Sunshine on the Gulf

Transparency & Participation in the RESTORE process



Prepared by Gulf Restoration Network Jordan Macha Editors Scott Eustis, Helen Rose Patterson, Matt Rota, and Cynthia Sarthou

Supporting Organizations

Action Communication and Education Reform, Inc. Alabama Chapter of the Sierra Club Alabama Coastal Heritage Trust Alabama Rivers Alliance Alliance Institute Apalachicola Riverkeeper Asian Americans for Change Atchafalaya Basinkeeper Pelican Coast Conservancy **Bayou Grace Community Services Boat People SOS Brighter Futures Foundation** Florida Clean Water Network Coastal Women for Change Conservation Alabama Delta Chapter Louisiana of the Sierra Club Earth Ethics Galveston Baykeeper Global Green New Orleans Gulf Islands Conservancy Hijra House Louisiana Environmental Action Network Lower Mississippi Riverkeeper Lowlander Center Mercy Housing & Human Development Mississippi Center for Justice Mobile Baykeeper Mobile Bay Group of the Sierra Club Mobile Environmental Justice Action Coalition Mississippi Coast Chapter of the Sierra Club NAACP, Biloxi Branch On Wings of Care Operation HomeCare, Inc. Panhandle Watershed Alliance Public Laboratory for Open Technology and Science San Antonio Bay Waterkeeper Slow Food NOLA SouthWings **Steps Coalition** Turkey Creek Community Initiatives Ventura Group, LLC



Courtesy of Paul Kenjerski



Gulf Restoration Network

The Gulf Restoration Network, founded in 1994, is committed to uniting and empowering people to protect and restore the natural resources of the Gulf Region. The GRN's vision is that the Gulf of Mexico will continue to be a natural, economic, and recreational resource that is central to the culture and heritage of five states and three nations. The people of the region will be stewards of this vital but imperiled treasure, and they will assume the responsibility of returning the Gulf to its previous splendor.

This publication has been made possible in part by funding from the Walton Family Foundation and the Campbell Foundation.

Published by: Gulf Restoration Network

Copyright: © 2015

Reproduction of this publication for educational or other noncommercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder

Available From: Gulf Restoration Network 541 Julia Street, Suite 300 New Orleans, Louisiana United States 70130 Tel 1.504.525.1528 info@healthygulf.org www.healthygulf.org

ACKNOWLEDGEMENTS

A wide range of experts contributed their extensive knowledge and substantial time to guide the development of this document and several reviewers were invited to provide input and advice. The authors are deeply grateful for their help.

The people and stories featured in the *Sunshine on the Gulf* Mapping Project were brought together through stories shared in March and April 2014 via visioning salons hosted across the Gulf by the <u>Gulf Future Coalition</u>.[†] Over 200 participants came together and told their stories of resiliency and fortitude in the wake of the BP oil disaster. We thank them for granting us permission to share their stories.

Sunshine on the Gulf Map Content and Design:

Matthew Phillips; Scott Eustis (Gulf Restoration Network); Kate Grudz; Ada McMahon (Bridge the Gulf); Teresa Chan and David Roche (Environmental Law Institute); Ocean Conservancy, Gulf Program Team; and, Jayeesha Dutta (Gulf Future Coalition).

Comments and advice on drafts were received by the following:

Michelle Erenberg (Ocean Conservancy, Gulf Program); Rosa Herrin and Jeffrey Buchanan (Oxfam America); Lily Elkins; and, Karl Cyffka.



FOREWORD

On April 20, 2010, an explosion on the BP *Deepwater Horizon* oil rig killed eleven men and led to the worst environmental disaster in the nation's history. For three months, the well spewed crude oil into the Gulf of Mexico, killing marine life, shutting down a productive fishing industry and bringing economic uncertainty to vulnerable communities across the coast. The BP oil disaster is a tragedy that caused environmental destruction of a unique and fragile ecosystem and endangered the communities that depend on this environment for their lives and livelihood. As devastating as this tragedy has been, it is only one chapter in a decades-long story of environmental neglect and poor decision-making that has created a precarious future for wildlife and humans who call the Gulf home.

Over the last five years, steps have been taken to not only remedy the impacts of the oil disaster but to address the long-term degradation this region has suffered. This report builds on the report, <u>Sunshine on the Gulf: The Case for Transparency in Restoration Project Selection</u>,ⁱ released in November 2011, which investigated proposals for funding under the Natural Resource Damage Assessment Early Restoration Framework Agreement.ⁱⁱ In that report, community groups across the Gulf established robust criteria for restoration that went beyond those outlined in the framework agreementⁱⁱⁱ to include criteria aimed at achieving sustainable coastal and marine environmental restoration and community resiliency. Using this expanded criteria, community members reviewed proposals and made recommendations for funding projects that would address the short and long-term impacts, create public health safeguards, employ local people to implement the projects, ensure opportunities for public engagement and include monitoring, evaluation and accountability.

Since 2011, new opportunities have arisen to use fines and penalties from the BP oil disaster to protect and restore the Gulf Coast ecosystem and economy. Unfortunately, as with the NRDA Early Restoration process, the stated commitment of decision-makers to include the public does not match the reality. The opportunities for the public to inform and participate in restoration decisions across the state and federal processes are inadequate and inequitable. Understanding the unique and overlooked expertise that exists in our coastal communities, this new report creates a criteria framework for evaluating and selecting projects that will truly address the myriad of challenges facing the Gulf. As decision-makers look at the universe of proposals for restoration under all components of the RESTORE Act, it is important that their attention is focused on short and long-term solutions for restoring both coastal and marine environments as well as creating resilience in coastal communities. We have an unprecedented opportunity to comprehensively address the needs of the Gulf and we cannot risk getting this wrong.

http://bit.ly/Sunshine_1

ⁱⁱ Early Restoration Framework Agreement (April, 2011). Natural Resources Damage Assessment Trustees.

^{III} 15 C.F.R. §§ 990 et seq.

CONTENTS

SUPPORTING ORGANIZATIONS ACKNOWLEDGEMENTS FOREWORD CONTENTS

CHAPTER 1	
INTRODUCTION AND BACKGROUND	
COASTAL ECOSYSTEM	1
MARINE ECOSYSTEM	1
• THE RESTORE ACT	2
Council Funded Priorities List	3
Purpose of this Report	4
CHAPTER 2	
OUR SOLUTION: CRITERIA FOR THE FUTURE OF THE GULF	
CRITERIA THAT ACCOUNTS OF THE ENTIRE ECOSYSTEM	4
I. PROTECTING AND RESTORING THE GULF ENVIRONMENT	4
II. COMMUNITY RESILIENCY	6
III. CREATING JUSTICE FOR THE GULF	6
IV. SOCIAL VULNERABILITY	7
V. LOCAL HIRING	8
VI. PRESERVING CULTURES	10
VII. CLIMATE CHANGE ADAPTATION & STORM PROTECTION	10
VIII. PUBLIC HEALTH	11
IX. THE ROLE OF SCIENCE	12
CHAPTER 3	
PUBLIC PARTICIPATION AND TRANSPARENCY	15
CHAPTER 4	
PROJECT EXAMPLES: GULF COAST ECOSYSTEM RESTORATION COUNCIL PROJECT PROPOSALS	17
THE GOOD	17
NEED IMPROVEMENT	19
CAUTIONARY TALE	20

CHAPTER 5 Conclusion	21
REFERENCES	22
APPENDIX 1: SUNSHINE ON THE GULF MAP: PEOPLE & PROJECTS	24
APPENDIX 2: SUNSHINE ON MISSISSIPPI	25
APPENDIX 3: JOINT LETTER TO RESTORATION COUNCIL	27

INTRODUCTION AND BACKGROUND

Encompassing nearly 600,000 square miles, the Gulf of Mexico is a diverse and robust ecosystem that is vital to the environmental, economic and cultural health of the United States. For centuries, the Gulf Coast has been instrumental in providing valuable resources to the nation. The Gulf Coast houses a unique coastal and marine ecosystem that includes our coastal wetlands, oyster reefs, barrier islands, and sea turtle and whale habitats. It is because of this value that the opportunity to invest in restoring and protecting the natural resources of the Gulf Coast was given priority in the passage of the RESTORE Act. It is imperative that we not squander this unique opportunity by failing to invest in environmental restoration - it is unlikely that an opportunity of such significance will be presented again.

Coastal Ecosystem

Gulf habitats sustain diverse wildlife, absorb floodwater from storms and hurricanes, and filter the polluted water from the Mississippi River. This diverse habitat supports seafood industries that generate \$2.8 billion per year in revenue for the Gulf. The Gulf States, particularly those with wetlands and barrier islands, provide invaluable natural infrastructure to mitigate storms, improve water quality, attract tourism, and provide critical habitat for commercially and recreationally important species vital to coastal livelihoods. Wetlands also have inherent value as a natural habitat and are valued in many cultures in the region. These wetlands are under constant threat: The Gulf region suffers the most coastal land loss of any region in the United States. Louisiana alone loses a football field of wetland every 45 minutes.¹ The Gulf region's barrier islands, bays,

rivers, and estuaries are also threatened. The Mississippi Sound, Mobile Bay, Apalachicola River basin, and the Matagorda Bay are each threatened by coastal development and the loss of natural habitat. Environmental losses and increased risks from rising sea level, land subsidence, and hurricane damage could cost the Gulf Coast states a total of \$350 billion in losses by 2030.²

Marine Ecosystem

The Gulf's marine ecosystem is highly productive and biologically diverse both near-shore and offshore. This productivity and diversity supports a robust tourism industry bringing millions to the Gulf



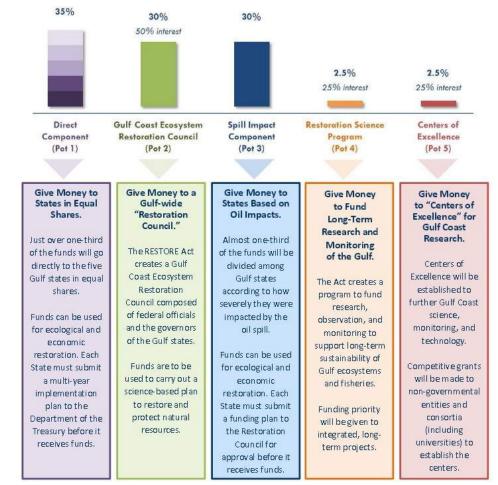
Courtesy of Tony Flanagan

each year to for recreational reef fishing and wildlife viewing. The blue water of the Gulf also hosts spawning Atlantic Bluefin tuna that migrate each year to these warm waters to lay their eggs. For all of the treasures we know to exist in the Gulf's waters, there is still much that is unknown. As with the coast, the offshore environment has struggled with persistent challenges such as ocean acidification, unsustainable fisheries, and the introduction of non-native species. Although much is still unknown about the impacts both short and long-term of the BP oil disaster on the marine environment, research indicates troubling impacts from the oil and response efforts to sea turtles³, marine mammals⁴, and deep-water corals⁵. These critical gaps in our understanding of the habitats and species that spend some part, if not all, of their lives in the Gulf's marine environment and the impact of the BP disaster upon those resources create a unique challenge for identifying restoration opportunities.

The **RESTORE** Act

In 2012, President Obama signed into law the Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (known as the "RESTORE Act")⁶, which directs 80% of any civil penalties paid under the Clean Water Act from the *Deepwater Horizon* BP Oil Disaster to Gulf restoration. The Gulf States and the <u>Gulf Coast Ecosystem Restoration Council</u>,⁷ established by the act, will oversee the expenditure of these funds, which will support a variety of projects aimed at restoring the Gulf's environment and economy.⁸

The penalties are calculated based on a complicated formula based on either the duration of the spill (\$37,500–140,000 per day) or the amount of oil discharged (\$1,100-4,300 per barrel. The actual amount of penalties will depend on three factors decided by the federal court: whether the court opts to apply a per-barrel or per-day penalty, the court's factual findings about the spill, whether the court finds the responsible parties acted with gross negligence or willful misconduct. In the last year, the judge has ruled on two of the three factors finding: BP acted with gross negligence⁹, and that 3.19 million barrels of oil gushed into the Gulf of Mexico and was not "recovered" by BP.¹⁰ ¹¹ In the final phase of the trial the judge will determine whether BP will pay the maximum fine of \$13.7 billion for their Clean Water Act penalties. Eighty percent of these fines will be distributed through the RESTORE Act.ⁱ



As established by the RESTORE Act, 80% of the funds provided by CWA fines and penalties will be distributed by a complicated formula directing certain percentages to local governments and states.

Courtesy of Environmental Law institute

ⁱ BP has appealed both of the court's finding of gross negligence and amount of oil spilled into the Gulf. Additionally, the U.S. government is appealing the federal court's ruling of 3.19 million barrels, based on their estimation of 4.09 million barrels oil discharged.

The statute also establishes the eligible activities that can be funded, including environmental restoration, economic development, and infrastructure. RESTORE mandates a public review and comment period before a restoration spending plan can be approved for funding. Only in the last year, have states or local governments made progress on developing plans for these funds. To date, only a handful of Florida counties have solicited any public input into the development of a restoration plan.

The RESTORE Act also created the <u>Gulf Coast Ecosystem Restoration Council</u> ("Council"), a region-wide body with representatives from the five Gulf States and relevant federal agencies. In August 2013, the Council unanimously approved the <u>Initial Comprehensive Plan: Restoring the Gulf Coast's Ecosystem and Economy</u> and accompanying <u>Final Programmatic Environmental Impact Statement</u>. ^{III, 12, 13} RESTORE Act funds are intended to fund implementation of the Plan. The Council will also play an important role in ensuring consistency between the Comprehensive Plan and the State Expenditure Plans¹⁴ to be funded with CWA fines and penalties.

Council Funded Priorities List

Under the RESTORE Act, the Gulf Coast Ecosystem Restoration Council is responsible for overseeing expenditure of the funds allocated under the Council-Selected Restoration Component (commonly known as Pot/Bucket 2). Under this component, the Council is authorized to select and fund projects and programs that restore the natural resources, water quality, fisheries, marine and wildlife habitats, beaches, and coastal wetlands within the Gulf region. Each state and federal member of the Council is responsible for proposing restoration projects and programs for consideration by the Council as a whole. These members may solicit input from the public and will decide which proposals are ultimately submitted under this component; however, the Council can only consider proposals directly from the individual Council members.¹⁵

In August 2014, approximately \$150-180 million from a settlement with Transocean was made available to fund projects and programs under the Council-Selected Restoration Component. The Council announced that members could submit up to five projects or programs, or sponsor additional projects for regional federally recognized tribes, to be considered for a Funded Priorities List. The Funded Priorities List (FPL) is the mechanism the Council is utilizing to invest in specific actions, projects and programs to achieve comprehensive results to restore the overall health of the Gulf Coast region. After reviewing project and program submissions from individual members, the Council will develop a proposed suite of prioritized projects for the public to review. After review and final approval by the Council, those projects will then move forward with funding and implementation.¹⁶

As restoration moves from planning to implementation, there will be a myriad of proposals for projects on which to spend restoration funds. The ultimate success of the chosen projects—which must be measured by the health and resilience of the ecosystem—rests on selection, implementation and evaluation of a series of integrated projects, consistent with a Gulf-wide plan and rigorous application of criteria, to ensure that only the best and most appropriate projects are funded.

ⁱⁱ The RESTORE Act requires the Restoration Council to incorporate the Gulf Coast Ecosystem Restoration Task Force's Restoration Strategy in its comprehensive plan for Gulf ecosystem restoration. Created by Executive Order of the President, the Task Force was formed to build on the ongoing spill response and natural resource damage assessment effort, as well as achieve overall recovery for the Gulf. The Task Force was comprised of federal and state leaders, informed by stakeholders in the region. President Obama appointed former EPA Administrator Lisa P. Jackson, a New Orleans native, to chair the Task Force. The Task Force completed their work in December 2012.

Purpose of this Report

Gulf residents and representatives from conservation, community and civil rights organizations are concerned that decision makers will miss out on this unprecedented opportunity to invest significant financial resources into protecting and restoring the Gulf Coast ecosystem, communities and economy. This report will describe the need for evaluating projects based on clearly defined criteria that consider a variety of ecosystem and community benefits and takes a gulf-wide, comprehensive approach. The highlighted projects listed in this report are not intended to be seen as the priority, but rather as examples of projects that address multiple criteria and aiming to achieve comprehensive restoration. In the absence of meaningful public participation in the funding and selection process, this report encourages decision-makers to use the recommended criteria to guide project selection and ensure the impact of economic and ecological restoration is community supported, sensible, and sustainable.

OUR SOLUTION: CRITERIA FOR THE FUTURE OF THE GULF

Criteria that Accounts for the Entire Gulf Ecosystem

The priorities and criteria identified in this report to achieve meaningful and widespread restoration under the RESTORE process have been developed and advanced collaboratively among environmental experts and Gulf-based stakeholders to supplement the Department of Treasury and Gulf Coast Ecosystem Restoration Council project, program and activity requirements. These criteria points provide a framework for systematic analysis of whether implementation of the proposed projects will meet the continued challenges facing the communities and habitats across the Gulf.

I. Protecting and Restoring the Gulf Environment

The BP oil disaster is a tragedy that caused environmental destruction of a unique and fragile ecosystem, as well as endangering the communities that depend on this environment for their lives and livelihood. However, as devastating as this tragedy has been, it is only one chapter in a decades long story of environmental neglect and poor decision-making that has created a precarious future for wildlife and humans who call the Gulf home.

To those who live or have spent time on the Gulf Coast, it comes as no surprise that the coastal and marine ecosystems are intrinsically linked. Due to this interconnectedness, the Gulf of Mexico is a diverse and vibrant ecosystem that provides vital resources to all that dwell in and along the Gulf's waters. However, because of environmental stressors on both coastal and marine resources, it is increasingly important to take an ecologically and geographically balanced approach to restoration.



Courtesy of Jim Denham, Galveston Bay

Priority Restoration Objectives:

- Restore, protect and sustain the coastal and marine habitats by:
 - Protecting and enhancing sea turtle, marine mammal and bird habitats;
 - o Restoring coastal and marine benthic habitats; and
 - Restoring and maintaining oyster reefs and fisheries.
- Restore, protect and sustain the Gulf Coast by:
 - Rebuilding the natural systems and habitats in coastal areas by restoring marsh and backfilling canals with compatible source material;
 - Improving water quality across the region by decreasing nutrient loads and urban runoff in watersheds that flow into the Gulf of Mexico, including the reduction of the "Dead Zone" ⁱ; and
 - Reestablish freshwater and sediment flows to encourage natural recovery of coastal marshes and estuaries.
 - Support community recovery and resiliency by:
 - Building a restoration economy that provides training and employment for local workforce and supports local, small and minority-owned businesses;
 - Invest in adaptation and resilience strategies to prepare communities for climate-change impacts, such as sea-level rise and increased flooding;
 - Promote initiatives for the long-term health and recovery of disenfranchised and subsistence-based communities; and
 - Enhance, repair and establish beneficial public access areas and amenities.



Courtesy of John Krzesinski

II. Community Resiliency

Gulf Coast communities face a myriad of threats, including the highest and fastest growing rates of land loss exacerbated by sea level rise, one of the highest rates of tropical storms, and recently some of the most powerful hurricanes ever recorded. Storms are anticipated to grow in number and intensity in the coming years, and, for all these reasons and more, it is critical to invest in actions that will create more resilience in communities on the front lines of climate change. Community resilience includes not only the ability to prepare for, respond to and recover from natural or man-made disasters, but also reduction in risks these communities face. Resources must be invested in resilience strategies across the Gulf Coast to reduce the economic impact of disasters and provide communities with more protection.



III. Creating Justice for the Gulf

Creating justice demands that that those who have historically been excluded from environmental decisionmaking, traditionally persons of color, low-income and tribal communities, have the same access to environmental decision-makers, input into the processes and ability to make meaningful contributions to decisions that will impact their lives. In approving restoration projects, plans and programs, federal agencies must comply with Executive Order 12898¹⁷ by integrating environmental justice considerations into development, implementation, and evaluation of restoration actions. According to the government's own definition, Environmental Justice calls for fair treatment and meaningful involvement of all people with respect to development, implementation and enforcement of environmental laws, regulations and policies. While some federal agencies and states have shown a willingness to reach out to communities plagued by environmental injustices, overall, there has been a failure to ensure those communities have access to information and opportunities needed for meaningful involvement. These hardest hit communities have been left out of restoration decision-making. Integrating environmental justice into restoration must go beyond the lowest threshold of compliance to ensure that restoration funds are invested in those communities most impacted and those investments are creating a more resilient and just region.

IV. Social Vulnerability

Many of our coastal communities are challenged by high rates of economic and social vulnerability due to persistent poverty, poor health care, unemployment, and fragile infrastructure and utilities. Additionally, many of the Gulf's residents live and work in high hazard areas. For generations, laws, institutional policies and social practices have intersected with these social realities to create critical gaps, barriers to and inequities in opportunity for low income communities and communities of color. Vulnerability is associated with economic, social, cultural, and/or political conditions that can limit the available resources and response capacity of a community. Additional factors, such as race, ethnicity, gender, community cohesiveness, and special needs populations, also contribute to a community's access to resources needed to deal with natural and man-made hazards, such as land loss, storms, poor water quality, industrial pollution and oil spill.¹⁸ In just the last decade, the Gulf coast has been hit with a series of economically and socially devastating events, including Hurricanes Katrina, Rita, Gustav, Ike, Isaac and the BP oil disaster. When these disasters strike, they tend to most severely impact the portions of the population that have the least ability to prepare for, respond to, or recover from the effects.



Courtesy of Gulf Restoration Network, 2012

Rapid land loss, coastal erosion, subsidence, and sea-level rise due to climate change are all working against our most vulnerable communities. Many restoration projects that aim to restore and conserve coastal habitat and barrier islands, reduce shoreline erosion, and improve storm-water management, if thoughtfully planned, can meet some of the needs of underserved communities. Understanding the value that ecosystem restoration projects serve in buffering communities from storm surge or reducing flood risks provides us with a critical perspective on the interconnectedness of communities to their environment. A key objective

of a comprehensive restoration plan must include addressing vulnerability by using the Social Vulnerability Index,ⁱⁱⁱ and other social science data to target restoration and protection efforts in the most vulnerable communities. Community leaders and social science experts have already identified several factors as critical

to ensuring that social science data, especially those pertaining to vulnerable populations, be incorporated into restoration strategies. Engaging individual, the frontline communities in design and implementation of these strategies is critical to this process. While there is no one-size-fits all tool or implementation strategy to build resilience among vulnerable and disadvantaged members of a community, a successful, comprehensive restoration strategy must include meaningful input from impacted communities with a clear goal of achieving environmental and social justice. In doing so, we will enable Gulf communities to become more resilient.



Courtesy of Gulf Restoration Network, 2012

ⁱⁱⁱThe Social Vulnerability Index (SOVI) measures the social vulnerability of U.S. counties to environmental hazards. The index is a comparative metric that helps users examine differences in social vulnerability among counties. <u>http://www.csc.noaa.gov/digitalcoast/data/sovi</u>

V. Local Hiring: Supporting Local Economies Through Workforce Development, Local Hiring, and Local Contracting

The unprecedented amount of funds that will be invested in the Gulf region over the several decades provides us with a unique opportunity to create and sustain an emerging restoration economy. As sea-level rise threatens more coastal communities throughout the world, innovation and best practices for restoration and protection will be highly valued. The investments made in the Gulf Coast should position our local firms and workers to lead the world in expertise and skills that could provide access to new markets and create economic opportunities for our communities. We know that ecosystem restoration is a job creator. In fact, NOAA research has found ecosystem restoration investments yield roughly 17.1 jobs per a million invested, with some techniques producing as many as 33 jobs per million. One way to increase community resilience is ensuring that local firms can compete in the bidding process and that firms commit to hiring local workers, especially those displaced and dislocated, in restoration contracts.

It is vital that economic and environmental goals are not presented in opposition. Instead, we encourage strategies to target good paying jobs in restoration towards socially and economically vulnerable populations. Many people who live and work on the coast are well positioned for jobs in a restoration economy because of their local knowledge of the environment and the skills developed from working in industries such as oil and gas, maritime activities, and fishing. As firms hire thousands of dredge operators, civil engineers, biologists, landscape architects, nursery workers, boat captains and builders, and monitors, Gulf Coast residents will be

with tremendous provided а opportunity to access new livelihood opportunities. Many jobs involved in the restoration field also pay above median wage levels and require less than two years of training.¹⁹ However, this will not happen unless we make investments in our local workforce by providing training and support needed, including the development public-private partnerships, of community college programs, workforce apprenticeships, intermediaries, and Service Corps.

Innovative approaches are also needed to ensure that local workers can access these new employment opportunities. In Louisiana and Mississippi, state laws, the Louisiana First



Courtesy of Jordan Macha

Hiring Act and the Mississippi Jobs first Act, have been enacted to give local workers a first shot at jobs involved in disaster recovery and coastal restoration and protection. New partnerships have been created between contractors and local workforce investment agencies to make critical linkages between local workers and employers needs. To address many of the barriers that impoverished communities face in employment, social service agencies and community-based organizations should be engaged to assist hard to employ individuals to acquire soft skills, and obtain re-entry assistance.

Recommendations:

- Invest in workforce training and support, including public-private partnerships, community college programs, apprenticeships, workforce intermediaries, and Service Corps.
- Work with employers and workforce agencies to identify in-demand restoration careers, to develop hand-on curriculum with industry-approved credentials and pathways to living wage jobs, and leverage additional sources of funding for preparing workers in restoration
- Provide incentives to coastal restoration contractors and grantees that hire local and/or disadvantaged workers and partner with local worker training institutions to prepare local workers. Specifically, the Gulf Coast Ecosystem Restoration Council should act on its statutory duty to develop common contracting terms to promote local hiring by requiring contractors and grantees to include plans for local outreach, training partnerships and hiring in their bid or proposal documents for Council-funded projects.²⁰ In order to promote the use of contractors and grantees working to build new introductions to restoration jobs for local workers, when possible under state law, the Council should require scoring that give these plan a significant weight in determining winning bidders and grantees.
- Provide workforce training in multiple languages so that non-English speaking residents are not left out of new economic opportunities.
- Create opportunities for low-income, minority, women, and limited English proficient (LEP) individuals through partnerships and standalone grants with community-based organizations.
- Hire local residents and fisher folk to participate in restoration and community-based monitoring of restoration projects.
- Where applicable require firms to comply with local, state^{21,22} and federal labor laws that commit to hiring local workers.
- Avoid unsafe and unfair labor practices by monitoring federal and state labor and contracting in implementing restoration plans and programs.
- Emphasize partnerships between the private sector and community nonprofits to capitalize on innovations, create new economic opportunities, and engage the public in restoration activities.
- Focus investments in community economic development and strategies that address the need to

transition to a cleaner energy economy.



Courtesy of Gulf Restoration Network

VI. Preserving Cultures: Incorporating Cultural Value in Restoration Management

The Gulf Coast is a region with a rich cultural history. People originally settled in this region partly because of the productivity of its ecology and natural resources. Today, the cultural diversity of the region is reflected in the indigenous tribes that have lived on the land for centuries, the historic African-American and French-Cajun communities, as well as newer Asian-American and Latino residents, who have contributed to the unique culture of the region. Unfortunately, as coastal land loss continues at a rapid pace, these communities and their cultures are also eroding. In the last few decades, communities have fractured as neighbors and family members have moved out of the path of recurring disasters. Without action, many more are faced with displacement. Despite this looming threat, coastal residents are hanging on because the Gulf is a critical part of their identity, their culture, and their way of life.

Due to the interconnectedness of culture, community, and environment in the Gulf region, it is important for decision-makers to consider the cultural values of and practices of the local people when making final decisions regarding restoration initatives. Traditional Ecological Knowledge (TEK) is the knowledge, wisdom, traditions, and practices of indigenous peoples or local communities. This style of knowledge is regularly expressed by local communities across the Gulf, such as a accepted understanding how to build their homes in areas prone to natural flooding or traditional fishing practices and trends. As the restoration process moves forward, imagintative practices can draw on TEK and could provide a greater understanding of the biological and cultural value of specific site; potential ecosystem benefits; and, critically, a greater understanding of traditional cultural practices that can help maintain a healthy ecosystem.²³ This type of knowledge could help decision-makers narrow down restoration priorities when all other criteria points are equal.

Recommendations:

- Integrate cultural knowledge criteria into program proposals to ensure cultural sensitivity with ecosystem recovery.
 - For example: community participation in restoration and monitoring, specific community input on cultural value of specific regions or areas, etc.
- Encourage ecologically sustainable cultural practices in restoration, particularly those that have evolved within the protected area, by supporting cultural customs, languages, and traditional knowledge of native people of the area.

VII. Climate Change Adaptation and Storm Protection

The Gulf Coast is one of the most vulnerable regions in the world to the impacts of climate change. Economic losses along the coasts of Louisiana, Texas, Mississippi, and Alabama caused by a rising sea level, land subsidence, and hurricane damage could total \$350 billion by 2030, according to America's Wetland Foundation.²⁴ All aspects of our economy are at risk from climate change. The loss of wetlands due to climate change makes employment based on restoring wetlands and estuaries less sustainable. Additionally, it may be impossible to protect some coastal residents where they currently live. This information should be clearly and honestly presented to coastal residents and others so that fully informed decisions can be made.²⁵

Because climate change will threaten coastal communities from multiple angles, coastal management strategies must begin focusing on community adaptability rather than more conventional large-scale infrastructure such as armoring or hardening. Because it is likely that coastal communities will rapidly face environmental change, the focus should not be on large scale projects whose goals will take years, if not decades, to achieve. Rather, action focused on planned community resilience must begin immediately.

Although long-range comprehensive planning often faces opposition, including zoning and land use planning, it is important that communities take a regional, long-term approach to reductions in losses from storm surge and flood events needed to protect their heritage and the habitat of their region.²⁶ Investing in safer and more sustainable communities will create more economic certainty, reduce risks, and send a message to industries and businesses that the coast will be viable for the future.

Recommendations:

- Improving disaster response communications, coordination, and evacuation procedures by engaging in preparedness outreach campaigns for residents.
- Establish Community Technology Centers (CTC) in vulnerable and high-risk coastal communities.^{iv}
- Establish Community Resilience and Recovery Trust Funds that Tribal Councils, community, and faithbased organizations can access to quickly respond to the needs of their communities builds resilience and gives communities a sense of self-reliance.
- Invest in resilience strategies such as flood proofing and residential elevations that include lifts.
- Provide financial support to communities who have developed plans and acquired consensus to relocate as a community out of high hazard areas^v.
- Invest in voluntary acquisition programs that pay fair prices to residents who need to relocate out of high hazard areas to ensure their ability to afford to buy another property.
- Invest in green infrastructure that will manage and capture storm water to reduce pressure on drainage systems

VIII. Public Health: Creating Public Health Safeguards

The economic impacts of the BP oil disaster sent shockwaves through already vulnerable coastal communities. Many Gulf residents have reported a rise in alcohol and drug abuse, domestic violence and mental health issues. Much of this stems from the uncertainty about the future of their landscape and communities. Engaging people in the process of restoration will create a sense of ownership and a feeling that these communities are in control of their destiny.

Even before the oil disaster coastal residents have faced public health challenges presented by the presence of multiple toxic chemicals and pollutants in the Gulf coastal and marine environments. Historically, the people on the Gulf Coast, particularly our most vulnerable, have not been empowered to prevent polluting industries from setting up shop in their communities and dumping pollution into the air and water. The BP oil disaster is simply the most recent, and, although it has been five years, coastal residents are still suffering from health problems consistent with exposure to oil and dispersants. While the funding opportunities discussed in this report do not offer specific measures for addressing those health concerns, significant investments in restoration projects that aim to improve water quality, monitor seafood safety, and reduce toxic discharges will have significant, long-term health benefits for our communities. Healthy management of natural resources contributes to the health of the society dependent on those resources.

^{iv} As more government agencies are using technology to communicate risks and recovery resources to communities before, during and after events, communities who lack access to these technologies are left in the dark, making them more vulnerable. CTCs will bring technology access and education to underserved communities by providing public access to computers and the Internet (Stewart, et al., 2008).

^v The Tribal leadership of the Biloxi-Chitimacha-Choctow has been working on a plan to leave its home on the Isle de Jean Charles in South Terrebonne Parish to seek a new home for the community on higher ground following repetitive flooding.

IX. The Role of Science

The Council's ultimate goal under the RESTORE Act is to implement landscape-level restoration programs to ensure individual activities contribute to a region-wide restoration effort to restore, protect and revitalize the Gulf. This approach will support coastal communities by increasing the economic, environmental, public health and safety benefits they derive from the ecosystem.

Restoring Natural Systems: Ecosystem Scale Landscape Planning

Achieving the goal of restoring entire natural systems in the Gulf requires some level of overarching understanding of the connectivity between terrestrial, coastal and marine systems. Landscape-level restoration is defined as a collection of activities across terrestrial, freshwater, near-shore and marine ecosystems organized such that they accomplish goals at the larger region or ecosystem scale. Because natural ecosystem functions have land, water and air components, recovery plans should reflect the connectivity of these ecosystems. Modeling the connectivity in the Gulf's dynamic system of people, processes, natural habitats and species would provide an essential tool for guiding a comprehensive approach to developing restoration projects that integrate into a larger strategy and become more than the sum of their parts. Large-scale restoration programs, including the Comprehensive Everglades Restoration Plan²⁷, Chesapeake Bay Watershed²⁸, and the Puget Sound Nearshore Partnership²⁹ have used large-scale conceptual ecosystem models to construct comprehensive restoration strategies in the context of the drivers, stressors, ecological effects of stressors and attributes of the interconnected coastal and marine systems.

Such planning would allow the Council to consider the effect an activity, program, plan or project will have on physical processes, wildlife populations and local communities that make up the natural systems of the Gulf. This includes the location of and interaction with other habitats, the accessibility of those habitats to different species that depend on them and the natural (water flow, sediment accumulation, etc.) and human-altered processes (dams, dredges, fishing, etc.) that impact them. It is also important to consider the geographic and ecological relationship of projects when modeling restoration approaches and their ecosystem implications. Projects in close proximity can be synergistic or work at cross-purposes depending on whether one set of actions supports or interferes with the actions of another project.

We recognize that development of a large-scale planning approach will require significant time. In the short term, development of such a planning approach should not impair the Council's ability to move forward with projects that address urgent needs or smaller projects that contribute to restoration. The larger planning effort would incorporate and consider the effect of funded projects in the context of a large-scale restoration concept. Using a conceptual model as the basis for carrying out comprehensive restoration will ultimately help ensure strategies and projects are effective. Ecosystem models of key sub-regions (like the Mississippi River Delta or Everglades watershed) are already complete and could be used to inform initial funding strategies.

Integrating conceptual models into short and long-term restoration strategies can provide a more clear and transparent way to achieve comprehensive restoration goals. When the Gulf's natural systems can generate and maintain ecosystem functions, they will in turn generate desirable outcomes like quality habitat, fish and oyster production, clean beaches and clean water. Modeling the dynamics of the Gulf ecosystem will provide both an invaluable planning tool for comprehensive ecosystem restoration and a scientific framework for applying adaptive management that can assess a system or sub-region's response to restoration efforts and inform future decisions.

Restoration planning should allow for flexibility to do smaller scale projects while a larger planning effort is underway. However, consideration of the effect of those projects in the context of a large-scale restoration concept will ensure those projects will make a greater contribution because together they add up to be larger than the sum of their parts.

Citizen Science

Recently, the White House Office of Science and Technology Policy has recognized the value of citizen science in assisting federal agencies in their work³⁰; citizen science can better ensure that the restoration program remains transparent and accountable to the citizens most affected by the BP disaster.

The scope of restoration needed to restore Gulf Coast communities is greater than RESTORE Act resources, and there is a need to integrate engagement with planning and monitoring. For example, many restoration projects in Louisiana, including the West Bay Diversion and barrier islands made from the "Berms to Barrier" debate, have already been improved by communication of local or traditional knowledge to resource managers.

Citizen science boosts environmental awareness and advocacy more than previously thought, which can lead to broader public support for conservation and restoration efforts.

What I learned from this study was how important it is to engage larger segments of the population in research. We often assume there's a dividing line between those who do science and those who are recipients of science, but there's a lot more room for interaction between the two.³¹ Dr. Weinthal, Lee Hill Snowdon Professor of Environmental Policy, Duke University

As stated in the 2013 Open Government National Action Plan³²:

Citizen science and crowdsourcing are powerful tools that can help Federal agencies:

- Advance and accelerate scientific research through group discovery and co-creation of knowledge. For instance, engaging the public in data collection can provide information at resolutions that would be difficult for Federal agencies to obtain due to time, geographic, or resource constraints.
- Increase science literacy and provide students with skills needed to excel in science, technology, engineering, and math (STEM).
 Volunteers in citizen science or crowdsourcing projects gain hands-on experience doing real science, and take that learning outside of the classroom setting.
- Improve delivery of government services with significantly lower resource investments.
- Connect citizens to the missions of Federal agencies by promoting a spirit of open government and volunteerism.



Public Laboratory for Open Technology and Science

As we face global demand increases for energy and consumer products, and their resultant disproportionate health and impacts environment in low-income communities, the Public Laboratory for Open Technology and Science empowers residents challenge government and to industry environmental health data through collaborative development of inexpensive, open-source monitoring tools and techniques. www.publiclab.org

There are published methods on integrating engagement and planning using GIS. For one method, developed on the Gulf Coast, the authors have elaborated on the utility of their method to the engagement process:

The current model of engagement via public meetings can generate extensive transcripts of public opinion, but it is limited in terms of scope and stakeholder representation. The information obtained with this model is also difficult to incorporate into the scientific toolbox used to make decisions about restoration. By mapping [traditional ecological knowledge] we translated this knowledge into a usable data set layer that incorporates quality control and can be confidently used in combination with existing data sets.³³

For example, community groups in Louisiana have participated in collecting the kinds of data necessary to evaluate complicated restoration projects, such as the West Bay Diversion.³⁴ Low-cost, engaging monitoring techniques like the ones developed by the Public Lab Community³⁵ can assist interested agencies and stakeholders in fulfilling key monitoring and engagement objectives of projects and programs.

In addition to selecting the best projects to implement, decision-makers must also be able to evaluate the performance of restoration measures, understand whether these measures are improving ecosystem health and, based on this information, and adjust restoration approaches as needed. All restoration projects, plans and programs must have a robust monitoring program that will give implementing agencies or organizations the ability to gauge the success of the project. Citizen monitoring can be used to fill this gap. By monitoring for the outcomes of restoration we will be able to understand if changes or adaptations of restoration activities will be necessary. Adaptive management of restoration will be essential in this changing Gulf ecosystem.



Courtesy of Public Laboratory for Open Technology and Science

PUBLIC PARTICIPATION AND TRANSPARENCY

Community engagement in all phases of the decision-making process regarding recovery, reconstruction and restoration activities is as important as the physical outcomes of that planning. Coastal communities know how to work together to address the changes occurring in their environment. Allowing the public an opportunity to participate in the planning and implementation of restoration strategies will give decision-makers a better understanding of the environmental, cultural and economic assets and challenges in a community and will lay a solid foundation for cooperation and support for restoration plans and programs.

The public must be informed and engaged not only about the purpose of restoration plans, but also the expected outcomes. Data at both the project level and across comprehensive programs must be collected and made publically available for communities. Additionally, regular communication, education and program updates must be part of any meaningful public engagement process. It is critical that multiple communication strategies are used so that all members of the community have access to the information. Using only internet communication is insufficient, as many members of socially and economically vulnerable communities have limited access to technology. Working with and providing resources to community organizations and libraries, holding public meetings to give updates on restoration programs, providing materials and information in multiple languages and using other innovative outreach strategies^{vi} are all necessary parts of any effort to encourage broad participation among community members.

As mentioned above, coastal residents often feel left out of decision-making processes, which has resulted in skepticism that restoration programs will consider what is best for the community and their environment. Consistent and meaningful participation can help to build trust between residents and government agencies. Trust is essential to facilitate a cooperative relationship in which the needs of a community are met and their knowledge and skills are utilized in a way that will encourage engagement and enhance the success of the restoration program. In building that trust, addressing the language access shortcomings in the participation

process is critical, particularly for the Vietnamese, Laotian. Cambodian, and Latino populations. Not only is it important to provide translated materials in the same timely fashion as English-language documents, but also provide informed and trained translator services at public meetings. Providing the funding for these services is essential to demonstrate both the dedication to providing timely translated materials and employing local organizations in the restoration process.vii



^{vi} MDEQ through the Executive Director sends text messages to the public to keep them informed about public participation opportunities. ^{vii} One interesting model supported by the Mississippi State Department of Employment Security used a portion of their \$5M in National Emergency Grant to contract with Asian Americans for Change to provide case management, information about community resources, recruit clients, and make

	Increasing Level of Public Impact					
	Inform	Consult	Involve	Collaborate	Empower	
Public participation goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions,	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision-makin in the hands of the public.	
Promise to the public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide	
Example techniques	 Fact sheets Web sites Open houses 	 Public comment Focus groups Surveys Public meetings 	 Workshops Deliberative polling 	 Citizen advisory committees Consensus- building Participatory decision- malding 	 Citizen juries Ballots Delegated decision 	

As it stands, public participation processes in the policy arena most often lies on the "inform" and "consult" side of the International Association of Public Participation (IAP2) spectrumⁱ seen below. We strongly recommend the Council adopt mechanisms that will move this policy arena towards "involve" and "collaborate". Initiating greater involvement and collaboration in project criteria, priorities and types by the public on the front end of RESTORE Act decision making will lead to significantly greater public buy-in, participation and support as funded priority lists are released.

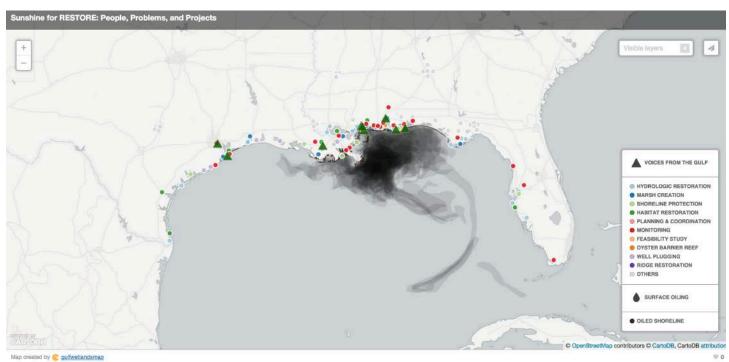
www.iap2.org/resource/resmgr/imported/spectrum.pdf

Coastal residents have a strong desire to be part of restoration programs either by providing input in planning and implementation, but also by participating in monitoring, data collection and informing adaptive management solutions. It is important to remember that most coastal residents are part of the communities that have lived in this region for decades if not centuries, passing traditional ecological knowledge (TEK) and skills down from one generation to the next. Utilizing TEK in planning and implementation acknowledges that local knowledge of the natural resources will contribute to the restoration and protection of those resources. The community's reliance on the Gulf's resources creates an opportunity for co-management in a just, equitable, and scientific way that also contributes to long-term ecological sustainability.

(continued...) workshops and other training options available to residents with low English proficiency. (MS DES, 2010) Asian Americans for Change and MS Coalition for Vietnamese-American Fisherfolk and Families are both supplying translators as caseworkers and identifying bilingual trainers. (Oxfam GCERTF Recommendations: http://www.oxfamamerica.org/static/oa3/files/gcertf-recommendationsfinal.pdf)

PROJECT EXAMPLES

Gulf Coast Ecosystem Restoration Council Funded Priority List Project Proposals



Sunshine on the Gulf Project Map: Council Proposed Funded Priority List Projects https://gulfwetlandsmap.cartodb.com/viz/33f18116-dc12-11e4-a11d-0e9d821ea90d/embed_map

The following section is not meant to review all project proposals under consideration by the Council for the Funded Priority List (FPL).^{viii} In the subsequent examples, we aim to highlight projects that we felt 'met-the-mark' at achieving both the overarching goals of the Council, as well as many of the criteria laid out by this report. However, not all projects were created equal, and we have given two examples of pit falls we hope that Council will avoid in choosing future restoration projects, as well as improving the process in which many of these projects were put forward.

The Good

Gulf of Mexico Habitat Mapping and Water Quality Network: Department of Commerce

It has become clear that too little information about the health of many of the natural resources of the Gulf were known prior to the BP disaster. Going forward it is critical that state and federal agencies determine the status of the various habitats and quality of our waters. This knowledge will enable them to better respond to future disasters, assess the impacts, and restore the Gulf's natural resources.

The U.S. Department of Commerce's Habitat Mapping and Water Quality Network³⁶ is a project that expands and assures funding for monitoring work essential to obtaining data needed for response, damage assessment and restoration after oil releases. This data will also assist communities throughout the Gulf in making decisions needed in order to adapt to a changing climate. The project seeks to combine existing federal and state expertise^{ix} in monitoring marine, estuarine and riverine habitat, and to standardize data

viii Attached to the appendix of this report, a letter from 22 gulf-based and national groups have proposed an FPL that meet many of the criteria points laid out by this report, echoed by other supporting organizations working in the Gulf region.

^{ix} National Oceanic & Atmospheric Association, Bureau of Ocean Energy Management, United States Geological Survey, Louisiana Coastwide Reference Monitoring System, National Park Service, and United States Fish & Wildlife Service, primarily.

collection and evaluation of the current condition and impact of restoration of Gulf watersheds across state boundaries. Through the Gulf of Mexico Coastal Ocean Observing System and other bodies, the planning effort seeks the input of stakeholders and non-governmental organizations to find gaps in data and prioritize monitoring needs.

Although not conceived as a jobs program, this project will likely provide some employment for Gulf residents who pursue higher education. Local residents in biological professions often leave the region for jobs elsewhere. We expect this project will retain the open and interactive qualities of NOAA and USGS efforts, like the USGS earth explorer and NOAA ERMA spill response map and the NOAA NRDA restoration projects portal. We are glad to see references to the recent White House Open Data Policy (OMB M-13-13)[×] as efforts to make the large amount of scientific data machine-readable will encourage educational and entrepreneurial institutions to communicate those results to the public. The government response to the BP disaster began inauspiciously, with poor communication of the flow rates of BP's oil from the Gulf floor. As restoration proceeds, the Gulf deserves open data management, to ensure public participation and government accountability. As standards are created, Commerce will continue to work with stakeholders, and communicate how Gulf residents can engage in citizen science efforts to monitor habitats and water quality.

Gulf Coastal Habitat Restoration Program: Department of Interior

The Gulf Coastal Habitat Restoration Program³⁷ proposed by Department of Interior project seeks to fill the gaps in capacity and communication that federal, state, local and community organizations confront in coastal restoration. Federal and state agencies do not always communicate or coordinate on even the best of environmental projects--gaps in governance will remain unless planning is improved; incorporation of local knowledge will not happen unless the gap between government and local organization is filled with some capacity building effort.

There have been longstanding planning and restoration efforts across the Gulf Coast through the National Estuary Program. This project seeks to leverage that history of community and landowner involvement into more effective restoration by incorporating the knowledge of federal and community partners already working to address wetland and water quality issues in the Gulf. For example, many state and federal -led restoration projects in Louisiana are implemented by state and federal agencies who rely on non-profit and volunteer organizations to plant or maintain plantings in the face of variable planting success.

This program will meet Gulf residents where they are, and provide jobs and informal and formal education opportunities for private landowners, LLCs, small and minority-owned businesses, NGOs, academic institutions, county and local governments, and tribes seeking to look beyond traditional partners to promote

local stewardship.



* Open data policy-managing information as an asset. (https://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf)

Needs Improvement

Connecting Coastal Waters: Restoring Coastal Wetland Hydrology: Department of Commerce

A significant issue with many of the proposed projects is that the "devil is in the details". These are projects that appear to be great - and many components of them are appropriate – however, due to the lack of information provided to the public through the proposal documents, issues of concern exist that are only known to those deeply familiar with the project or the location site. A good example of this challenge lies in the Connecting Coastal Waters: Restoring Coastal Wetland Hydrology³⁸ project proposed by the Department of Commerce (DOC).

Connecting Coastal Waters is a project that proposes eleven sub-projects across the Gulf Coast. The number of project combined within this larger program is unwieldy and makes it difficult to determine whether the entire DOC project is "good" or "bad." Many of these sub-projects follow a similar theme: restoring freshwater flows into estuaries through removing human-caused impediments to the water, which certainly would qualify them as a good restoration project. However, one of the sub-project proposals, the Maurepas Swamp (West Joyce Wetlands) Restoration sub-project, raises some concerns discussed below and doesn't fit with the rest of the projects.

While the Maurepas Swamp project does have promising components, such as utilizing a structure to reduce salt-water intrusion, it primarily depends on a controversial concept called "wetland assimilation". While apparently successful in some areas, the use of this process of discharging secondarily treated sewage effluent into existing wetlands has done significant damage to the wetlands adjacent to the proposed Maurepas Swamp project. In fact, this process has already converted a significant portion of the receiving wetlands into open water. While the area might be recovering, it is far from certain how the current proposal to use treated effluent would impact the wetlands in the Maurepas Swamp project.

Additionally, the Maurepas Swamp sub-project claims that it will restore 15,000 acres of wetland, which is questionable, given past uses of "wetland assimilation". This is almost 70% of the 21,930 acres that the entire Connecting Coastal Waters project projects to restore. Based on the above concerns, it seems the flagship sub-project is of questionable merit.

As Connecting Coastal Waters illustrates, when many sub-projects are lumped together and full disclosure and details on each of those sub projects are not given, it makes it difficult for the public to determine the overall merit of the project and/or where improvements need to be made. Further, it is not clear what would happen to the remaining 10 projects that make up the Connecting Coastal Waters project if the Maurepas Swamp sub-project is deemed not a good use of RESTORE funds. We recommend that the Council provide further insight into how proposed projects, programs, and activities that contain several components would be handled if the public raises significant concern about one aspect or subproject. Furthermore, the challenges raised by this project provides an important reminder: Community groups, citizens and public interest groups have historic knowledge of this region and the types of projects and programs that have been successful in these areas. Providing an opportunity for public review of these programs before they become part of the official proposal package to the Council, can allow (sub)-projects like these to be fully vetted and critical information provided that can increase the overall success of the program.

A Cautionary Tale

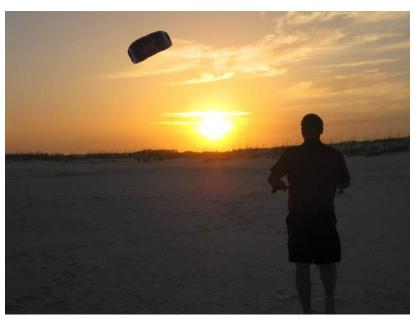
Alabama Convention Center: NRDA Early Restoration Project

While the Council is not considering the Alabama Gulf State Park Convention Center³⁹ project for RESTORE Act funding, this project is important to note due to the precedent it sets for the misuse of restoration funds and the violation of the public trust. In the Early NRDA restoration process, BP agreed to put up a \$1 billion down payment to begin repairing the damage to the wetlands, water bottoms and wildlife caused by the BP oil disaster. In 2014, the Natural Resource Damage Trustees^{xi} issued their decision approving the final Programmatic Environmental Impact Statement (PEIS) and Phase III Early Restoration Plan (ERP)⁴⁰, which allocated \$58.5 million dollars of Early Natural Resource Damage Assessment (NRDA)⁴¹ funds to subsidize a hotel and convention center in Alabama's Gulf State Park. The Alabama Convention Center is one of 44 projects selected for implementation in the third phase of NRDA Early Restoration.

Within the Early NRDA Restoration process, the Trustees are required to ensure that funds are actually used to repair or replace natural resources or restore recreational loss of use.⁴² No convention or meeting center was damaged during the BP disaster, and there is no rational basis for a finding that that building a convention center a) restores our natural resources, or b) makes up for any loss of use or other damage caused by the BP disaster. Since Alabama announced its plan to subsidize a convention center with BP disaster restoration money in 2012, thousands of citizens across the Gulf noted their objection to use of limited restoration funds for this project. Despite this significant outcry, the NRDA Trustees are allowing Alabama to squander \$58.5 out its \$100 million share of the funds to "restore" the public's ability to look at the beach through the windows of a conference room.

While the scope of restoration projects the Council may consider does not appear to allow for recreational loss of use or infrastructure-style projects under the Pot 2 criteria, the approval of the Alabama Convention Center project has raised the skepticism of Gulf residents as to the commitment of State and Federal officials to the priorities and limitations set by the RESTORE Act and the Initial Comprehensive Plan.^{xii} The total

disregard of the serious objection of communities and interested parties across the Gulf Coast, especially those in Alabama, to this project was viewed as symptomatic of the lack of true and effective public participation in decisionmaking and a violation of the public trust. To re-establish trust in decision-makers like the RESTORE Council, it is imperative that Council members include in their review a meaningful response to public comments and an explanation for the reasoning behind any rejection of that input, so that an understanding of the decision-making process fully is understood by all who participate.



Courtesy of smthng else

^{xi} The NRDA Trustee Council is comprised of the Department of Interior, Department of Commerce, Department of Defense, Department of Agriculture, the Environmental Protection Agency, and the five Gulf States (all of whom make up the NRDA Trustees). http://www.gulfspillrestoration.noaa.gov/about-us/co-trustees/

^{xii} Especially since the membership of the NRDA Trustees and RESTORE Council are largely the same.

CONCLUSION

Across the Gulf Coast, people and their communities are aware of the complexities of the restoration process. From the RESTORE Act, to the Natural Resources Damage Assessment, to the National Fish and Wildlife Foundation – these funding mechanisms have given the Gulf region a unique opportunity to invest significant dollars into a region that has a long list of restoration needs. Given this opportunity, and the long history of environmental neglect, it is in the public's best interest and our civic responsibility to actively participate in the restoration efforts. We are not willing to stand idly by as the RESTORE process moves forward without pushing for greater, more meaningful opportunities in the public participation process.

The public has a need and interest in understanding the criteria utilized for project selection. While some measures have been taken to inform the public of the general methodology for selection, individual Council members should make available the specific criteria they are using to select from the hundreds of projects submitted through their particular portals. Moreover, additional review opportunities are needed. For example, the public should be provided with an opportunity to review project prior to individual Council members submission of those project proposals for the Funded Priority List. This would give the interested parties greater insight into the decision-making process and the ability to raise concerns if a project or single component of a larger project is problematic.

While we recognize the Initial Comprehensive Plan expressed a commitment to addressing important goals and accomplishing critical objectives, which will ultimately create a healthier Gulf and benefit our coast and our communities, the criteria for project prioritization should be expanded to more fully consider a proposed project's ability to:

- Comprehensively protect, restore, and maintain the Gulf ecosystem, including its communities and those who make their livelihood from the Gulf's resources;
- Support local economies through workforce development, local hiring, and local contracting;
- Ensure that projects engage and meaningfully benefit the public, particularly vulnerable communities and populations;
- Create public health safeguards; and
- Include best available science, monitoring and evaluation of success as a priority to ensure public accountability.

This report does not review all the project proposals in the Council-Selected Restoration Component. Overall, the projects selected by the Council members are decent, ecosystem restoration style projects. The projects selected to date are the types of projects that we would like to see replicated and prioritized across the Gulf States. That being said, there is always room for improvement; our aim in highlighting proposed projects that have met the mark or need additional work are intended as examples of what we should avoid and what we should replicate. For example, few projects give more than lip service to workforce training and local hiring in their proposals, when we believe that significant weight should be given to projects that firmly commit to hiring local workers, especially those displaced and dislocated during the BP oil disaster. Furthermore, the Council must do a better job to solicit meaningful input from impacted communities with the clear goal of achieving environmental and social justice. In doing so, the Council would recognize the dedication of the people across the Gulf, and furthers the commitment for a more resilient and just region.

References

¹ Torbjörn E. Törnqvist & Douglas J. Meffert. Nature Geoscience, Sustaining coastal urban ecosystems 2 (1), 2009, p.16. http://www.nature.com/ngeo/journal/v2/n1/full/ngeo399.html

² http://www.entergy.com/content/our_community/environment/GulfCoastAdaptation/Building_a_Resilient_Gulf_Coast.pdf

³ NMFS. 2011. Sea Turtles and the Gulf of Mexico Oil Spill. Retrieved from http://www.nmfs.noaa.gov/pr/health/oilspill/turtles.htm

⁴ Schwacke, L. H., et al. 2013. Health of common bottlenose dolphins (Tursiops truncatus) in Barataria Bay, Louisiana, following the Deepwater Horizon oil spill. Environmental Science and Technology, 48(1), pp. 93-103.

NMFS. 2013. Dolphins and whales and the Gulf of Mexico oil spill. Retrieved from http://www.nmfs.noaa.gov/pr/health/oilspill/mammals.htm

⁵ White, H. K., et al. 2012. Impact of the Deepwater Horizon oil spill on deep-water coral community in the Gulf of Mexico. Proceedings of the National Academy of Sciences. Retrieved from www.pnas.org/cgi/doi/10.1073/pnas.1118029109

⁶ http://eli-ocean.org/gulf/files/RESTORE-Act-2012.pdf

⁷ http://restorethegulf.gov/

⁸ <u>http://eli-ocean.org/gulf/clean-water-act-restore/</u>

⁹ http://www.uscourts.gov/courts/laed/9092014RevisedFindingsofFactandConclusionsofLaw.pdf

¹⁰ <u>http://www.laed.uscourts.gov/OilSpill/Orders/1152015FindingsPhaseTwo.pdf</u>

¹¹ BP has appealed both of the court's finding of gross negligence and amount of oil spilled into the Gulf (http://www.bloomberg.com/news/articles/2014-12-11/bp-appeals-spill-ruling-that-may-spell-18-billion-fine, http://www.reuters.com/article/2015/02/23/usa-bp-spill-idUSL1N0VX2OI20150223). Additionally, the U.S. government is appealing the federal court's ruling of 3.19 million barrels, based on their estimation of 4.09 million barrels oil discharged (http://www.reuters.com/article/2015/03/14/us-bp-trial-appeal-iduskbn0ma0qb20150314).

¹² <u>http://www.epa.gov/gcertf/pdfs/GulfCoastReport_Full_12-04_508-1.pdf</u>

¹³ http://restorethegulf.gov/release/2013/01/29/initial-comprehensive-plan-next-steps

¹⁴ State Expenditure Plan Guidelines

¹⁵ https://www.restorethegulf.gov/our-work/council-selected-restoration-component

¹⁶ <u>http://restorethegulf.gov/release/2014/08/21/gulf-restoration-council-announces-proposal-submission-window-council-members</u> (21 Aug 2014)

¹⁷ Executive Order 12898 of 1994. <u>http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf</u>

¹⁸ Coping with Disaster: Social Vulnerability and Climate Hazards in the Gulf Coast, 2012

¹⁹ Buchanan, Jeffrey, "Building the Gulf"," Oxfam America, Nature Conservancy and Corps Network, 2015 <u>http://www.oxfamamerica.org/explore/research-publications/building-the-gulf/</u>

²⁰ Barnes, Stephen, "Contracting Preferences for Restore Act-Funded Projects: Recommendations to the Gulf Coast Ecosystem Restoration Council," Oxfam America, 2013: www.oxfamamerica.org/restore-contracting.

²¹ Louisiana House Bill 720 (2012) <u>http://legiscan.com/LA/text/HB720/id/651727/Louisiana-2012-HB720-</u> <u>Chaptered.pdf</u>

²² Mississippi Senate Bill 2622 (2012) <u>http://billstatus.ls.state.ms.us/documents/2012/pdf/SB/2600-</u> 2699/SB2622SG.pdf ²³ Ecological Restoration for Protected Areas: Principles, guidelines and best practice IUCN WCPA Ecological Restoration Taskforce <u>https://portals.iucn.org/library/efiles/documents/PAG-018.pdf</u>. 2012

²⁴ Building a Resilient Energy Gulf Coast: Executive Report, 2010

²⁵ Answering 10 Fundamental Questions about the Mississippi River Delta, 2012

²⁶ Gulf Coast Resilient Communities Program: A Resource Guide for Local Leaders, 2013

²⁷ Ogden, J. C., Davis, S. M., Jacobs, K. J., Barnes, T., & Fling H. E. (2005, December). The use of conceptual ecological models to guide ecosystem restoration in South Florida. WETLANDS, 25(4), 795-809.

²⁸ U.S. Environmental Protection Agency. (2011, October). An optimization approach to evaluate the role of ecosystem services in Chesapeake Bay restoration strategies. Retrieved from http://www.epa.gov/research/docs/chesapeake-bay-pilot-report.pdf

²⁹ Puget Sound Nearshore Partnership. (2004, November). Guidance for protection and restoration of the nearshore ecosystems of Puget Sound. Retrieved from

http://www.pugetsoundnearshore.org/technical_papers/guidance.pdf

³⁰ Second Open Government National Action Plan for The United States of America. 5 Dec 2013. http://www.whitehouse.gov/sites/default/files/docs/us_national_action_plan_6p.pdf

³¹ McKenzie F. Johnson, Corrie Hannah, Leslie Acton, Ruxandra Popovici, Krithi K. Karanth, Erika Weinthal. Network environmentalism: Citizen scientists as agents for environmental advocacy. Global Environmental Change, 2014; 29: 235

³² Second Open Government National Action Plan for The United States of America. 5 Dec 2013 http://www.whitehouse.gov/sites/default/files/docs/us_national_action_plan_6p.pdf

³³ Matthew B. Bethel, Lynn F. Brien, Michelle M. Esposito, Corey T. Miller, Honora S. Buras, Shirley B. Laska, Rosina Philippe, Kristina J. Peterson, and Carol Parsons Richards (2014) Sci-TEK: A GIS-Based Multidisciplinary Method for Incorporating Traditional Ecological Knowledge into Louisiana's Coastal Restoration Decision-Making Processes. Journal of Coastal Research: Volume 30, Issue 5: pp. 1081 – 1099.

³⁴ Reporting From the Youngest Land in the World. Al Shaw and Brian Jacobs ProPublica. 8 Dec 2014. http://www.propublica.org/nerds/item/reporting-from-the-youngest-land-in-the-world

³⁵ www.PublicLab.org

³⁶ http://restorethegulf.gov/sites/default/files/DOC-Gulf of Mexico Habitat Mapping and Water Quality Monitoring Network.pdf

³⁷ http://restorethegulf.gov/sites/default/files/DOI-Gulf Coastal Habitat Restoration Program.pdf

 $^{38} \ http://restore the gulf.gov/sites/default/files/Connecting\%20 Coastal\%20 Waters\%20 Restoring\%20 Coastal\%20 Wetland\%20 Hydrology.pdf$

³⁹ <u>http://www.gulfspillrestoration.noaa.gov/wp-content/uploads/GSP_AL_FINAL9_26_14.pdf</u>

⁴⁰ <u>http://www.gulfspillrestoration.noaa.gov/wp-content/uploads/Final-Phase-III-ERP-PEIS-Record-of-Decision_FINAL.pdf</u>

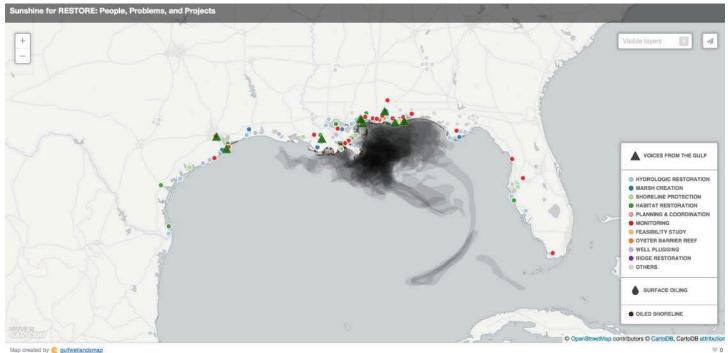
⁴¹ <u>http://www.gulfspillrestoration.noaa.gov/restoration/early-restoration/</u>

⁴² <u>http://www.gulfspillrestoration.noaa.gov/how-we-assess-injuries/</u>

APPENDIX 1

Sunshine on the Gulf Mapping Project

To see the fully functional, embedded maps, please visit: <u>http://healthygulf.org/sunshine-gulf-people-and-places-restore</u>



Sunshine on the Gulf: RESTORE Funded Priorities List Projects & Voices from the Gulf

This map highlights the 50 FPL projects proposed by the Gulf Coast Ecosystem Restoration Council members in their proposed location. Additionally, interspersed amongst the project sites, are stories from different Gulf Coast citizens recounting their story of living on the Gulf Coast and the impacts of the BP oil disaster had on their lives.

APPENDIX 2 Sunshine on Mississippi

While the state of Mississippi and the Mississippi Department of Environmental Quality (MDEQ) have shown effort and innovation in ensuring that Mississippians are engaged in the restoration processes discussed in this report, it is imperative that these efforts continue to develop and improve. By adopting some key measures to increase public participation and trust, Mississippi can be the leader in Gulf-wide citizen-led restoration efforts.

Project Selection and the Portal

Mississippi's open access portal for submitting project ideas has been a blueprint for other Gulf States. The opportunity for any person regardless of education, background or experience to propose projects for restoration funding should be lauded. Despite this important step the portal has not been the great success is was expected to be for two primary reasons.

The first is that citizens are concerned about how projects are selected once they have been submitted into the portal. MDEQ has explained that all projects are considered and that projects may be bundled to create the landscape level projects expected by the RESTORE Council, but MDEQ has given no criteria for what an exemplary project is. In their own example, MDEQ has indicated that a project that only identifies an area or place that should be restored because of economic or environmental value would carry the same weight as a complex project submitted by an engineering firm, backed with scientific modeling and studies. Without a better understanding of the criteria utilized by MDEQ, all members of the public will have difficulty writing proposals – complex or simple – that would pass initial consideration/review.

In order to build the public trust, and ensure that Mississippi continues to lead the way on restoration, MDEQ must create a substantially greater level of transparency about what happens behind the portal.

We recommend providing key criteria for projects as well as allowing communities to participate in the process of selecting the projects they want to see funded.

The second problematic element of the portal is the public access webpage where one can view proposed projects. While the idea of having the projects available on a map is useful, the utility of the site ends there. It is difficult to read about projects in the small scroll box below the map, and even when one manages to read them, the information is limited. It is difficult to discern between the new projects that have been added, and the projects, which have been edited. This makes it challenging for both citizens and the NGO community to do anything useful with the project list and therefore defeats the purpose of making the list available to the public for review.

We recommend that the website be adjusted to improve its fundamental utility with functions such as the ability to sort the database by date of submission, organization or river basin. It should be clear which when projects were added to the list and when they were last altered.

Inter-Agency Collaboration

The state's coastal resource agency, the Mississippi Department of Marine Resources (DMR), in the last

several years has developed into an agency capable of innovation and serious, science-based resource management. The agency has grown in recent years and is prepared to play an important role in the restoration process.

It is apparent to close observers of the restoration processes that DMR has not been adequately consulted on restoration projects that have been proposed and funded. This is of course problematic for several reasons. The first of which is that DMR is responsible for providing permits for restoration activities in the coastal zone; ensuring that a project meets the standards of permitting before it is proposed is essential. The second reason is that DMR has existing programs and plans that should be consulted to avoid redundancy. For example, DMR already manages a program for the beneficial use of dredge materials, yet another, different project was proposed by the state for the first round of RESTORE Pot 2 funding.

DMR staffs many coastal and environmental restoration experts and the state should do all that it can to make the most of what the agency has to offer. MDEQ should be consulting closely with DMR regarding project selection, permitting and best available science.

Wastewater and Stormwater

As the state begins to consider how it will spend RESTORE funds in Pots 1 and 3, we urge decision-makers to consider the importance of storm water and wastewater management. The Mississippi Coast experiences too many beach closures and water-contact advisories every year due to poor wastewater and storm water management systems, which is unappealing to tourists and residents alike. More importantly, many of the restoration projects that are currently proposed or funded rely on fresh clean water coming into the Mississippi Sound.

The most poignant example of the impacts that poor wastewater and storm water management have on an ecosystem can be seen in the ruinous plunge in oyster populations and harvest along the coast¹. While oysters are a physically strong part of living shorelines and healthy ecosystems, they are fragile organisms that are very sensitive to salinity. They cannot be harvested for human consumption if they have come into contact with sewage related bacteria.

In the wake of Hurricane Katrina the state had a unique opportunity to improve storm water and wastewater systems on the coast, unfortunately poor decisions were made and the coast is left without adequate systems. It is imperative that this first round of funding from RESTORE is used to improve these systems to create a foundation for a healthy ecosystem and successful restoration projects moving forward.

Moving Forward

It is our hope that Mississippi will continue to be a leader in citizen-led restoration. As is explained in the 2015 Sunshine on the Gulf report, coastal communities have a great deal to offer in creating restoration that is meaningful to them and that succeeds in the long term. Mississippi can ensure comprehensive, landscape level restoration and meaningfully engaged communities if it continues to expand the involvement of citizens and coastal governments and agencies in the decision-making process.

¹ "This year, MDMR shellfish biologists and other marine science experts projected an even slower year, with production currently lower than 5 percent of what the industry harvested 10 years ago." <u>http://www.dmr.state.ms.us/images/dmr/Oyster_Council/initial_handout.pdf</u>

APPENDIX 3

March 10, 2015

Justin Ehrenwerth Executive Director Gulf Coast Ecosystem Restoration Council 500 Poydras Street, Suite 1117 New Orleans, LA 70130

Dear Mr. Ehrenwerth:

On behalf of our organizations, which have a long history of working on conservation and restoration in the Gulf region, we thank you for your efforts to make a strong first investment toward comprehensive restoration of the Gulf of Mexico ecosystem. We have reviewed the 50 proposals submitted by the Gulf Coast Ecosystem Restoration Council (Council) members for funding consideration under the Council-Selected Restoration Component (Bucket 2). We are encouraged by the quality and potential positive impacts of these projects, by the opportunity they now give the Council to maximize the impact of the limited funding available for this first Funded Priorities List (FPL), and by the foundation this FPL can lay for a comprehensive approach to ecosystem restoration.

Based on the restoration activities proposed by Council members, we recommend the investments outlined in the attached document. Given the strength of many of the proposals submitted, there are likely a number of project and proposal combinations that would result in a successful first FPL. Our organizations believe the attached recommendations represent an integrated and balanced approach to restoration that offers the greatest likelihood of achieving sustainable outcomes benefiting both human and natural communities. We offer these recommendations and the thinking behind them in the spirit of assisting the Council in the difficult job of allocating scarce resources in the best way possible.

Given the scope and scale of restoration needs in the Gulf region, successful restoration will likely require decades. As the Council contemplates which projects to include in this initial round of funding, it can also plan for the future, when available funding will likely be much greater and early lessons and successes can be incorporated into restoration planning and implementation. To that end, we ask that the Council consider the following recommendations to position itself for success beyond this first round of funding.

- We recommend that the Council allocate an appropriate amount of funding under the Council-Selected Restoration Component to update the Initial Comprehensive Plan to include specific restoration benchmarks and outcomes. Clarifying these measures of success, which should be developed in consultation with the various science entities in the Gulf, will better enable evaluation of future submissions.
- 2. Once the Draft FPL is published, the Council should work with stakeholders to identify lessons learned in the project evaluation process to guide future funding decisions.
- 3. The Council should play an active role in coordinating and synthesizing environmental monitoring efforts in the Gulf to ensure that monitoring data from various sources is readily available and usable for project evaluation and adaptive management.

Thank you for your consideration of our recommendations. We look forward to discussing them in more detail as you conduct your important work to restore the ecosystem of the Gulf region.

Regards,

National Audubon Society Environmental Defense Fund National Wildlife Federation Ocean Conservancy The Nature Conservancy Alabama Coastal Foundation Audubon Florida Audubon Louisiana Audubon Mississippi Audubon Texas Birmingham Audubon Coalition to Restore Coastal Louisiana Coastal Bend Bays & Estuaries Program Conservation Alabama Foundation Florida Wildlife Federation Gulf Restoration Network Lake Pontchartrain Basin Foundation Lower 9th Ward Center for Sustainable Engagement & Development (CSED) Mississippi Wildlife Federation Mobile Baykeeper Texas Conservation Alliance





































Audubon LOUISIANA



MISSISSIP

Enclosure: Proposal Funding Options for the Council's Consideration

CC: Sec. Penny Pritzker Robert Bonnie Elizabeth Washburn Jo Ellen Darcy VADM Peter Neffenger Ken Kopocis N. Gunter Guy, Jr. Mimi Drew Chip Kline Gary Rikard Toby Baker

Proposal Funding Options for the Council's Consideration

Context

Many of the projects and programs proposed by Council members have important conservation value and should ultimately be funded. Given the limited amount of available funding, however, our recommended approach for this first round of funding consists of a combination of three (3) important project and program types within the focus areas of habitat and water quality:

- 1. Funding for the development of region-wide and site-specific decision-support, planning and science tools that will lay the foundation for future restoration projects, priority setting and/or that will assist in tracking project and program success. Among these projects are several that enable effective planning at the estuary/watershed level;
- 2. Funding for on-the-ground implementation activities; and
- 3. Funding for projects in the Mississippi River Delta, in recognition of the importance of the Mississippi River Delta as a significant driver in the Gulf ecosystem.

Within the context of the habitat and water quality focus areas, we used several criteria to propose activities:

- Activities that represent a wide cross-section of environments from Texas to Florida and from the coast to the offshore environment. When taken together, the identified activities address habitat and water quality restoration needs throughout the Gulf ecosystem and across jurisdictional boundaries, as well as help achieve the Council's other goals by benefiting living coastal and marine resources and human communities.
- Activities that can be leveraged with projects funded by other restoration funding sources (such as NRDA, NFWF and NAWCA) to potentially increase the impact of the limited funds currently available to the Council.
- Activities that are ready to be funded in accordance with the Council's proposed NEPA rules
- Activities that advance a cost-effective sequence of action for an individual project site, for a larger geographic area, such as an estuary or watershed, or for a category of Gulf restoration work

The projects listed below are not in priority order.

In our analysis, we noted that in many instances there is significant overlap among proposals, indicating both a need and an opportunity for partnership and coordination across the membership of the Council. It is our hope that during the review process Council members and staff can work to modify, coordinate, select and implement activities across proposals to achieve a cost-effective, long-term approach to comprehensive Gulf of Mexico restoration.

In cases where funding is sought to increase impact for or expand existing programs, we recommend that the grant explicitly delineate how RESTORE funding will be used to supplement, not replace, existing

sources of revenue for those programs. This will ensure that members continue to have access to all of the resources they need to continue their important work in the Gulf.

Efforts to increase long-term sustainable benefits for restoration projects should include strategies that incorporate local community members in the process of restoration. Given the limited amount of funding in this first round, we recommend that the Council conduct a small pilot program to create a Conservation Corps organized around a specific set of activities.

Finally, our analysis is based on the information provided in the proposals submitted by Council members. We recognize that the results of the external science and environmental compliance reviews may indicate that more information or attention is needed before a project can be included on the FPL.

Funding for Projects in the Mississippi River Delta

Project Title: West Grand Terre Beach Nourishment and Stabilization

Project Footprint: Louisiana
Member: State of Louisiana
Suggested Activities: Planning, engineering, design, permitting & adaptive management
Associated Budget: \$7,259,216
Increased Impact/Leverage: This project builds on CWPPRA and CIAP projects all funded in this area as well as Louisiana Oyster Cultch Project (NRDA). Additionally, the NFWF-GEBF <u>Adaptive Management: Louisiana</u>
<u>River Diversions and Barrier Islands</u> project can be applied to management of this project.

Project Title: Golden Triangle Marsh Creation

Project Footprint: Louisiana
Member: State of Louisiana
Suggested Activities: Planning, engineering and design, permitting & adaptive management
Associated Budget: \$4,347,733
Increased Impact/Leverage: This project builds on <u>NRDA</u> and several other projects funded in this area – including proposed <u>Biloxi Marsh Living Shoreline Project</u> (RESTORE). Additionally, the NFWF-GEBF <u>Adaptive</u> <u>Management: Louisiana River Diversions and Barrier Islands</u> project can be applied to management of this project.

Project Title: Biloxi Marsh Living Shoreline

Project Footprint: Louisiana

Member: State of Louisiana

Suggested Activities: Planning, engineering and design, permitting & adaptive management **Associated Budget:** \$3,220,460

Increased Impact/Leverage: This project builds on Golden Triangle Marsh Creation (RESTORE), Louisiana Oyster Cultch Project (NRDA), Living Shoreline Demonstration project (CIAP), Lake Fortuna and Eloi Bay reef projects (TNC). Additionally, the NFWF-GEBF *Adaptive Management: Louisiana River Diversions and Barrier Islands* project can be applied to management of this project.

Project Title: <u>Mississippi River Reintroduction into Maurepas Swamp</u>

Project Footprint: Louisiana

Member: State of Louisiana

Suggested Activities: Planning, engineering and design, permitting & adaptive management **Associated Budget:** \$14,190,000

Increased Impact/Leverage: This project builds on other Master Plan projects and is in the footprint of the Expansion of Maurepas Wildlife Management Area (MOEX). Additionally, the NFWF-GEBF *Adaptive Management: Louisiana River Diversions and Barrier Islands* project can be applied to management of this project.

Project Title: <u>Cote Blanche Freshwater and Sediment Introduction, and Shoreline Protection Project, St.</u> Mary Parish, Louisiana (Tribal Proposal)

Project Footprint: Louisiana

Member: Department of the Army

Suggested Activities: Planning, engineering, design & permitting

Associated Budget: \$2,650,000

Increased Impact/Leverage: This project will build upon several existing and proposed CWPPRA projects. Additionally, the NFWF-GEBF *Adaptive Management: Louisiana River Diversions and Barrier Islands* project can be applied to management of this project.

Project Title: <u>Bayou Dularge Ridge Restoration</u>, <u>Marsh Creation & Hydrologic Restoration Phase 1 (Tribal</u> <u>Proposal</u>)

Project Footprint: Louisiana
Member: Department of Agriculture
Suggested Activities: Planning, engineering, design & permitting
Associated Budget: \$5,162,084
Increased Impact/Leverage: This project is complementary of a priority <u>CWPPRA</u> project in the same footprint. The NFWF-GEBF Adaptive Management: Louisiana River Diversions and Barrier Islands project can be applied to management of this project.

Project Title: Abandoned Oil and Gas Well Plugging and Site Reclamation

Project Footprint: Louisiana

Member: Department of Interior

Suggested Activities: USFWS site reclamation in Louisiana refuges \$1,403,000 (P&A projects removed from list); NPS Jean Lafitte NHP&Pr, La. Canal Backfilling \$8,731,000

Associated Budget: \$11,100,000 (requested \$34,399,245)

Increased Impact/Leverage: This project complements projects in the Louisiana Master Plan.

Funding For Foundational Planning, Assessment Tools and Priority Setting

Project Title: <u>The Mississippi Sound Estuarine Program: A programmatic vision for bridging coastal</u> restoration

Project Footprint: Mississippi
Member: State of Mississippi
Suggested Activities: Planning and program development
Associated Budget: \$2,270,000
Increased Impact/Leverage: Project is intended to look across all funding horizons (National Fish and Wildlife Foundation, Natural Resource Damage Assessment, and RESTORE), including Coastal Stream & Habitat Initiative (NFWF) and Mississippi Coastal Restoration Program.

Project Title: <u>Coastal Alabama Comprehensive Watershed Restoration Planning Project</u>
Project Footprint: Alabama
Member: State of Alabama
Suggested Activities: Planning to prioritize coastal watersheds for future planning and project implementation
Associated Budget: \$3,000,000
Increased Impact/Leverage: Project builds on Fowl River Watershed Restoration – Phase I (NFWF), D'Olive Watershed Restoration (NFWF) and Coastal Habitat Restoration Planning Initiative (NFWF)

Project Title: Northwest Florida Estuaries and Watersheds – 1) Comprehensive updates to watershed management plans 2) Design and permitting of identified priority projects
Project Footprint: Florida
Member: State of Florida
Suggested Activities: Planning, engineering, design & permitting
Associated Budget: \$3,645,000
Increased Impact/Leverage: Many restoration projects have already been funded in this region and there are numerous opportunities to increase impact by coordinating across projects. Some of the projects include the Oyster Reef Habitat Restoration in the Saint Andrew Bay (NFWF), Apalachicola Bay Oyster Restoration (NFWF), Florida Bay Seagrass Recovery Project (NRDA) Stormwater Retrofit Projects (MOEX)

Project Title: <u>Gulf National Estuary Program (NEP) and Lake Pontchartrain Basin Restoration Program</u> (LPBRP) Comprehensive Plan Implementation Program and Gulf of Mexico Estuary Program

Project Footprint: Gulf-wide

Member: Environmental Protection Agency

and the Florida Cat Point Living Shoreline Project (NRDA).

Suggested Activities: Watershed problem identification, strategy development and planning in high-priority

estuaries and their watersheds; CCMP implementation in areas currently served by a National Estuary Program

Associated Budget: \$10,000,000

Increased Impact/Leverage: Investment in estuary/watershed planning and management can help direct other sources of restoration funding in the most cost-effective way within each watershed.

Notes: We believe there is merit in both of these projects. We recommend allocation of funding by the Council for a combination of projects to increase the capability of existing National Estuary Programs and to advance estuary planning in strategic Gulf estuaries and their watersheds where NEPs are not present.

Project Title: <u>US EPA & USGS Joint Proposal for Baseline Flow & Gage Analysis and On-Line Tool</u> <u>Development to Support Bay and Estuary Restoration in Gulf States</u>

Project Footprint: Gulf-wide

Member: Environmental Protection Agency

Suggested Activities: Develop assessment and prioritization decision support tool

Associated Budget: \$5,800,000

Increased Impact/Leverage: Project has benefits for all proposed or funded water quality enhancement projects.

Project Title: Enhancing opportunities for beneficial use of dredge sediments
Project Footprint: Gulf-wide
Member: State of Mississippi
Suggested Activities: Planning, engineering, design & permitting
Associated Budget: \$6,180,000
Increased Impact/Leverage: Utilization of Dredge Material for Marsh Restoration in Coastal Mississippi
(NFWF). Impact of this project could be increased if it is coordinated with the many marsh creation projects funded or proposed by the RESTORE Council, NRDA, NFWF, Louisiana Coastal Master Plan and other restoration efforts in the Gulf.

Project Title: <u>Gulf of Mexico Habitat Mapping and Water Quality Monitoring Network</u> - Habitat Mapping, Assessment, and Monitoring
Project Footprint: Gulf-wide
Member: Department of Commerce
Suggested Activities: Technical support (scientific expertise, modeling, etc.), develop assessment and prioritization decision support tool, mapping critical areas
Associated Budget: \$11,000,000 (requested \$13,051,000, see pg. 13)
Increased Impact/Leverage: Benthic Habitat Mapping, Characterization and Assessment (NFWF)

Project Title: <u>Adaptive Management and Technical Assistance in Support of Gulf Ecosystem and Economic</u> <u>Restoration</u>

Project Footprint: Gulf-wide
Member: Department of Interior
Suggested Activities: Project coordination, adaptive management, monitoring, applied research
Associated Budget: \$8,713,000
Increased Impact/Leverage: Could be applied to a variety of restoration projects across funding entities

Project Title: <u>Strategic Conservation Assessment of Gulf Coast Landscapes</u>

Project Footprint: Gulf-wide

Member: Department of Interior

Suggested Activities: Planning, program coordination, and develop assessment and prioritization decision support tool

Associated Budget: \$1,879,378.19

Increased Impact/Leverage: Strategic Land Protection, Conservation, and Enhancement of Priority Gulf Coast Landscapes (RESTORE), NFWF land conservation projects

Funding for Implementation Activities

Project Title: Alabama Living Shorelines Restoration and Monitoring Project

Project Footprint: Alabama

Member: State of Alabama

Suggested Activities: Planning, engineering, design & permitting. Implementation: create living shoreline using breakwater, sand fill and salt marsh vegetation and monitoring

Associated Budget: \$10,250,000

Increased Impact/Leverage: ADCNR will actively partner with DISL, TNC, MBNEP. Opportunities to coordinate with other living shoreline restoration in Alabama including Swift Tract Living Shoreline in Baldwin County (NRDA early restoration). Monitoring efforts could be standardized and coordinated with living shoreline project in other states, such as Boggy Bayou Watershed Water Quality Improvement, Alabama Swift Tract Living Shoreline, Florida Pensacola Bay Living Shoreline, Florida Cat Point Living Shoreline Project, Mississippi Hancock County Marsh Living Shoreline Project.

Project Title: <u>Alabama Submerged Aquatic Vegetation Restoration and Monitoring Project</u>

Project Footprint: Alabama

Member: State of Alabama

Suggested Activities: Education, signage, bird stakes, SAV seed collection, mapping **Associated Budget:** \$875,000

Increased Impact/Leverage: Coordination with nearby living shoreline and water quality improvement projects will increase the success of this project. The Swift Tract Living Shoreline in Baldwin County (NRDA early restoration and the D'Olive Watershed Restoration (NFWF) are two examples of nearby projects that could increase the impact of restoration efforts. In addition, monitoring efforts could be standardized and coordinated with seagrass projects or projects that monitor seagrasses in other states, such as Florida Seagrass Recovery Project (NRDA), Bayou Chico Restoration (NFWF), Destin Harbor, Joe's Bayou, and Indian Bayou Water Quality Improvement (NFWF), Boggy Bayou Watershed Water Quality Improvement (NFWF) and the Egery Flats Marsh Restoration (NFWF).

Project Title: <u>The Mississippi Gulf Coast Forest Restoration and Conservation Initiative</u>

Project Footprint: Mississippi

Member: Department of Agriculture

Suggested Activities: Planning and implementation of forests and stream restoration on public and private lands.

Associated Budget: \$10,000,000 (requested \$21 million)

Increased Impact/Leverage: Coastal Stream & Habitat Initiative (NFWF), Mississippi Coastal Restoration Program (NFWF), Mississippi Coastal Preserves Program (NFWF) Mississippi Wetlands Conservation Initiative I (NAWCA), Mississippi Wetlands Conservation Initiative II (NAWCA)

Project Title: <u>Tampa Bay Watershed Restoration</u> – 1) River Tower Shoreline Restoration and Stormwater Treatment, 2) Palm River Restoration Project Phase II, East McKay Bay, 3) Alafia Bank Bird Sanctuary Living Shorelines

Project Footprint: Florida

Member: State of Florida

Suggested Activities: Habitat creation/enhancement, stormwater/wastewater treatment, removal of nonnative/invasive species, living shoreline - concrete breakwater, & erosion control

Associated Budget: \$4,902,710

Increased Impact/Leverage: Opportunities to coordinate across proposed RESTORE projects with other watershed planning and restoration efforts such as the Gulf-wide project, <u>Connecting Coastal Waters:</u> <u>Restoring Coastal Wetland Hydrology</u>.

*Project Title: <u>The Apalachicola Project Phase 1: Restoring Apalachicola Bay and Region</u>

Project Footprint: Florida

Member: Department of Agriculture

Suggested Activities: Hydrological restoration and land management including: prescribed fire, isolated wetland restoration, and invasive species control

Associated Budget: \$4,000,000 (requested \$15 million, see pg. 12)

Increased Impact/Leverage: Apalachicola Bay Oyster Restoration (NFWF), Apalachicola Bay Watershed Restoration (RESTORE)

*Project Title: <u>Apalachicola Bay Watershed Restoration</u> - Marsh and Oyster Reef Restoration at the Apalachicola National Estuarine Research
Project Footprint: Florida
Member: State of Florida
Suggested Activities: Research or study of resources, conditions/monitoring, erosion control, Living shoreline creation
Associated Budget: \$2,340,000
Increased Impact/Leverage: <u>Apalachicola Bay Oyster Restoration</u> (NFWF), <u>The Apalachicola Project Phase</u> 1: Restoring Apalachicola Bay and Region (RESTORE)

*These projects should be coordinated to maximize impacts.

Project Title: Matagorda Bay System Priority Landscape Conservation
Project Footprint: Texas
Member: State of Texas
Suggested Activities: Land acquisition + ancillary costs for the 6,950 acre parcel
Associated Budget: \$6,799,830 (requested \$44,922,705, see pg. 12)
Increased Impact/Leverage: Coordination with other land acquisition projects in Texas, especially those nearby such as the Powderhorn Ranch Land Acquisition (NFWF), Texas Gulf Coast XI project (NAWCA) could increase impact and improve connectivity between conservation areas.

Project Title: Bahia Grande Coastal Corridor
Project Footprint: Texas
Member: State of Texas
Suggested Activities: Land acquisition 1500 acres
Associated Budget: \$4,500,000 (requested \$19 million or \$5.5 million for Phase I, see pg. 14)
Increased Impact/Leverage: Several private and public entities are partnering to protect and restore the larger landscape, and funders have pledged support to fund additional acquisitions, thus leveraging returns on restoration.

Project Title: <u>Texas Salt Bayou Freshwater Inflows Restoration: Feasibility Study, Design, Engineering &</u> <u>Permitting</u>

Project Footprint: Texas Member: State of Texas Suggested Activities: Planning, engineering, design & permitting Associated Budget: \$1,200,000 Increased Impact/Leverage: Land acquisition projects in Texas

Project Title: <u>Strategic Land Protection</u>, <u>Conservation</u>, <u>and Enhancement of Priority Gulf Coast Landscapes</u> Project Footprint: Gulf-wide

Member: State of Mississippi

Suggested Activities Include: Action #2: Public grant program for enhancing land protection and conservation across the Gulf: Action Budget: \$3,100,000

Objective #3: Create a strategic conservation assessment framework for future land acquisition; prioritization through collaborative conservation planning and design. Action Budget: \$1,772,998. The remainder of the recommended budget should be used for land acquisition activities. **Associated Budget:** \$15,000,000 (requested \$103,467,437)

Increased Impact/Leverage: Many opportunities to coordinate with Mississippi's Coastal Preserves Program, Texas's NFWF-GEBF and RESTORE proposals for Matagorda Bay, Bahia Grande Corridor & Galveston Bay, Alabama's Forever Wild Land Trust, NWR and NERRs, Florida's NFWF-GEBF projects Restoration and *Management of Escribano Point Coastal Habitat Phases I & II* and, Florida's RESTORE proposal *Northwest Florida Estuaries and Watersheds*

Project Title: Gulf Coastal Habitat Restoration Program

Project Footprint: Gulf-wide

Member: Department of Interior

Suggested Activities: Program coordination and funding implementation of existing restoration plans and projects in Gulf States

Associated Budget: \$5,159,020 (one year, not including monitoring) (requested \$26,795,100) **Increased Impact/Leverage:** Many opportunities to coordinate with NFWF (e.g., Mississippi Coastal Restoration Program), early NRDA projects, Louisiana Coastal Master Plan as well as NERRS, NWRs and other proposed RESTORE projects, such as the <u>Strategic Conservation Assessment of Gulf Coast Landscapes</u> and the Gulf National Estuary Program (NEP) and Lake Pontchartrain Basin Restoration Program (LPBRP) <u>Comprehensive Plan Implementation Program</u>. Project Title: Connecting Coastal Waters: Restoring Coastal Wetland Hydrology – Phase I

Project Footprint: Gulf-wide

Member: Department of Commerce

Suggested Activities: Phase 1

Associated Budget: \$2,893,750

Increased Impact/Leverage: Other proposed RESTORE projects that restore coastal wetland hydrology in the target areas such as the <u>Bahia Grande Coastal Corridor</u>, <u>Mississippi River Reintroduction into Maurepas</u></u> <u>Swamp</u>, Coastal Alabama Comprehensive Watershed Restoration Planning Project, and the Mississippi Gulf <u>Coast Forest Restoration and Conservation Initiative</u>.

Other opportunities to build on previously funded restoration projects:

Texas: Acquisition of Big Tree Ranch Aransas County, Texas (MOEX) and the Egery Flats Marsh Restoration (NFWF) projects.

Louisiana: Expansion of Maurepas Wildlife Management Area (NFWF)

Alabama: Coastal Habitat Restoration Planning Initiative (NFWF), D'Olive Watershed Restoration (NFWF) Mississippi: Mississippi Hancock County Marsh Living Shoreline Project (NFWF), Mississippi Coastal Preserves Program (NFWF)

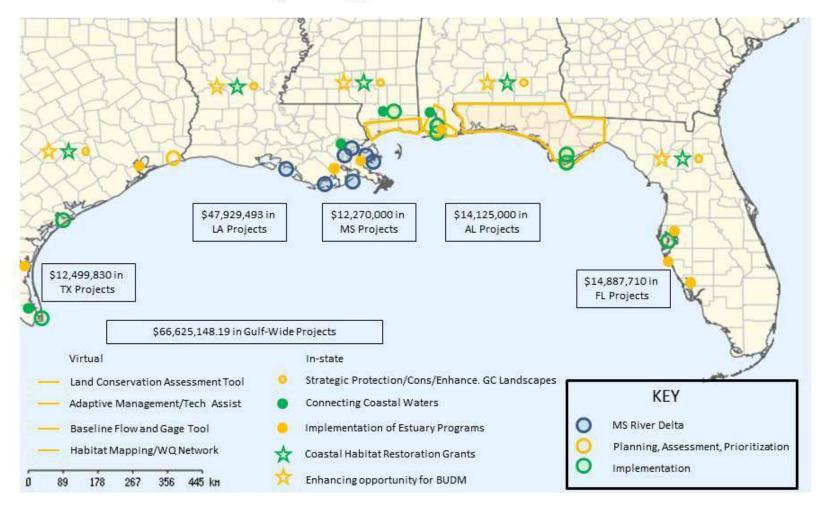
Project footprint	Project Name	Proposing Member	Recommended Funding
Louisiana	West Grand Terre Beach Nourishment and Stabilization	State of Louisiana	\$7,259,216
	Golden Triangle Marsh Creation	State of Louisiana	\$4,347,733
	Biloxi Marsh Living Shoreline	State of Louisiana	\$3,220,460
	Mississippi River Reintroduction into Maurepas Swamp	State of Louisiana	\$14,190,000
	Cote Blanche Freshwater and Sediment Introduction, and Shoreline Protection Project, St. Mary Parish, Louisiana (Tribal Proposal)	Department of the Army	\$2,650,000
	Bayou Dularge Ridge Restoration, Marsh Creation & Hydrologic Restoration Phase 1 (Tribal Proposal)	Department of Agriculture	\$5,162,084
	Abandoned Oil and Gas Well Plugging and Site Reclamation	Department of Interior	\$11,100,000
			Total LA funding: \$47,929,493
Mississippi	The Mississippi Sound Estuarine	State of Mississippi	\$2,270,000

Summary of Recommended Activities and Associated Budget

	Program: A programmatic vision		
	for bridging coastal restoration	Department of	¢10,000,000
	The Mississippi Gulf Coast Forest Restoration and Conservation	Department of	\$10,000,000
	Initiative	Agriculture	
			Total MS funding:
			\$12,270,000
Alabama	Coastal Alabama Comprehensive	State of Alabama	\$3,000,000
	Watershed Restoration Planning		1 - / /
	Project		
	Alabama Living Shorelines	State of Alabama	\$10,250,000
	Restoration and Monitoring		
	Project		
	Alabama Submerged Aquatic	State of Alabama	\$875,000
	Vegetation Restoration and		
	Monitoring Project		
			Total AL funding:
			\$14,125,000
Florida	Northwest Florida Estuaries and	State of Florida	\$3,645,000
	Watersheds – 1) Comprehensive		
	updates to watershed		
	management plans 2) Design		
	and permitting of identified		
	priority projects	Chata of Flouida	¢2,240,000
	Apalachicola Bay Watershed	State of Florida	\$2,340,000
	Restoration - Marsh and Oyster Reef Restoration at the		
	Apalachicola National Estuarine Research		
	Tampa Bay Watershed	State of Florida	\$4,902,710
	Restoration – 1) River Tower		γ¬,J02,710
	Shoreline Restoration and		
	Stormwater Treatment, 2) Palm		
	River Restoration Project Phase		
	II, East McKay Bay, 3) Alafia Bank		
	Bird Sanctuary Living Shorelines		
	The Apalachicola Project Phase	Department of	\$4,000,000
	1: Restoring Apalachicola Bay	Agriculture	
	and Region		
			Total FL funding:
			\$14,887,710
Texas	Texas Salt Bayou Freshwater	State of Texas	\$1,200,000
	Inflows Restoration: Feasibility		
	Study, Design, Engineering &		
	Permitting		

	Restoring Coastal Wetland Hydrology – Phase I	Commerce	
	Gulf Coastal Habitat Restoration Program Connecting Coastal Waters:	Department of Interior Department of	\$5,159,020 \$2,893,750
	Strategic Land Protection, Conservation, and Enhancement of Priority Gulf Coast Landscapes	State of Mississippi	\$15,000,000
	Strategic Conservation Assessment of Gulf Coast Landscapes	Department of Interior	\$1,879,378.19
	Adaptive Management and Technical Assistance in Support of Gulf Ecosystem and Economic Restoration	Department of Interior	\$8,713,000
	Gulf of Mexico Habitat Mapping and Water Quality Monitoring Network - Habitat Mapping, Assessment, and Monitoring	Department of Commerce	\$11,000,000
	Enhancing opportunities for beneficial use of dredge sediments	State of Mississippi	\$6,180,000
	US EPA & USGS Joint Proposal for Baseline Flow & Gage Analysis and On-Line Tool Development to Support Bay and Estuary Restoration in Gulf States	Environmental Protection Agency	\$5,800,000
Gulf-wide	Gulf National Estuary Program (NEP) and Lake Pontchartrain Basin Restoration Program (LPBRP) Comprehensive Plan Implementation Program and Gulf of Mexico Estuary Program	Environmental Protection Agency	\$10,000,000
			Total TX funding: \$12,499,830
	Landscape Conservation Bahia Grande Coastal Corridor	State of Texas	\$4,500,000

Funded Priority List Recommendations: Project Types and Locations





Gulf Restoration Network

541 Julia Street, Suite 300 New Orleans, Louisiana United States 70130 Tel 1.504.525.1528 www.healthygulf.org

Front Cover Photo Credit: Susan Venables Back Cover Photo Credit: dburns10308

