

Expected Outcomes of the Workshop

The workshop will produce outcome documents through a process that involves small groups and discussion. The guidelines detailed in "GoMRI Synthesis & Legacy Workshops: Structure and Objectives", indicate that the workshop participants will develop the following outcomes/products:

Outcome 1: Recommendations that address strategies for developing integrated solutions to challenges associated with coupled human-environment systems that make up the terrestrial and aquatic edge of the Gulf of Mexico.

Outcome 2: Recommendations for translating and operationalizing results of applied scientific solutions through non-scientific, popular venues into actionable knowledge that sustains social movements and informs researchers, policy makers, local leaders, non-traditional collaborators, and local residents about human-environment systems in the Gulf of Mexico region.

Outcome 3: Development of manuscripts based on the expert presentations for publication in scientific journals (as special issues or stand-alone articles). This would depend on the willingness and ability of presenters to produce article-length manuscripts in a timely fashion.

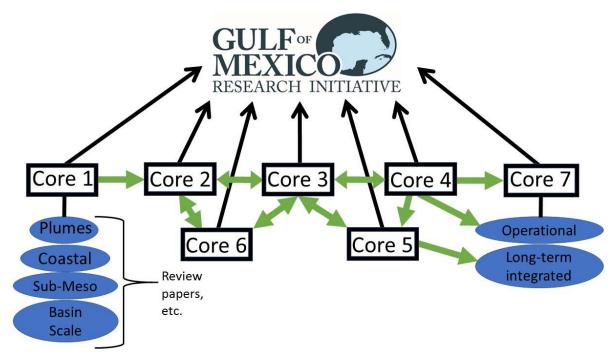
Workshop Attendees

| First Name | Last Name | Institution |
|------------|------------|--|
| Greg | Barras | St. Michael's Church |
| Jeff | Bielicki | Ohio State University |
| Ayanna | Buckner | Gulf Regional Health Outreach Program |
| Rex | Caffey | Louisiana State University |
| Greg | Carter | University of Southern Mississippi |
| David | Cochran | University of Southern Mississippi |
| Bartow | Elmore | Ohio State University |
| Melissa | Finucane | RAND Corporation |
| Michael | Feldman | GoMRI Management Team |
| Michael | Forster | University of Southern Mississippi |
| Bernard | Goldstein | University of Pittsburgh |
| George | Haddow | Tulane University |
| David | Halpern | California Institute of Technology/ NASA Jet Propulsion Laboratory |
| Michael | Hopkins | Lake Ponchartrain Basin Foundation |
| Bandana | Kar | Oak Ridge National Laboratory |
| Janel | Lowman | University of South Alabama Mitchell Cancer Institute |
| Ariel | Lugo | United States Forestry Service |
| Larry | McKinney | Harte Research Institute |
| Dominika | Parry | 2° C Mississippi |
| Missy | Partyka | Mississippi-Alabama Sea Grant |
| Ashleigh | Price | University of Southern Mississippi |
| Chris | Rea | National Academies' Gulf Research Program |
| Tim | Rehner | Ohio State University |
| Jay | Ritchie | Northern Gulf Institute |
| Burt | Singer | University of Florida |
| Robert | Twilley | Louisiana State University |
| Denis | Wiesenburg | University of Southern Mississippi |
| Chuck | Wilson | GoMRI Chief Science Officer |
| Laura | Windecker | National Academies' Gulf Research Program |

GoMRI's Synthesis Efforts

The Gulf of Mexico Research Initiative (GoMRI) will come to an end in 2020 after 10 years of dedicated research efforts to understand the impacts of the Deepwater Horizon oil spill. GoMRI is synthesizing knowledge to ensure that GoMRI's scientific achievements and advances will be available to scientists, the user community, and responders. To best capture a comprehensive scientific synthesis, eight Core Areas of focus were identified along with a set of guiding principles to maintain consistency throughout the entire synthesis effort. Learn more about GoMRI's synthesis efforts, the eight Core Areas and the series of workshops that have already occurred and will continue in the coming year, at gulfresearchinitiative.org/gomri-synthesis/.

This workshop, Fate of Oil, will contribute significantly to GoMRI Synthesis Core Area 2.



This diagram illustrates the interrelated nature of the GoMRI Core Areas. The green arrows indicate critical lines of communication. Each Core Area has multiple subtopics, as shown here in the Core Area 1 example. The Core Area 8 advisory group will play a unique and crucial role throughout all the Core Areas promoting the effective application and communication of GoMRI funded science between the research and user communities. Products from the subtopics, designed for a scientific audience within that specific field, will help inform a product for each Core Area that is written for scientific audiences in all fields. Eventually, all Core Area products will inform synthesis products for the general public.

GoMRI findings, including the data and peer reviewed publications, are publicly available. This data and information legacy will promote continual scientific discovery and public awareness of the Gulf of Mexico ecosystem. Visit <u>data.gulfresearchinitiative.org</u> and <u>research.gulfresearchinitiative.org</u> to learn more!

Downtown Restaurants Recommendations

Dauphin's

107 Saint Francis Street, Suite 3400, Mobile, AL 36602 (251) 444-0200

Located high atop downtown Mobile on the 34th floor of the RSA Trustmark Bank Building - Dauphin's truly is Southern Hospitality, elevated! Enjoy breathtaking views of the Mobile Bay while dining at the area's first and only Chef's Table; all while savoring Executive Chef Steve Zucker's menu full of classic coastal cuisine with a hint of Caribbean.

Dumbwaiter Restaurant

167 Dauphin Street, Mobile, AL 36602 (251) 445-3802

The Dumbwaiter is reminiscent of the nostalgic southern charm for which the city of Mobile is so well known. While quirky and quaint, this innovative restaurant integrates modern technology with the charm of yesteryear to provide a first class dining experience.

Five

609 Dauphin Street, Mobile, AL 36602 (251) 3083105

At Five, we offer five entrees, five snacks, five reds and five whites. We have a bar stocked with everything you need and nothing more. All of our seafood comes from our own wholesale market in Destin, FL.

Moe's Original BBQ

701 Spring Hill Ave, Mobile, AL 36602 (251) 410-7427

Located in upper Dauphin St. in downtown Mobile, Moe's Original Bar B Que is a 7,400 sq. ft. spot featuring a hot nightlife scene with full premium bars, HDTVs and an entertainment venue that showcases live music from top bands as well as hosts private parties.

NOJA

6 N Jackson Street, Mobile, AL 36605 (251) 433-0377

Enjoy fine dining in downtown Mobile. Our minds are always cooking.

The Royal Scam

72 S Royal Street, Mobile, AL 36602

(251) 432-7226

Restaurant and bar. Lunch menu includes soups, salads and sandwiches. Dinner menu features areas finest steaks, seafood, etc. Courtyard dining available. Available for private parties. Full service bar featuring Mobile's best martinis and extensive wine list.

Von's Bistro

69 Saint Michael Street, Mobile, AL 36602

(251) 375-1113

Discover a creative blend of Asian and American fusion cuisine served in a welcoming and comfortable environment. Dinner reservations suggested.

Notes

Notes