

## **CURRICULUM VITAE - RENEE CHRISTINE COLLINI**

1815 Poppo Ferry Rd · Biloxi, MS 39532 · 817-602-8475 · rcollini.msstate@gmail.com

### **PROFESSIONAL PREPARATION**

2019 – 2022 Mississippi State University; Biloxi, AL

Doctorate of Philosophy; Forest Resources, Minor: Agricultural and Extension Education

Completion date: May 2022 – already defended and dissertation accepted by the university

Dissertation: Exploring Diffusion and Adoption of a Climate Resilience Innovation Among Gulf of Mexico Stewards

2009 – 2012 University of South Alabama; Mobile, AL

Master of Science

Thesis: Quantifying Hydromedusae Predation on Fish Eggs in the Northern Gulf of Mexico

2004 – 2008 University of Texas at Dallas; Richardson, TX

B.S. of Biology

### **PROFESSIONAL EXPERIENCE**

2023-present Director, Gulf Center for Equitable Climate Resilience, The Water Institute, Baton Rouge, LA

2022-2023 Assistant Extension Professor (Dr. James Henderson), Mississippi State University, Biloxi, MS

2021-2022 Program for Local Adaptation to Climate Effects: Sea-Level Rise, Mississippi-Alabama Sea Grant Consortium/Florida Sea Grant, Biloxi, MS

2014-2021 Northern Gulf of Mexico Sentinel Site Cooperative Program Coordinator (Dr. LaDon Swann) Mississippi Alabama Sea Grant Consortium, Mobile, AL  
*Transitioned the program into PLACE:SLR (above)*

2019-2022 Extension Instructor (Dr. James Henderson), Mississippi State University, Biloxi, MS

2018-2019 Extension Associate III (Dr. Eric Sparks), Mississippi State University, Biloxi, MS

2015-2018 Program Manager Alabama Real-time Coastal Observing System (Dr. John Valentine), Dauphin Island Sea Lab, Dauphin Island, AL

2015-2017 Science Coordinator/DISL Liaison (Roberta Swann), Mobile Bay National Estuary Program, Mobile, AL

2012-2016 Marine Technician, Marine Technical Support (Michael Dardeau/Laura Linn), Dauphin Island Sea Lab, Dauphin Island, AL

Summer 2011 Teaching Assistant, Introduction to Oceanography (Dr. W. Monty Graham), Dauphin Island Sea Lab, Dauphin Island, AL

- Winter 2011 Field Scientist Volunteer, NOAA vessel *Oregon II*, NRDA Zooplankton Collection (Dr. Joanne Lyczkowski-Shultz)
- 2010-2011 Research Assistant, Biological Oceanography Lab (Dr. W. Monty Graham), Dauphin Island Sea Lab, Dauphin Island, AL
- 2009-2011 President and Vice President, U.S.A. Marine Science Graduate Student Organization
- 2009 & 2010 Visiting Scientist, Instituto Nacional de Investigación y Desarrollo Pesquero (INIDEP), Mar del Plata, Argentina
- 2008- 2009 Research Technician, Biological Oceanography Lab (Dr. W. Monty Graham), Dauphin Island Sea Lab, Dauphin Island, AL
- Summer 2008 Summer Intern, Plankton Sampling/Sorting Lab (Dr. W. Monty Graham/Dr. Frank Hernandez Jr) Dauphin Island Sea Lab, Dauphin Island, AL
- Fall 2007 Teaching Assistant, Undergraduate Biochemistry Laboratory (Dr. Scott Ripple), University of Texas at Dallas, Richardson, TX
- Summer 2007 National Science Foundation-Research Experience for Undergraduates, Assessing the Risk of Predation on Ichthyoplankton Using an Adaptive Sampling Approach (Dr. W. Monty Graham), Dauphin Island Sea Lab, Dauphin Island, AL

## **OUTREACH AND EXTENSION PUBLICATIONS AND PRODUCTS**

- Application Guide for the 2022 Sea Level Rise Technical Report – Led the project scoping and development of an Extension-style publication to support the application of newly released science on risings seas. Final report delivered by NOAA: <https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/noaa-nos-techrpt02-global-regional-SLR-scenarios-US-application-guide.pdf>
- Cost Benefit Analyses of Flood Protection for a Critical Facility – Led execution of a cost-benefit analysis for the Jackson County Utility Authority to assess if a flood protection berm for a new water reclamation facility was cost effective when considering future sea levels. Final report delivered directly to the Utility Authority; outreach product: <https://placeslr.org/wp-content/uploads/2021/09/Berm-Infographic-Updated-2.pdf>
- Cost Benefit Analysis of Living Shorelines vs Hardened Shorelines – Led execution of a cost-benefit analysis for a private homeowner to assess the relative cost effectiveness of a wooden bulkhead as compared to a hardened shoreline. [https://placeslr.org/wp-content/uploads/2021/07/Living-Shoreline-Cost-Benefit-Analysis\\_withPub.pdf](https://placeslr.org/wp-content/uploads/2021/07/Living-Shoreline-Cost-Benefit-Analysis_withPub.pdf)
- Living Shorelines Public Informational Videos – Led development of three videos to inform different target audiences on the benefits of living shorelines and how to access the Living Shorelines Resource Catalogs. [www.GulfLivingShorelines.com](http://www.GulfLivingShorelines.com)
- Living Shorelines Informational Two-Pagers – Led development of five audience-specific two-pagers to inform regarding options for living shorelines across multiple

sectors. Made in collaboration with partners across the Gulf of Mexico and the Climate and Resilience Community of Practice. [www.GulfLivingShorelines.com](http://www.GulfLivingShorelines.com)

- State Living Shorelines Resource Catalogs – Led development of user-friendly resource catalogs for each state to support the understanding, design, and implementation of living shorelines. Made in collaboration with partners across the Gulf of Mexico and the Climate and Resilience Community of Practice. [www.GulfLivingShorelines.com](http://www.GulfLivingShorelines.com)
- Climate Communication and Myths – A brief, two-pager with general best practices for communicating about climate change and common arguments from climate skeptics and how to answer them. [http://masgc.org/assets/uploads/publications/1137/climate\\_communication\\_and\\_myths\\_v2.pdf](http://masgc.org/assets/uploads/publications/1137/climate_communication_and_myths_v2.pdf)
- Case Studies in Sea Level Rise Resilience Short Videos – Led development of videos to educate viewers on affordable mechanisms to improve sea-level rise resilience coupled with latest localized sea-level rise data. <http://masgc.org/northern-gulf-of-mexico-sentinel-site-co/resilience-to-future-flooding#ShortFilms>
- Sea Level Rise Informational Short Videos – Led development of videos to educate viewers on the basics of sea-level rise in the northern Gulf of Mexico. Did so in collaboration with stakeholders from across outreach, elected officials, municipal staff, and coastal training coordinators. <http://masgc.org/northern-gulf-of-mexico-sentinel-site-co/resilience-to-future-flooding#ShortFilms>
- Localized Sea-Level Rise Two Pagers – Coupling access to locally-specific sea-level rise scenarios with standardized, clear communication materials to begin dialogue around sea-level rise and risk-based scenario selection with local stakeholders. In addition to the more in-depth data access tools, recently upgraded to include an easy access website <http://masgc.org/northern-gulf-of-mexico-sentinel-site-co/two-pager> and [www.localslr.org](http://www.localslr.org)
- Gulf TREE – Gulf Tools for Resilience Exploration Engine. [www.gulftree.org](http://www.gulftree.org). A web resource that enables end-users from a variety of backgrounds to find relevant climate change tools and products via structured search engine.
- Fulford, C. and R. Collini, 2016. *Inventory of Continuously Operating Reference Stations (CORS) in the northern Gulf of Mexico (2016) Summary Report*. <https://bit.ly/2B4jPxc>
- Co-editor and Developer. Climate Community of Practice Tool Bulletin. <http://masgc.org/climate-outreach-community-of-practice/monthly-tool-bulletin>
- Phelps, A., J. Dorton, S. Wilkins, R. Collini, M. Walton, and M. Haden. Winter 2016. “String of Sentries: Sentinels Form a Network of Eyes on the Coast.” *Coastwatch*. 1: 17 – 23
- Collini, R., T. Sempier, D. Kidwell, T. Osborne. 2015. “Keeping Pace: A short guide to navigating sea-level rise models.” National Sea Grant Library: MASGC-H-16-002

- Editor and Developer. *Cooperative Ternary* <http://masgc.org/northern-gulf-of-mexico-sentinel-site-co/newsletter>
- Mississippi-Alabama Sea Grant Staff Blog
  - [Why is my house sinking?](#) October 2021
  - [Understanding the economics of a changing floodplain.](#) March 2021
  - [Coastal climate resilience intern's fieldwork is fun in the sun \(sometimes\).](#) September 2020
  - [Outsmarting Water.](#) April 2020
  - [Sea-level rise research: What is it anyway?](#) August 2019
  - [Make climate change awareness work for your wallet.](#) February 2019
  - [What will storm surge look like in the future?](#) July 2018
  - [Social Coast: The other science.](#) February 2018
  - [Nate in my front yard, sea-level rise in my office.](#) October 2017
  - [Finding Gulf TREE through the forest of tools.](#) May 2017
  - [What can a restoration project do for you in the face of sea level rise?](#) January 2017
  - [Climbing the tree of tool selection.](#) September 2016
  - [Keeping Pace with sea-level rise models.](#) June 2016
  - [Tool Inundation: Information From a Sea of Choices.](#) February 2016
  - [Extra! Extra! Read all about it!](#) September 2015
  - [Ready, SET, collaborate.](#) May 2015
  - [Program seeks to get more from monitoring data.](#) January 2015
- Collini, R. and M. Dardeau, 2013. "Environmental Monitoring: Mobile Bay Project Shares Local Conditions." *ECO: Environment Coastal & Offshore*, 1(3): 36-39.

## PEER REVIEWED PUBLICATIONS

- DeLorme, D.E., Stephens, S.H., Collini, R.C. (2022). Coastal hazard mitigation considerations: perspectives from northern Gulf of Mexico coastal professionals and decision-makers. *Journal of Environmental Studies and Sciences*. <https://doi.org/10.1007/s13412-022-00771-z>
- Ahrabi-Nejad, S., Collini, R.C., Miller-Way, T., Patch, S.M., Rellinger, A., Sempier, T., Seubert, E.A., Sparks, E. (2022) Fostering science-to-civics literacy through the development and assessment of a sea-level rise curriculum. *Continental Shelf Research* 241 (15) <https://www.sciencedirect.com/science/article/pii/S0278434322000851>
- Collini, R. C., Heming, M. C., Mohrman, C. F., Daigle, M. T., Fulford, C. A., Lowry, C. L. G., Hanisko, M. D., Mikulencak, S., Price, R., Sempier, T. T., Shepard, C., Underwood, W. V., Woodrey, M. S., Denny, M. D., & Sparks, E. (2022). Utilizing an end-user driven process to identify and address climate-resilience tool needs in the U.S. Gulf of Mexico. *Coastal Management*. <https://doi.org/10.1080/08920753.2022.2022975>
- Collini, R. C., Heming, M. C., Mohrman, C. F., Daigle, M. T., Fulford, C. A., Lowry, C. L. G., Hanisko, M. D., Mikulencak, S., Price, R., Sempier, T. T., Shepard, C., Underwood, W. V., Woodrey, M. S., Denny, M. D., & Sparks, E. (2021). Understanding

end-user adoption of an online climate resilience tool. *Environmental Science & Policy*, 124, 247–253. <https://doi.org/10.1016/j.envsci.2021.06.022>

- Collini, R. C. and S.M. Smallegan. 2021. Foundations for a practical approach to considering sea-level rise in coastal projects. *Marine Technical Society Journal*. Invited. 55 (4) 47-55 <https://doi.org/10.4031/MTSJ.55.4.1>
- Coogan, J., Dzwonkowski, Lehrter, Park, K., Collini, R. 2021. Observations of Dissolved Oxygen Variability and Physical Drivers in a Shallow Highly Stratified Estuary. *Estuarine, Coastal and Shelf Science* 259, 10482 <https://doi.org/10.1016/j.ecss.2021.107482>
- DeLorme, D.E., S.H. Stephens, R.C. Collini, D.W. Yoskowitz, S.C. Hagen 2021. Communicating and Understanding Ecosystem Services Assessment with Coastal Stakeholders: Obstacles and Opportunities. *Frontiers in Communication: Science and Environmental Communication*. doi: 10.3389/fcomm.2021.656884
- Osland, M., et al. 2017. Assessing coastal wetland vulnerability to sea-level rise along the northern Gulf of Mexico coast: Gaps and opportunities for developing a coordinated regional sampling network. *PLoS ONE* 12(9): e0183431
- Dzwonkowski, B., K. Park, and R. Collini 2015. The coupled estuarine-shelf response of a river-dominated system during the transition from low to high discharge. *Journal of Geophysical Research*. 120, 6145-6163, doi: 10.1002/2015JC010714

## **PUBLISHED DATA SETS**

- Dauphin Island Sea Lab – Alabama Real Time Coastal Observing System. *Hydrographic and Meteorological Data Sets 2015 – 2019* [Stations: Dauphin Island Sea Lab, Cedar Point, Middle Bay Lighthouse, Meaher Park, Bon Secour, Perdido Pass, Katrina Cut] DOI: 10.25921/3epd-9d76 <http://mondata.disl.org/mondata/disclaimer.cfm>
- Fulford, C. and R. Collini, 2016. Inventory of Continuously Operating Reference Stations (CORS) in the northern Gulf of Mexico (2016). Gulf Coastal Plains and Ozarks LCC Conservation Planning Atlas. <https://bit.ly/2iGdL7m>
- Oster, D.A., R. Collini, and J. Tirpak (2016). Surface Elevation Table (SET) Inventory Gap Analysis. <http://bit.ly/2jhGUoH>

## **SUCCESSFUL FUNDING**

*Fostering a Diverse Climate Extension Workforce*

U.S. Fish and Wildlife Service  
\$76,000, Lead PI

*Legal Analyses for Road Liabilities and Sea-Level Rise*

Sea Grant Legal Program  
\$49,807, Total award  
\$10,000, Co-PI

*Increasing Sea-Level Rise Resilience in the Northern Gulf of Mexico*

NOAA Environmental Literacy Program  
\$499,557, Lead-PI

*Facilitating Accurate and Effective Application of Marsh Modeling Outputs*  
Southeast Climate Adaptation Science Center  
\$106,326, Co-PI

*Gulf TREE Train the Trainer Workshop Series*  
National Sea Grant Office  
\$5,401, Lead-PI

*Gulf of Mexico Sea Level Rise Regional Workshop*  
Coastal and Estuarine Research Federation  
\$2,000, Co-PI

*Sea-Level Rise in the Classroom (2019-2020)*  
Brown Foundation  
\$19,997, Lead-PI

*Dynamic Sea-Level Rise Research Extension Project (2019-2020)*  
NOAA NCCOS Effects of Sea Level Rise Program  
\$49,973, Lead-PI

*Sea-Level Rise Risk Communication in Socially Vulnerable Communities (2019-2020)*  
NOAA Water Initiative  
\$50,000, Lead-PI

*Resilience Extension Transition (2019-2022)*  
National Sea Grant Office  
\$100,000, Lead-PI

*Sea Grant Extension for the North Central Gulf of Mexico: A Submission to the NOAA Sentinel Site Competition (2019 – 2021)*  
Mississippi-Alabama Sea Grant Consortium  
\$102,000, Lead-PI

*Coastal Adaptation Pathways for Barrier Island Communities (2019-2021)*  
Army Corps of Engineers Cooperative Ecosystem Studies Units  
\$82,626, Co-PI  
\$200,262, Total Award

*Building sea-level rise and flood resilience capacity in the northern Gulf through students and teachers (2018-2021)*  
NAS Gulf Research Program  
\$391,537, Lead PI

*Providing access to historical water column data (2018)*  
NOAA Gulf Regional Collaboration Team  
\$12,500, Lead PI

*Working with Water Level Data Workshop* (2018)  
NOAA Gulf Regional Collaboration Team  
\$10,000 Co-PI

*Addressing communication and financial barriers to sea-level rise resilience in northern Gulf of Mexico communities* (2017 – 2021)  
NOAA Regional Coastal Resilience Grant  
\$496,285, Lead PI

*Expansion of [www.mymobilebay.com](http://www.mymobilebay.com) for coastal Alabama resource management* (2017-2020)  
NOAA RESTORE Science Program  
\$720,000, Lead PI

*Expanding Coastal Community Capacity for Climate Change Adaptation* (2017-2019)  
NAS Gulf Research Program  
\$36,236, Co-PI  
\$359,000, Full award

*Coordinating Video Case Studies II* (2017-2018)  
Gulf of Mexico Alliance Gulf Star Funding  
\$15,000, Lead PI

*Dynamic Sea Level Rise Assessments of the Ability of Natural and Nature-based Features to Mitigate Surge and Nuisance Flooding in the Northern Gulf of Mexico* (2016-2021)  
NOAA NCCOS Ecological Effects of Sea Level Rise Program  
\$160,000, Management Transition Advisory Group PI  
\$1,200,000, Full Award

*Developing Recommended Sea Level Rise Scenarios for Habit and Coastal Community Resilience in the Northern Gulf of Mexico* (2016-2018)  
Gulf of Mexico Alliance Gulf Star Funding  
\$10,000, Co-PI

*Climate Change Tool and Model Decision Support Tree for Improved Coastal Community Resilience* (2016-2018)  
EPA Gulf of Mexico Program  
\$279,353, Lead PI

*Maintaining and Enhancing the Alabama Real-Time Coastal Observing System* (2016-2021)  
Gulf of Mexico Coastal Ocean Observing System  
\$150,000, Co-Lead PI

*Intern to Support the Northern Gulf of Mexico Sentinel Site Cooperative* (2016)  
NOAA Gulf Regional Collaboration Team  
\$10,000, Co-PI

*Director Fellowship to Support the Northern Gulf of Mexico Sentinel Site Cooperative* (2016)  
U.S. Fish and Wildlife Service  
Advisor – Full Summer Fellowship Salary

*End-User Derived Research to Improve the Effectiveness, Sustainability, and Prevalence of Coastal Restoration Projects (2015-2018)*

NOAA NERRs Collaborative Grant

\$23,507, Co-PI

*Maintaining Real-Time Observation in Mobile Bay for Resource Management (2015-2016)*

Alabama Coastal Area Management Program

\$45,000, Lead PI

*Sea Grant Extension for the North Central Gulf of Mexico: A Submission to the NOAA Sentinel Site Competition (2014 – 2019)*

Mississippi-Alabama Sea Grant Consortium

\$378,331, Co-PI

## **OUTREACH & EXTENSION**

### ***Workshops Hosted***

*Future Flood Resilience for Jackson County.* In-Person Training for Jackson County Staff.  
November 2021. Biloxi, MS.

*Advisory Workshop: Guiding activities for PLACE:SLR.* Virtual. August 24 & 25, 2021

*Sea-Level Rise Lunch 'n' Learn for City Staff.* Pensacola, FL. July 20, 2021

*Exploring Sea-Level Rise: Moving through the overwhelm to practical solutions*  
Weeks Bay NERR. May 19, 2021

*Future Flood Resilience for the State of Mississippi.* In-Person Training for MS Secretary of State. April 2021. Biloxi, MS

*Ocean Visions Coastal Solutions Gulf Workshop.* Virtual. April 27 & 28, 2021

*Climate Change Communication One on One Training.* Virtual. Mobile County Creation Care.  
January 6, 2021

### ***Gulf TREE Train the Trainer***

Virtual – Upper TX Gulf Coast Region. January 27, 2021

Virtual – Aransas Region. January 26, 2021

Virtual – Tampa Bay Region. January 19, 2021

Virtual – Louisiana Region. January 13, 2021

Virtual – Alabama Region. December 15, 2020

Virtual – Tallahassee Region. December 10, 2020

Virtual – Mississippi Region. December 8, 2020

*SETs & Stuff: Improving the Understanding and Visualization of SET Data Using R*  
Virtual. July 30, 2020

*Adapting to a Changing Gulf Region: Managing for Change – Virtual, contributor.* Summer 2020.

*Exploring Sea-Level Rise: Moving through the overwhelm to practical solutions*  
Virtual – Apalachicola NERR. May 20 & 21, 2020

*Sea-Level Rise Lunch 'n' Learn for Consultants*



Apalachee Regional Planning Council. March 27, 2020  
Spanish Fort, AL. September 23, 2019  
Biloxi, MS. August 12, 2019

*Flood Insurance as a Tool for Resilience*  
Pensacola, FL. March 22, 2019

*Northern Gulf of Mexico Sea Level Rise Data, Scenarios, and Modeling Workshop.*  
Gulf Coast Research Lab Marine Education Center. August 6-8, 2018

*NGOM+N2E2 MTAG Workshop*  
Grand Bay National Estuarine Research Reserve. July 12, 2018

*Building Sea Level Rise Natural Resource Management Partnerships*  
Cedar Key, FL. April 18, 2018

*Using Remote Sensing to Quantify Ecosystem Services for Improved Coastal Decision Making*  
Grand Bay National Estuarine Research Reserve. January 18, 2018

*Northern Gulf of Mexico Sentinel Site Cooperative Annual Partnership Workshop*  
Dauphin Island Sea Lab. November 30, 2017

*Gulf TREE Workshops Part 2: Seeing the Results*

- November 2, 2017: Baton Rouge, LA
- November 8, 2017: Ocean Springs, MS
- November 9, 2017: Mobile, AL
- December 13, 2017: Pensacola, FL

*NGOM+N2E2 MTAG Workshop.*  
Apalachicola National Estuarine Research Reserve. June 28, 2017.

*Building Resilience Through Actionable Science: TNC & USGS Products*

- June 7, 2017: Biloxi, MS
- June 8, 2017: Mobile, AL
- June 9, 2017: Milton, FL

*Ecological Effects of Sea Level Rise Final Management Team Workshop.*  
Weeks Bay National Estuarine Research Reserve. January 27, 2017.

*Gulf TREE Workshops Part 1: Sharing Your Knowledge*

- December 5, 2016: Spanish Fort, AL
- December 9, 2016: Gautier, MS
- March 7, 2017: Pensacola, FL

*Northern Gulf of Mexico Sentinel Site Cooperative Annual Partnership Workshop*  
NOAA Disaster Response Center. August 18, 2016

*Northern Gulf of Mexico Sentinel Site Cooperative Annual Partnership Workshop*  
Grand Bay National Estuarine Research Reserve. April 28, 2015

***Select Webinar Series Hosted***

*Coastal Resilience in the Gulf Webinar Series – A Product of the Climate and Resilience Community of Practice.* Fall 2020

Maintained critical connections across the Gulf of Mexico Climate and Resilience Community of Practice during the COVID-19 pandemic.

*Fast and Easy CEUs Resilience Series.* Summer 2020

Connected coastal practitioners to valuable information on hurricanes and climate change, diversity, equity, and inclusion, selecting sea-level rise scenarios for planning purposes, legal implications of sea-level rise on road maintenance, and building more resiliently.

### ***Select Outreach Activities***

#### **SLR Resilience Movie Premiere Events**

Hosted screenings of new resilience videos at large events that included tables with activities for various educational and environmental organizations, opportunities to win prizes for participating, and panel discussion with attendees after the movie screening. These events stimulated conversation and awareness among a variety of coastal residents.

#### **Thriving Earth Exchange Resilient Communities**

A program through the National Academies of Sciences to connect technical experts to communities addressing vulnerability issues. Supporting Turkey Creek and Forrest Heights communities of Gulfport, underserved, historical communities that are struggling with flooding and urbanization. Our project is focused on gathering data and informing residents around the underlying causes and potential solutions to the issues in their communities to support a dialogue on potential actions.

#### **Sea-level rise dialogues across the northern Gulf of Mexico**

Engage in open-house, formal, and informal meetings, presentations, and one-on-one dialogue sessions with coastal stakeholders and residents on the basics of sea-level rise and opportunities to act to increase resilience with small pots of money. Audiences have included town hall and city council meetings, municipal staff, emergency planners, and coastal residents in coastal Alabama, Mississippi, and Northwest Florida

#### **MTAG-PI, NOAA NCCOS EESLR Program NGOM+N2E2 Project**

Partners with a diverse team of researchers to work with local decision-makers (e.g. planners, natural resource managers) to integrate stakeholder and management perspectives into research scope, direction, and outputs. A modeling heavy project, Collini's role includes facilitating communication of modeling approach and techniques to enable robust discussions and interactions between researchers and MTAG members.

#### **Outreach Team, NOAA NCCOS Ecological Effects of Sea Level Rise Program EESLR-NGOM Project**

Partners with the NCCOS EESLR Team and LSU Center for Coastal Resilience to facilitate the accurate application and integration of EESLR-NGOM project products into local coastal planning and natural resource management through a variety of direct and frequent interactions with stakeholders and end-users in MS, AL, & FL.

#### SET-MH Coordination in the Eastern Gulf

Brings together SET-MH practitioners to open lines of communication and opportunity between various agencies for further collaboration, coordination, and data sharing.

#### Climate Change in Mobile County Lecture Series

Developed and participated in a series of lunch-n-learns with the League of Women Voters of Mobile. Included developing a strategy for the lecture series, inviting speakers, and presenting on future conditions and solutions.

#### Sea Level Rise Scenarios Synthesis

Developed a two-pager synthesis with plug and play analysis tool for extension agents anywhere in the coastal zone to utilize/apply. It will clearly communicate local scenarios coupled with future flooding projections and FAQs around utilizing SLR scenarios in decision-making and planning.

#### A Seafood Phenomenon: the Wonder of Alabama Jubilees (Gravy Ep. 40)

Interviewed by Southern Foodways Alliance for a podcast on the science of Jubilees in Mobile Bay. <https://www.southernfoodways.org/gravy/a-seafood-phenomenon-the-wonder-of-alabama-jubilees-gravy-ep-40/>

#### Climate Adaptation for Coastal Communities

Presented *Sea-Level Rise in the Gulf of Mexico* to stakeholders such as local decision-makers who were participating in

#### Twitter Content Developer and Moderator for @NGOM\_SSC now @PLACE\_SLR

#### Discovery Day (2009 – 2019)

An annual event inviting the public into the Dauphin Island Sea Lab targeting children and exposing them to the variety of research and projects.

#### Boardwalk Talk, “Hydromedusae, The Other Jellyfish”

Discussion about my research with local residents and Estuarium visitors.

#### Alabama Deep Sea Fishing Rodeo Community Day (2007 – 2011)

Annual summer event educating the public on the fisheries-based projects at the Dauphin Island Sea Lab and encouraging participation in incentive-based tagging programs.

### **SELECT ORAL PRESENTATIONS**

*A synthesis of end-user perspectives on marsh models for decision-making.* Coastal and Estuarine Research Federation Bi-Annual Meeting, online. Oral Presentation. Invited. November, 2021

*Coastal Change & Community Response: Turning Uncertainty into Action.*

Rising with the Tides. Virtual. Nov 2021

*Changing Flood Risk: Building Public Private Partnerships for Community Resilience*

Training and Collaboration Workshop for Pearl River County, Nov 2021

*Coastal Resilience: Practical Solutions for Addressing Uncertainty.*

One-on-One Meeting with Jackson County Staff. Oct 2021

*Practical Solutions for Addressing Sea-Level Rise in Floodplain Management: Updates and New Data.* Alabama Association of Floodplain Managers. Orange Beach, AL. Oct 2021

*Sea-Level Rise in the Mississippi Gulf Coast.*  
Rotary Club of Ocean Springs. September 15, 2021.

*Considering Sea-Level Rise in Long-Term Infrastructure Planning – What is it worth?*  
Association of State Flood Plain Managers Annual Meeting. Virtual. May 2021.

*Coastal Solutions to Flooding and Climate Lessons Learned from US Case Studies.* Keynote Address Invited. Ocean Visions Summit 2021, Online.

*Sea-Level Rise: Turning uncertainty into action.* ASFPM National Conference 2021, Online.

*Considering Sea-Level Rise in Long-Term Infrastructure Planning – What is it worth?* Oral Presentation. ASFPM National Conference 2021, Online.

*A cost-benefit analysis of green and grey shoreline-stabilization measures in coastal Mississippi.*  
Center for Watershed Protection Coastal & Island Conference. November 2020

*Developing an Adaptation Pathway for Dauphin Island, Alabama.* Center for Watershed Protection Coastal & Island Conference. November 2020

*Berms, Floodwalls, and Dunes – How High? Considering sea-level rise in coastal projects.*  
Oceans 2020. Virtual. October 2020

*Rising Water Connections.* Alabama Association of Floodplain Managers Orange Beach, AL. October 2020

*Bridges Between Research & Decision-Making: How it comes together.* Plenary Address.  
Climate Adaptation and Resilience Immersion Course. August 2020

*Stakeholder Engagement: Basics for researchers to understand and participate in the process.*  
Invited Plenary Address. USGS Southeast Region Science Workshop. July 2020

*Tackling Sea-Level Rise in the Southeast.* Plenary Address. NAACP Sea-Level Rise Training. August 2020

*How to Fit Tomorrow's Floods in with Today's Fires.* Invited Speaker – SAFE-T Meeting. June 2020.

*Lessons from the field – translating sea-level rise science into coastal decision making in the northern GOM.* Ocean Sciences. San Diego, CA. February 2020

*After Your Tool Leaves the Nest: Assessing Online Resource Application Post-Release.* Social Coast Forum. February 2020

*Connecting Science to Action.* Invited speaker – NOAA Climate Connections. Silver Spring, MD. November 2019

*Tools: Renovate Before You Build and Other Bad Analogies to Explain What Gulf Stakeholders Need to Address SLR.* Invited speaker – NOAA CO-OPS Briefing. Silver Spring, MD. November 2019

*NOAA NCCOS Leadership Briefing.* Silver Spring, MD. November 2019.

*Making Sense of Sea-Level Rise in Floodplain Management.* Invited speaker – Alabama Association of Floodplain Managers Fall Conference. Gulf Shores, AL. October 2019

*Making Sense of Sea-Level Rise in Planning.* Invited speaker – American Planning Association Alabama|Mississippi Conference. Huntsville, AL. October 2019.

*A Diversity of Mentors. Coastal Women in Science.* Ocean Springs, MS. October 2019.

*Building Bridges for Sea-Level Rise Resilience.* Invited speaker - EPA Briefing. Gulfport, MS. October 2019.

*Trading in Bulkheads for Natural Shorelines: Where and how to learn more information.* Friday Morning Serial. Biloxi, MS. September 2019.

*Tools: Renovate before you build – and other bad analogies to explain what Gulf stakeholders need to address sea-level rise.* Invited speaker – Hydrographic Services Review Panel Federal Advisory Committee. New Orleans, LA. August 2019.

*How to utilize Local SLR Two-Pagers to structure conversations around risk-tolerance, planning, and future conditions.* Tidally United Summit 2019. Pensacola, Florida. August 2019.

*Building Sea-Level Rise Resilience Through Partnership.* Mississippi State University Research Roundup. Biloxi, MS. June 2019.

*Utilizing a New Sea-Level Rise Communication Tool to Support Planning & Scenario Selection.* Invited speaker – Gulf of Mexico Alliance All Hands 2019. Gulf Shores, AL. June 2019

*Sea-Level Rise in Planning: Resources for “What is Sea-Level Rise” through “What Scenario Should I Use?”* CNREP 2019. New Orleans, LA. May 2019

*The Northern Gulf of Mexico Sentinel Site Cooperative.* CNREP 2019. New Orleans, LA. May 2019

*Sea-Level Rise in Alabama: What is it, who cares, and what can we do about it?* Invited panelist – League of Women Voters of Alabama Biannual Convention. Tuscaloosa, AL. May 2019

*GIS Success Stories in Sea-Level Rise Resilience.* Invited speaker – Geological Information Systems of Alabama Annual Meeting 2019. Orange Beach, AL. May 2019

*Which Scenario? Understanding & selecting sea-level rise scenarios for projects and planning.* Invited speaker – 4<sup>th</sup> Annual Florida Coastal Management Program Meeting. Pensacola, FL. May 2019

*Transforming Data into Action: Best practices for integrating sea-level rise science into decision-making.* 2019 National Adaptation Forum. Madison, WI. April 2019

*Risk Tolerance & Sea-Level Rise.* Invited speaker – Florida RESTORE Coordination Meeting. Tallahassee, FL. March 2019

*Emergency Planning & Sea-Level Rise.* Invited speaker – Local Emergency Planning Committee. Diamondhead, MS. March 2019

*Sea-Level Rise in Coastal Mississippi*. MSU REC Producer Advisor Council Meeting. Biloxi, MS. February 2019

*The Northern Gulf of Mexico Sentinel Site Cooperative: Connecting research, service, and decision-making*. GOMOSES. New Orleans, LA. February 2019

*Local Sea-Level Rise Two-Pager: Access, How-To, and Application*. Mississippi-Alabama Bays and Bayous Symposium. Mobile, AL. November 2018

*The NGOM SSC: Connecting Research, Service, and Decision-Makers*. Mississippi-Alabama Bays and Bayous Symposium. Mobile, AL. November 2018

*Which Scenario? Understanding Sea-Level Rise Scenarios and Tips on Selecting One*. Alabama Association of Floodplain Managers. Orange Beach, AL. October 2018

*Using a new resource to understand future storm surge*. Alabama Association of Floodplain Managers. Orange Beach, AL. October 2018

*Identifying Funding & Setting Yourself Up For Success: Options when you don't have a gazillion dollars*. Invited speaker – National Association of Counties Resilience Workshop. Fairhope, AL. October 2018

*Marine Science: The jobs your mom never told you about*. Invited speaker – Alabama School of Math and Science Junior Biology Class. Mobile, AL. September 2018

*Sea-Level Rise in Coastal Mississippi*. Invited speaker – Friday Morning Serial. Biloxi, MS. September 2018

*Panel: Use of Ecological Expertise for Communicating Sound Management Advice*. Invited panelist – National Conference on Ecosystem Restoration. New Orleans, LA. August 2018

*Gulf SLR Scenarios & SLR-Marsh Modeling Comparison: An upcoming workshop*. Gulf of Mexico Alliance All Hands Habitat Resources Team Meeting. St. Pete, FL. June 2018

*Building SLR Resilience in the northern Gulf*. Gulf of Mexico Alliance All Hands Coastal Resilience Team Meeting. St. Pete, FL. June 2018

*Translating New SLR Modeling Capabilities into Decision-Making*. Climate & Resilience Community of Practice Annual Meeting. Port Aransas, TX. April 2018

*Moving the Needle on SLR Resilience: A Cooperative's Role*. Briefing to NOAA Leadership. Silver Spring, MD. April 2018

*Sea Level Rise in Mobile County*. Invited speaker – Sea-level rise and extreme precipitation: preparing for Mobile's uncertain future. Mobile, AL. April 2018.

*Helping communities plan for sea-level rise*. Invited speaker – Leadership Mobile. Mobile, AL. April 2018.

*Planning for sea-level rise in coastal Alabama*. Invited presentation – PLAN Meeting. Fairhope, AL. April 2018.

*Northern Gulf of Mexico Sentinel Site Cooperative.* Invited presentation – Grand Bay National Estuarine Research Reserve Lunch & Learn. Moss Point, MS. February 2018.

*Utilizing Virtual Meetings to Integrate Stakeholder Input in an Interdisciplinary Gulf of Mexico Sea Level Rise Project.* Social Coast Forum. Charleston, SC. February 2018.

### **SELECT WEBINAR PRESENTATIONS**

*Drowning in Scenarios? Decision-Making for Sea Level Rise.* Invited Speaker – Florida Transplex Webinar. October 2020

*Integrating Sea-Level Rise Science into Coastal Decision-Making: Lessons from the Field.* NOAA Brown Bag Seminar. June 2020.

*Resources for Assessing Ecological and Socioeconomic Impacts of Sea-Level Rise.* GOMA Tool Time. August 2020

*Storm Surge + Sea-Level Rise.* NOAA Three-Minute Thesis. October 2019

*Local Sea-Level Rise Two-Pagers.* Invited speaker – EPA Webinar. March 2019

*Sea-Level Rise, Two-Pagers, and Data... Oh My!* Invited speaker – U.S. FWS National Climate Team Webinar. December 2018

*Tackling Sea-Level Rise Cooperatively.* Florida Coastal Resilience Quarterly Webinar. November 2018

*Local SLR Two-Pager.* Invited speaker – Gulf of Mexico Climate and Resilience Community of Practice Webinar. October 2018

*Making Regional SLR Scenarios Accessible.* NOAA Gulf Regional Collaboration Team Three Minute Thesis Webinar. August 2018

*Northeastern Gulf of Mexico SET Coordination.* Invited presentation – North Carolina SET Monitoring Group Webinar. May 2018

*Translating Gulf TREE Lessons Learned.* Invited presentation – Council Monitoring & Assessment Program Development Working Group Webinar. May 2018

*Northern Gulf of Mexico Sentinel Site Cooperative.* Invited presentation – Florida Coastal Office Webinar. March 2018

### **COMMITTEES/BOARDS**

2021-present Dauphin Island Watershed Management Plan Steering Committee

2020-present NASA Sea Level Change Team Advisory Board

2020-present Aloe Bay Economic Development Steering Committee

2020-present U.S. Climate Toolkit Southeast Region Webpage Development Committee

2018- present Gulf of Mexico Coastal Ocean Observing System Director

2017- 2020 Cooperative Hypoxia Assessment and Monitoring Program Mississippi-Alabama Monitoring Working Group

2015- present Gulf of Mexico Alliance Coastal Resilience Priority Issue Team

- 2015- present Gulf of Mexico Climate Community of Practice  
Tools Working Group Co-Chair (2016- present)
- 2015- present Gulf of Mexico Alliance Habitat Priority Issue Team
- 2015- present Gulf of Mexico Alliance Data and Monitoring Priority Issue Team
- 2015- 2018 Weeks Bay National Estuary Research Reserve Advisory Committee  
Co-Chair (2017, 2018)
- 2014- 2018 Mobile Bay Interagency Working Group
- 2013- present Mobile Bay National Estuary Program Science Advisory Committee  
Chair Restoration Monitoring Working Subcommittee (2014- present)
- 2013 -2015 Gulf of Mexico Alliance Water Quality Priority Issue Team

### **SERVICE ACTIVITIES**

- 2021 Reviewer *Climate Risk Management*
- 2021 Ocean Visions Summit  
Chair – Steering Committee Gulf Regional Workshop  
Member Steering Committee – International Summit
- 2021-2022 Author - U.S. SLR Task Force Application Guide
- 2021 Reviewer Sea-Level Rise Taskforce Technical Report
- 2021-2023 Fifth National Climate Assessment – Coastal Effects Author
- 2021 NERRS Transfer Grant Panel Reviewer
- 2021 Peer Reviewer – MSU internal process  
Amanda Sartain – Marine Debris Programming Report
- 2020 Peer Reviewer – MSU internal process  
Marcus Drymon - FISHERS
- 2020 NERRS Transfer Grant Panel Reviewer
- 2019 Orange Beach Program for Public Information Technical Committee
- 2019 NOAA NCCOS Ecological Effects of Sea Level Rise Grant Panel Reviewer
- 2018-2019 Planning committee for the Gulf of Mexico Climate and Resilience Community  
of Practice
- 2018-2019 Journal of Human Sciences and Extension Reviewer
- 2018 NERRS Catalyst Grant Technical Reviewer
- 2017 NERRS Transfer Grant Panel Reviewer
- 2016 NERRS Transfer Grant Panel Reviewer
- 2015 NERRS Transfer Grant Panel Reviewer

### **PROFESSIONAL DEVELOPMENT**

- 2021 Fully Serving the Underserved: An Online Course
- 2020 Adapting to a Changing Gulf Region: An Online Course
- 2019 Adaptation Planning Workshop, NOAA Office for Coastal Management,  
Apalachicola, FL.
- 2018 Early Career Leadership Academy, American Meteorological Society



March 2018	Social Science 101 Workshop, NOAA Office for Coastal Management. Moss Point, AL.
February 2018	Building Risk Communication Skills Workshop, NOAA Office for Coastal Management. Mobile, AL.
September 2017	Seven Practices for Risk Communication Webinar, NOAA Office for Coastal Management.
Spring 2015	Planning and Facilitating Collaborative Meetings Workshop, NOAA Office for Coastal Management. Moss Point, MS
November 2012	Science: Becoming the Messenger Workshop. National Science Foundation. Tuskegee, AL.

### **MENTORING GRADUATE STUDENTS**

- Master's Thesis Committee Member. (January 2020 – May 2021)  
Posey, Sarah Peyton: Adaptation Strategies to Mitigate Morphological Damage from Future Storms on a Barrier Island. Completed

### **SUPERVISING EXPERIENCE**

2022	Emerson Woodhall
2021-present	Alexi Monti
2021	Amit Chandruly
2020-2021	Carey Schafer
2020-present	Camille Sicangco
2019-present	Sara Martin, co-supervise
2019-present	Sonia Vedral
2017-2018	Diana Marchant, co-supervise
2017-2022	Mikaela Heming
2016-2018	Hunter King, co-supervise
2016-2017	Christina Mohrman
2016-2018	Casey Fulford
2016	David Oster, co-supervise
2015-2017	Erich Bohaboy, co-supervise

### **AWARDS**

2022	First Place – Individual, Gulf Guardian Award, EPA Gulf of Mexico Program
2022	Second Place – Resilience to Future Flooding Project, Partnerships, Gulf Guardian Award, EPA Gulf of Mexico Program
2022	Second Place – SLR in the Classroom, Youth Education, Gulf Guardian Award, EPA Gulf of Mexico Program
2021	Silver Award, Association of Natural Resource Professionals
2020	Climate Adaptation Leadership Award, Association of Fish and Wildlife Agencies

2020 Silver Award in TV/Video, Association of Natural Resource Professionals  
2020 Emerging Public Policy Leadership Award, American Institute of Biological Sciences  
2019 Gulf Guardian Award 2<sup>nd</sup> Place, Partnership Category  
2017 Spirit of Community Award, Gulf of Mexico Climate Community of Practice  
2012 Outstanding Thesis of the Year Award; University of South Alabama  
2011 Dauphin Island Sea Lab Fellow  
2009 Dauphin Island Sea Lab Fellow  
2009 Best Poster Presentation; Gulf Coast Graduate Student Symposium  
2007 Research Experience for Undergraduates; National Science Foundation  
2005-2008 Academic All Conference; American Southwest Conference  
2004-2008 Four Years NCAA Varsity Women's Soccer; UTD  
2004-2008 Academic Excellence Scholarship, UTD