



RESTORE ACT CENTER OF EXCELLENCE FOR LOUISIANA EXPENDITURE SUMMARY

Due within 30 days of the close of the award

CFDA/Fed Grant Number: 21.015/RCEGR260003-01-00

CEA Number: 2000249131

Subaward Agreement Number: _____

Award Period (mm-dd-yyyy to mm-dd-yyyy): _____

Project Title: _____

Grantee Lead Institution: _____

Grantee Principal Investigator and Contact Information:

First name: _____ Last name: _____

Title: _____ Affiliation: _____

Mailing address: _____

Phone: _____

Email: _____

Year	Total Award	Total this Invoice	Invoiced to Date	Remaining Amount	Percent Expended	Technical Percent Completed
Year 1						
Year 2						
Year 3						
Year 4						
Year 5						
Total						



RESTORE ACT CENTER OF EXCELLENCE FOR LOUISIANA FINAL TECHNICAL REPORT

Due within 30 days of the close of the award

Project Title:

Principal Investigator:	
Principal Investigator Institution:	
Co-Principal Investigator:	
Co-Principal Investigator Institution:	
Co-Principal Investigator:	
Co-Principal Investigator Institution:	
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Co-Principal Investigator:	
Co-Principal Investigator Institution:	

A. Technical Activities

1) Deliverables on proposed goals and objectives.

#	Proposed goal / objective / activity	Target output / deliverable	Completed (Y/N)	Comments (If No, please describe incomplete deliverable(s) or reason why actual output / deliverable deviated from the proposed)	Topical area (s) and research need(s) addressed (as described in the proposal)
1					
2					
3					
4					

#	Proposed goal / objective / activity	Target output / deliverable	Completed (Y/N)	Comments (If No, please describe incomplete deliverable(s) or reason why actual output / deliverable deviated from the proposed)	Topical area (s) and research need(s) addressed (as described in the proposal)
5					
6					
7					
8					
9					
10					

- 2) Summary of research project.** Similar to an abstract; include sentences that describe the introduction, research questions/hypotheses, methods, results, discussion, and conclusion. 400 words max.

In vulnerable areas across coastal Louisiana, nonstructural interventions are necessary to reduce risk and potential harm to residents and property. While nonstructural mitigation has primarily focused on helping people adapt in place, resident relocation will become increasingly necessary. This project responds to the need for effective programs that help people move away from risky areas in the face of ongoing environmental change and increasing disasters. The primary objective of these recommendations is to assist in implementation of nonstructural mitigation measures in Louisiana's 2017 Comprehensive Master Plan for a Sustainable Coast to shape equitable relocation assistance that helps enable people to preserve their coastal cultures. The project addresses two questions and interrelated sub-questions: Research Question 1: How do residents respond to threats from immediate and long-term environmental change? What factors drive decisions of whether, when and where to relocate? What factors drive decisions to stay in place? Research Question 2: How do public officials and land managers respond to threats from immediate and long-term environmental change? How can local officials facilitate equitable relocation for residents in at risk areas? How can communities develop low risk residential land use that accommodate relocating residents? To answer the first question we conducted interviews with 58 residents who live in Terrebonne Parish's bayou communities or who have relocated within or outside the parish. In answering the second question we interviewed 29 local officials, planners, nonprofit and business leaders and university researchers. We coded and analyzed the transcribed interviews for key themes using Dedoose qualitative analysis software. Additionally we analyzed buyout and relocation programs in the US to identify useful lessons, promising practices and pitfalls to avoid during the relocation process. Results address the conditions associated with long term environmental change, the relationships among land loss and increased flooding and larger economic and population shifts, the diverse and changing circumstances of people living in at-risk communities, and their priorities when participating in initiatives to reduce risk and property damage. Based upon our results we present recommendations to inform relocation policies and programs that move beyond merely acquiring at risk properties and lead to just outcomes for communities and residents on the frontline of dealing with disasters from both extreme weather events and ongoing environmental change. Just and equitable policies and programs must be flexible, inclusive and transparent, and work beyond disaster recovery to ensure long term, inclusive and just adaptation.

- 3) Results and scientific/technical highlights.** In 5-10 bullets: list and describe key outcomes and findings; new methods, technology, and/or advanced tools developed (e.g., models, biomarkers).

- Identified key challenges and promising practices in buyout and relocation initiatives in the US
- Identified how Terrebonne Parish residents have responded to environmental change and numerous factors that shape their decisions to adapt in place or move
- Identified residents' needs and priorities for relocation policy and programs
- Key findings:
 1. Adequate resources are necessary if buyout programs are to: reflect the cost of comparable replacement housing in a safe part of the region; meet the specific needs of communities and residents; recognize traditional land claims and alternative forms of tenure.
 2. Flexible buyout program requirements are needed to ensure that funding is available when people are ready to move.
 3. Buyout and relocation programs must be quick and straightforward.
 4. Buyout and relocation program goals must be transparent and established in advance.
 5. Stakeholders must be engaged early and regularly.
 6. Local and regional authorities must work beyond disaster recovery to long term adaptation, and federal programs must enable this transition.
- Developed a concept model that explains how individuals and households make decisions to relocate or stay in place and the factors that influence those decisions
- Identified public sector planning professionals and community leaders' perspectives on the best approaches for mitigation and relocation assistance
- Developed policy recommendations for equitable relocation programs that move beyond acquiring at risk properties and lead to just outcomes for residents in diverse circumstances
- Identified key principles and strategies to collaborate with frontline communities to design, evaluate, and implement relocation and resettlement strategies
- Developed a decision-making tool to identify relocation sites for residents who participate in buyouts and a regional strategy to develop low-risk residential land uses

4) **Application of research results to the implementation of the Louisiana Coastal Master Plan by Coastal Protection and Restoration Authority.** Please add each targeted output/deliverable under each relevant column. Refer to section 1) *Deliverables on proposed goals and objectives* on page 2 to obtain your output/deliverables and to your notes/comments from the All Hands Meeting where this was discussed in the break out groups.

COASTAL PROTECTION AND RESTORATION AUTHORITY PROGRAM AND PROJECT IMPLEMENTATION						
Planning	Feasibility	Engineering and Design	Operations, Maintenance, and Monitoring	Knowledge Base	Stakeholder Engagement	Communications

COASTAL PROTECTION AND RESTORATION AUTHORITY PROGRAM AND PROJECT IMPLEMENTATION

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5) Peer-reviewed publications. Please provide pdf copies.

Authors	List author names of graduate students/ Postdocs	Title	Journal	DOI (or other identifier)	Published; submitted; in prep; planned?	Date

Authors	List author names of graduate students/ Postdocs	Title	Journal	DOI (or other identifier)	Published; submitted; in prep; planned?	Date

6) Oral presentations and posters. Please provide pdf copies.

Presenter's Name	Co-author's Name	List author names of graduate students/ Postdocs	Title	Oral or poster?	Conference or meeting name	Location & date	Completed; submitted; planned?	Proceedings published (Y/N)

Presenter's Name	Co-author's Name	List author names of graduate students/ Postdocs	Title	Oral or poster?	Conference or meeting name	Location & date	Completed; submitted; planned?	Proceedings published (Y/N)

7) **List other products or deliverables.** These can include white papers, patent applications, workshops, outreach activities/products. Describe and provide pdf copies, as applicable.

8) **Data.** Making data publicly assessible in a timely manner is a key goal of the data management policy of RESTORE Act Center of Excellence. All projects must ensure that data and ISO metadata are collected, archived, digitized, and made available using methods that allow current and future investigators to address new questions as they arise. Per the U.S. Department of the Treasury’s Office of Gulf Coast Restoration Data Accessibility and Management Best Practices¹ *“Data are generally expected to be made publicly available at the time of publication of a peer-reviewed article relying on the data or two years after the data are collected.”* All information products resulting from funded projects must be associated with detailed, machine-readable metadata (ISO format) and shared in a regional or national digital repository or data center (e.g., National Centers for Environmental Information, Gulf of Mexico Research Initiative Information & Data Cooperative, Inter-university Consortium for Political and Social Research, DataOne Dash) for discovery and long-term preservation. Metadata, a brief description of the data, and location of the data (e.g., repository, DOI) must be provided to the LA-COE to enable tracking of all data and information products.

¹ <https://www.fio.usf.edu/documents/flracep/program-documents/Treasury%20RESTORE%20COE%20data%20management%20best%20practices%20Jan%202018.pdf>

#	Description of data	Repository or data center	Date by when data will be made available (2 years after final report)	DOI (or similar) if data are already uploaded
1				
2				
3				
4				
5				
6				
7				
8				

B. PARTICIPANTS AND COLLABORATORS

1) **Project participants and collaborators.** Please list researchers who are not post-doctoral researchers or students but have participated and/or collaborated in this research. This can be both unfunded and funded participants and collaborators on the research project.

First name	Last name	Institution	Project role

2) Mentoring and Training. Please list post-doctoral and graduate and undergraduate student participants (provide pdf copies of thesis/dissertation).

First Name	Last Name	Postdoc/ PhD/ MS/ BS	# Years involved	Institution	Thesis/Dissertation title/ research topic or tasks	Did the student graduate? Y/N	If they graduated, what is their current position?

C. CONTINUING RESEARCH

Please describe the next steps for this work, if applicable (5 bullet points max).

1. Publish peer reviewed journal articles based on this research
2. Develop comparative research project to understand how residents and planners facing slow environmental change and disasters such as drought respond similarly and differently than those living in coastal communities.
3. Use findings from this research to inform two ongoing research projects:

Resilient Receiving Communities. Gulf Research Program, National Academies of Science, Thriving Communities Grant Award. M. Nelson is Co-PI (with M. Farris) on sub award from the Urban Institute. 2019-2022

Climate, culture, movement: Navigating decision-making in a shifting landscape for a resilient United Houma Nation. Gulf Research Program, National Academies of Science, Thriving Communities Grant Award. M. Nelson is Co-PI (with M. Farris) on sub award from Tulane University. 2019-2022

D. CERTIFICATION

Please submit report no later than 30 days following the close of the award to:

Danielle Johnson

Grants and Contracts Manager

AP@thewaterinstitute.org

- Certification:** I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.

Principal Investigator:

Signature: Marla Nelson

Digitally signed by Marla Nelson
Date: 2020.06.01 11:50:01 -05'00'

Name:

Date Signed:

- Approval:** I have evaluated the final report and associated invoice and confirm that the project is finished.

LA-COE Technical Point of Contact:

Signature: Scott A. Hemmerling

Digitally signed by Scott A. Hemmerling
Date: 2020.10.06 10:21:23 -05'00'

Name:

Date Signed:

- Approval:** I have reviewed the final report and approve for payment.

LA-COE Director:

Signature: Melissa M. Baustian

Digitally signed by Melissa M. Baustian
Date: 2020.10.06 15:50:22 -05'00'

Name:

Date Signed: