Louisiana's RESTORE Center of Excellence Research Grants Program

FY2017 Annual Report to the RESTORE Council

Executive Summary

On April 8, 2014, the Coastal and Protection and Restoration Authority (CPRA) named The Water Institute of the Gulf as the State of Louisiana's Center of Excellence. On November 1, 2015, the U.S. Department of the Treasury awarded CPRA a grant to begin its research program. The mission of the RESTORE Act Center of Excellence for Louisiana (LA-COE) is to support research directly relevant to implementation of Louisiana's Coastal Master Plan by administering a competitive grants program and providing the appropriate coordination and oversight support to ensure that success metrics are tracked and achieved.

The LA-COE completed coordination of the review process of 76 proposals (graduate studentship, research and collaborative awards) that were solicited under the first request for proposals (RFP1). The proposals were all reviewed by subject matter experts (SME) and CPRA for criteria defined in the RFP. The SME and CPRA reviews of the research and collaborative proposals were compiled for the External Review Board (ERB). The ERB consists of nationally and internationally recognized subject matter experts on topics relevant to Louisiana's Coastal Master Plan. An in-person ERB meeting was held in Baton Rouge, LA in April 2017. The ERB made funding recommendations (based on a scale of 1-3) for each research and collaborative proposal based on review and discussion of the proposals, the SME reviews, and the CPRA reviews. A Recommendation Meeting was held 6/20/2017 with CPRA and LA-COE staff to discuss the ERB's recommendations and to develop a potential list of projects to fund, subject to concurrence by CPRA and LA-COE leadership. A Concurrence Meeting was held 5/30/2017 to finalize which graduate studentship, research and collaborative awards would be granted. Principal investigators (PIs) were notified of the awards and then a public announcement was made via a joint LA-COE and CPRA press release 6/22/2017. A total of 13 awards were announced; six graduate studentship awards, two collaborative awards, and five research awards.

Contracting and research grants management procedures were developed to help manage the funding process and subrecipients. Assessment and reporting on progress using defined metrics that address federal reporting requirements including reports to Treasury have been developed.

Programmatic Elements

Award Recipient

Following a mandate by the U.S. Department of Treasury requiring that Centers of Excellence must focus efforts on a selected set of disciplines, the LA-COE focuses on the following:

• Coastal and deltaic sustainability, restoration and protection, including solutions and technology that enable citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast region

- Coastal fisheries and wildlife ecosystem research and monitoring in the Gulf Coast region
- Sustainable and resilient growth, economic, and commercial development in the Gulf Coast region
- Comprehensive observation, monitoring, and mapping of the Gulf of Mexico

The status of performance and annual accomplishments include: Coordinated the review of proposals by subject matter experts, CPRA, and the ERB. CPRA provided review of the relevance of the proposed research to implementation of Louisiana's Coastal Master Plan. Developed summary reviews and, subject to CPRA's concurrence, selected research projects for funding. PIs were notified for selection of funding, and project kick-off webinar with subrecipients was conducted. Subrecipient risk assessments were completed on all selected subrecipients, subawards drafted and sent to research institutions for review and negotiation. The LA-COE was operated according to SOPs, including website, coordination with other Center of Excellence and other outreach. Contracting and research grants management was developed and implemented to help manage subrecipients. Assessment and reporting on progress using defined metrics that address federal reporting requirements including reports to Treasury was conducted.

Award Subrecipient(s) Selected for Funding

- 1. Louisiana State University
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast
 - Research project undertaken: Integrating High-Fidelity Models with New Remote Sensing Techniques to Predict Storm Impacts on Louisiana Coastal and Deltaic Systems
 - Subawarding is in progress
- 2. Louisiana State University
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast
 - Research project undertaken: Coupling Hydrologic, Tide and Surge Processes to Enhance Flood Risk Assessments for the Louisiana Coastal Master Plan
 - Subawarding is in progress
- 3. University of New Orleans
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast
 - Research project undertaken: An Evaluation of Faulting in Holocene Mississippi River Delta Strata through the Merger of Deep 3-D and 2-D Seismic Data with Near Surface Imaging and Measurements of Vertical Motion at Three Study Areas

- Subawarding is in progress
- 4. University of Louisiana at Lafayette
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Coastal fisheries and wildlife ecosystem research and monitoring in the Gulf Coast Region
 - Research project undertaken: Assessment of coastal island restoration practices for the creation of brown pelican nesting habitat
 - Subawarding is in progress
- 5. University of New Orleans
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Sustainable and resilient growth, economic and commercial development in the Gulf Coast Region
 - Research project undertaken: From Adapting in Place to Adaptive Migration: Designing and Facilitating an Equitable Relocation Strategy
 - Subawarding is in progress
- 6. Louisiana State University
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast
 - Research project undertaken: Enhancing Sediment Retention Rates of Receiving Basins of Louisiana Sediment Diversions
 - Subawarding is in progress
- 7. Louisiana State University
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast
 - Research project undertaken: Plant and Soil Response to the Interactive Effects
 of Nutrient and Sediment Availability: Enhancing Predictive Capabilities for the
 Use of Sediment Diversions and Dredge Sediment for Marsh Creation
 - Subawarding is in progress
- 8. Louisiana Tech University
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast & Comprehensive observation, monitoring, and mapping of the Gulf of Mexico
 - Research project undertaken: Electrokinetic barrier for seawater intrusion
 - Subawarding is in progress
- 9. Louisiana State University
 - Researcher role to help implement the Coastal Master Plan
 - Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast

- Research project undertaken: Multiple Tools for Determining the Fate of Nitrate
- Subawarding is in progress

10. Louisiana State University

- Researcher role to help implement the Coastal Master Plan
- Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast.
- Research project undertaken: Project Louisiana Rivers' Sediment Flux to the Coastal Ocean
- Subawarding is in progress

11. University of Louisiana at Lafayette

- Researcher role to help implement the Coastal Master Plan
- Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast & Comprehensive observation, monitoring, and mapping of the Gulf of Mexico
- Research project undertaken: Evaluation of Radar-Based Precipitation Datasets
- Subawarding is in progress

12. Louisiana State University

- Researcher role to help implement the Coastal Master Plan
- Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast
- Research project undertaken: Constructing Mississippi River Delta Plain soil stratigraphy
- Subawarding is in progress

13. Louisiana State University

- Researcher role to help implement the Coastal Master Plan
- Eligible discipline: Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast
- Research project undertaken: Determining the Influence of Surface Water Diversions
- Subawarding is in progress

Financial Flements

Award Recipient

The RESTORE Act Center of Excellence Research Grant Program amended award to the Louisiana Coastal Protection and Restoration Authority (CPRA) issued 05/25/2017 is funded for \$4,202,509.00. A Cooperative Endeavor Agreement dated 6/9/2017 has been executed by CPRA with the Water Institute of the Gulf (The Water Institute) to administer the award with a current contract value of \$4,036,238. Invoices from The Water Institute through 9/30/2017 total \$416,314.92. CPRA expenditures to date total \$64,869. Research subawards totaling

\$3,027,178.50 are anticipated under the contract. There have been no subaward expenditures submitted to the Institute to date.

Award Subrecipient(s)

As a result of a competitive and peer-reviewed request for proposal process, subrecipients of research awards have been selected. Subcontracts are in progress. The subrecipients and the associated subaward amounts are listed here:

No.	Subrecipient	Subaward Amount
1	Louisiana State University	\$501,267.00
2	Louisiana State University	\$499,882.00
3	University of New Orleans	\$349,173.52
	University of Louisiana at	
4	Lafayette	\$299,733.16
5	University of New Orleans	\$295,338.00
6	Louisiana State University	\$292,495.00
7	Louisiana State University	\$292,914.00
8	Louisiana Tech University	\$57,519.00
9	Louisiana State University	\$63,100.00
10	Louisiana State University	\$77,015.00
	University of Louisiana at	
11	Lafayette	\$71,148.00
12	Louisiana State University	\$70,070.00
13	Louisiana State University	\$83,328.00

Gulf Coast Ecosystem Restoration Council Elements Leveraging Multipliers

The LA-COE and CPRA participate in bimonthly conference calls of the Gulf of Mexico Restoration and Science Programs Coordination Forum that allows for funding organizations in Gulf area to discuss their programs, share ideas, and promote collaborations.