

# Executive Summary

## Toward Holistic Coastal Resilience

### *A cross-government assessment of Louisiana's resilience challenges and opportunities*

NOVEMBER 7, 2022

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In 2020, Governor Edwards joined ten other states by naming a Chief Resilience Officer to advance a cross-agency, holistic approach to the challenges and opportunities associated with the impacts of environmental hazards in Louisiana's coastal area. After two years of engagement, vulnerability assessments, and the exploration of options for adaptation to better meet the needs of its residents now and into the future, it is clearer than ever before that environmental changes in coastal Louisiana are producing direct and indirect consequences for the core missions and functions of every agency in state government.

While some adaptations are already underway and other ideas for enhancing the resilience of the state are still in development, an inescapable finding of this work is that the environmental challenges in store for Louisiana that are being exacerbated by climate change will be enormous and will not be limited to the coastal region of the state. Adequately addressing these needs will necessitate maintaining a formal and continued emphasis on resilience-building in government across all hazards and across the entire state through permanent positions, structures, and processes. Furthermore, a single focal point for statewide efforts will be essential for avoiding damages to infrastructure and assets, preserving and promoting economic and workforce development, sustaining the natural environment, serving and protecting vulnerable people and cultures, and securing funding to implement adaptation strategies and projects.

#### **Agency Vulnerability Findings:**

The most common and expected vulnerability to state agencies are to buildings and assets like transportation infrastructure, facilities, vehicles, or equipment. This affects both budgets and the delivery of services. Service providing agencies also face scattered clients, damages to their own employees' homes, and new, post-disaster demands for programming without the benefit of additional staff. Economically, natural disasters hurt Louisiana's attractiveness to business and workforce retention and recruitment; they can raise costs for those living and working in the state further hindering economic resilience and reducing productivity. Finally, in addition to land loss and habitat change, efforts to manage and regulate the protection of the natural environment can be severely challenged by extreme weather events and slower-moving changes to the coast.

#### **Identified Adaption Options:**

Quality, actionable data exists and is being utilized to inform permitting, construction, and investments in coastal Louisiana, but additional work is needed to mainstream the fortification and siting of

community and state infrastructure and facilities. The “no wrong door” model is being piloted by social services agencies in Lafayette and St. Landry parishes. This model should be further adapted and expanded to meet the needs of communities and individuals post-disaster. Workshops are building cultural bridges between communities and preserving arts, traditions, and creativity in the face of land loss. Negative economic perceptions of Louisiana can be addressed through the promotion of Louisiana’s successful coastal program and direct programming for businesses to prepare for disasters and plan for the future. Environmental and natural resources managers can modify their research agendas to more directly address impacts from climate change; serve as resources to local governments and users; and can adapt or relocate monitoring equipment to preserve data collection.

Many identified adaptations are reactionary and require capacity and resources to implement. Louisiana needs to become more proactive about adapting to the changes and challenges in store for the coming decades. The following findings and recommendations can continue that work.

### **Findings and Recommendations:**

- **Formally establish the role of Chief Resilience Officer to advance and coordinate adaptation throughout Louisiana.**
- **Resilience efforts should expand to include more hazards, all areas of the state, and additional partners outside of state government.**
- **Resilience criteria should be explicitly integrated into investment decisions regarding the state’s capital investments.**
- **Louisiana should adopt FEMA’s Enhanced Hazard Mitigation Plan.**
- **Coordination should be enhanced among agencies to maximize pre-disaster mitigation and resilient disaster recovery.**
- **Long-term resilience will require additional investments in “receiving communities,”** welcoming, prepared locations less susceptible to the extremes of environmental hazards.
- **Engagement with resilience coordinators should continue in order to develop multi-dimensional adaptation options** to better serve vulnerable populations; address chronic, but slower moving environmental changes; and foster stronger collaborations across agencies.
- **Limitations on capacity that curb success in adapting to environmental risks should be addressed.** Lack of human and financial resources directly impacts state, local, and community participation in adaptation measures and general planning for the future.



# Toward Holistic Coastal Resilience

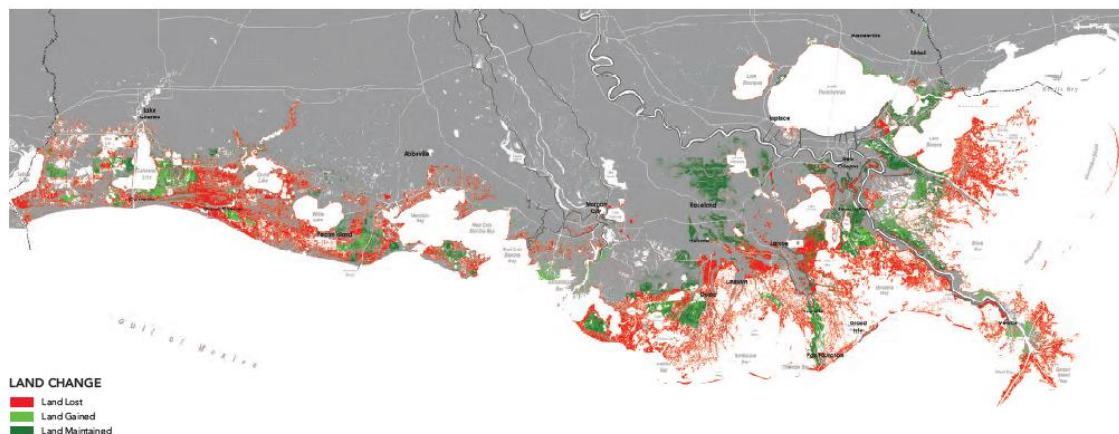
*A cross-government assessment of Louisiana's resilience challenges and opportunities*  
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## Introduction

The 2017 Coastal Master Plan produced maps of a “future with action” depicting Louisiana’s landscape after fifty years and fifty billion in investments in coastal protection and restoration. This map shows areas of dramatic land loss and gives leaders and citizens alike an image to visualize the reality that, in the future, the state would not be able to maintain as much land as it was losing. Speaking to the audience at the biennial State of the Coast conference in 2018, Governor Edwards declared that the state’s new job was to work more closely together to address all of the implications of a changing coast. “To see the coastal crisis in its broadest terms and organize and lead a coordinated and comprehensive state approach,” he said. “An approach that will reach beyond the current green and grey infrastructure strategy; and beyond the expertise of the CPRA in order to more directly address the economic and social implications of Louisiana’s degrading coast.” This conviction, that the scale of changes in store for coastal Louisiana were too large and carried too many implications to be shouldered by a single state agency, is one of the central tenants of the Adaptive Governance Initiative, a two-year effort led by the Governor’s Office, the Coastal Protection and Restoration Authority, and the Center for Planning Excellence.

### COAST WIDE LAND BENEFITS

THE MASTER PLAN RESULTS IN LAND GAINED AND MAINTAINED



**FIGURE 4-4**  
Predicted land gained and maintained along the Louisiana coast under the Medium Environmental Scenario over the next 50 years as an outcome of implementing 2017 Coastal Master Plan projects. Red indicates areas predicted to be lost, light green indicates areas where land would be created, and dark green indicates areas where existing land that would otherwise be lost will instead be maintained.

BY THE END OF 50 YEARS, PROJECTS IN THE 2017 COASTAL MASTER PLAN HAVE THE POTENTIAL TO CREATE OR MAINTAIN APPROXIMATELY 800 SQUARE MILES OF LAND UNDER THE MEDIUM ENVIRONMENTAL SCENARIO.

The other animating idea behind the Adaptive Governance Initiative is that there are some things that you can control and others that you cannot. The frequency and severity of natural disasters, and the pace of the ongoing, chronic changes happening along our coast are being driven by river management decisions and engineered structures put in place after the Great Flood of 1927, natural subsidence, and by the effects of global climate change. While the state has begun to take steps to mitigate its own greenhouse gas emissions, the science is clear that the environmental changes we are experiencing in Louisiana today will be with us for the foreseeable future and will likely increase in severity. Even if in the immediate term state action cannot affect the frequency or severity of natural disasters, Louisiana does have control over how these inevitable environmental challenges are mitigated and managed and over how the state organizes and governs itself in response to those challenges. The Adaptive Governance Initiative was a first step to move the state toward a more proactive and cross-government approach, one essential for adapting to the coastal and climate impacts that are here today and that can be anticipated in the future. This crucial work can help build a more resilient state better able to deliver services and maintain infrastructure that can help communities and individuals weather the changes and challenges ahead.

Building resilience is necessarily a forward looking and multi-faceted activity. Louisiana has ample experience with disaster management and post-disaster recovery programs that traditionally focus on addressing the immediate needs of impacted communities. While meeting needs after a disaster is critical, the very conditions communities are recovering from today might not be the conditions those communities will face in the future. This reality could leave them as unprepared for the next event as they were for the most recent disaster. We also know that resilience depends on more than hardened infrastructure. If you elevate all the homes and roads so that they no longer flood, but there are no jobs, most of your neighbors have moved away, you have to drive an hour for a doctor or groceries, and the natural environment is polluted, your community is not resilient. The state's ability to engineer solutions, both green and grey, to reduce storm surge damages and restore the environment has grown exceptional, but our ability to tend to the social, cultural, and economic needs of communities coping with land loss, increased hurricane risk, and the other chronic changes brought on by sea level rise, salt water intrusion, and subsidence has not received as much attention or as many resources.

The Adaptive Governance Initiative has been working through "resilience coordinators" in executive branch agencies to systematically advance a vision for resilience that is holistic and that anticipates of the coming changes for Louisiana's coast and beyond—to revisit agency missions in light of the impacts of a changing climate, establish lines of communication and collaboration, utilize scientific data about environmental conditions to make decisions, and to begin to consider ways to adapt their programs, services, and asset and infrastructure footprints to better serve the needs of the state's people. State agencies are a crucial part of a more resilient state overall. They provide services directly to the people of Louisiana, they are a link between federal programs and the people of the state, and they also serve as a conduit and resource for local governments.

The findings from both the resilience coordinators and the more zoomed out conversations about the status and direction of the state's resilience efforts make it clear: critical functions and missions of agencies are already being impacted by natural disasters and the chronic effects of a changing coast. However, it is not only the coast that is changing in Louisiana. As the impacts of climate change arrive with greater frequency and intensity the state will need to redouble its efforts to adapt to additional types of environmental hazards including extreme heat, excessive rainfall, drought, and many more that will be felt across the entire state. The Adaptive Governance Initiative focuses on ways to improve resilience in coastal Louisiana to changes being measured by the coastal master plan, but the tools and processes established to understand and adapt to changing environmental risk, and the ultimate goal of building a more integrated, adaptive state government should be applied statewide and to all hazards.

By building resilience through intentional and coordinated adaptation throughout society and across levels of government, the state can avoid as many of the human, financial, and environmental losses as possible and also carve out a pathway to a brighter future. Through efforts to build resilience, the state can fashion systems that serve all of their people effectively, where public health and quality of life are enhanced, where clean air, water, and access to nature are available today and for future generations, where the economy provides meaningful employment and opportunity for individuals with varying skills and educational backgrounds, and where our infrastructure, homes, and businesses are built to withstand the stresses of today's and tomorrow's environmental challenges. In this, more resilient Louisiana, individuals will not be forced to rely on their "resilience" as they cope with flooded homes, or intense heat, because the systems they rely on when the weather is good will be prepared and functional during times of adversity.

## Process

Recognizing the wide-ranging impacts associated with our changing coast, Governor Edwards signed Executive Order 2020-19 on Coastal Resilience in August of 2020. This executive order not only established the need for a cross-agency approach to building resilience, but a structure and process by which to begin making progress.

The structure established by the E.O. was a hub-and-spoke approach to government-wide adaptation. The Chief Resilience Officer (CRO), in close collaboration with and the support of the non-profit Center for Planning Excellence (CPEX), engaged with a network of "resilience coordinators" appointed sixteen state agencies (see supporting documents for list of agencies and coordinators). This structure immediately established lines of communication around resilience and has allowed for conversations about the adaptation needs of individual agencies; small group discussions with agencies that have common programs, missions, or structures; and whole-group, cross-government conversations about adapting to the demands of the future.

The E.O. also created a process by which agencies could begin to increase their resilience and the state's resilience overall. The process began with the identification of vulnerabilities, then the development of adaptation actions, and concluded with the institutionalization and implementation of these findings.



FIGURE 2 RESILIENCE-BUILDING PROCESS

Together, the CRO and CPEX team, established four goals for "the Adaptive Governance Initiative," the name given to the cross-agency work to build resilience throughout state government:

1. Assist agencies in understanding their relationship to the coastal crisis and to each other.
2. Develop strategies and tools that aid in the integration of Coastal Master Plan projections into agency decision making.
3. Leverage partnerships to maximize investment benefits.
4. Establish a framework for proactive, climate adaptive governance for Louisiana.

These goals and a desire to make resilience-building something concrete and actionable led to the creation of two foundational concepts for the remainder of the work. First, was a definition for resilience, or “**framework**,” that was multi-dimensional. The framework includes four elements of resilience that make space for each agency to identify at least one clear role in supporting the work of a more resilient state.

The four elements are:

- **Robust Built Environment**
- **Vibrant Economic Activity**
- **Health & Opportunity for all Coastal Residents**
- **Sustainable Natural Environment**

The framework is also supported by four “**principles**” that help guide agency leadership and staff as they make decisions about their existing and future programs. It provides a series of questions to consider when analyzing opportunities to enhance Louisiana’s coastal resilience and helps answer the question, “How do we know if we are increasing resilience?” The principles are:

- **Information**—Support data-driven decisions by having resources to collect data, conduct modeling and integrate best available science,
- **Integration**—Aligning agency objectives and efforts within and across state agencies,
- **Participation**—Engagement of a spectrum of perspectives to inform approach, particularly those who rely on the agencies for services or as users of infrastructure/assets; and
- **Innovation**—Mobilizing resources (human, financial, and others) to deal with new conditions.

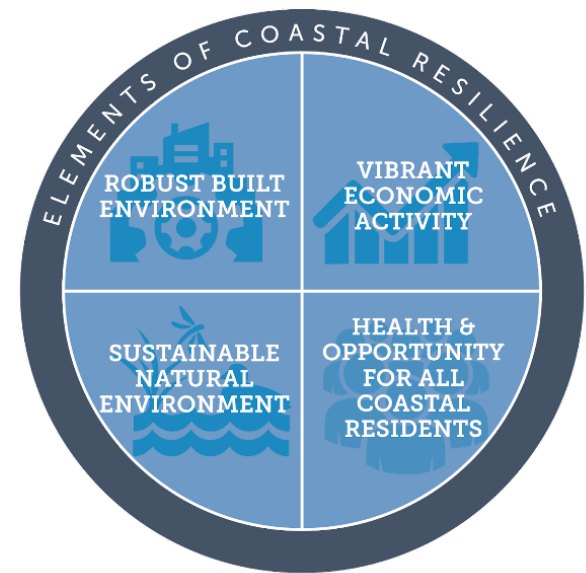


FIGURE 3 RESILIENCE ELEMENTS

Because the intent of the Adaptive Governance Initiative was to bring new partners across the state into the conversation about adapting to the changes happening and projected for Louisiana’s coastal region, early meetings of the resilience coordinators focused on the data and tools created by the Coastal Protection and Restoration Authority (CPRA) like the online Master Plan [Data Viewer](#) and the contents of the [2017 Coastal Master Plan](#). From there, meetings shifted to supporting agencies as they worked to complete the requirements of the executive order which included conducting a vulnerability assessment, developing adaptation options, and institutionalizing this process.

## VULNERABILITY ASSESSMENT

A fundamental building block for adaptation and resilience-building is understanding where and how changing environmental conditions will affect an agency’s ability to fulfill its mission in the near, medium, and long term. This exercise helped agencies establish priorities around impacts that were most critical to their mission, helped establish buy-in by identifying concrete examples of how the coastal problem manifested within their department, and lay the groundwork for developing adaptation options.

The vulnerability assessment was designed to reveal areas where the coastal crisis is impacting an agency’s ability to administer their programs and manage their assets both now and in the future. It asked agencies to consider two types of risk—those from chronic stressors like sea level rise or salt water intrusion, and those from acute shocks like from major flood events or hurricanes. It elicited feedback on current risks and future risks, and it included severity scoring for impacts to the agency itself and for how those impacts would affect other agencies across government. A summary

of findings and specific examples from vulnerability assessments received from agencies will be discussed in the next section.

## DEVELOP ADAPTATION ACTIONS

Adaptation is the process by which individuals, communities, organizations, and the state as a whole will become more resilient. While adapting to changes is not always easy, it is also not unprecedented. Over time, many practices have evolved to better cope with changing conditions. However, many vulnerabilities still remain. Usually this is because they are difficult or complicated to address, or because they are projected for future years and have not yet demanded action or attention. Due to the far reaching and large magnitude of the changes in store for coastal Louisiana these difficult and seemingly far off vulnerabilities must be addressed proactively and preemptively through adaptations.

Building off of the vulnerability assessment with scored and prioritized impacts, agencies then considered ways to further their efforts to adapt and meet those challenges. The process of developing these adaptation actions included (1) identifying their specific adaptation needs; (2) developing a list of potential adaptation actions to reduce the current or future impacts to the identified needs; (3) identifying implementation pathways, resource needs, and timelines; (4) identifying potential “catalytic actions” that could accelerate the mitigation of impacts from the coastal crisis; and (5) institutionalizing adaptation by identifying the appropriate place for these actions within an agency.

The ease or speed of moving forward with the implementation of identified adaptation actions can be affected by a number of factors and agencies were prompted to consider prioritizing adaptation for immediate, near-term, and longer-term implementation.

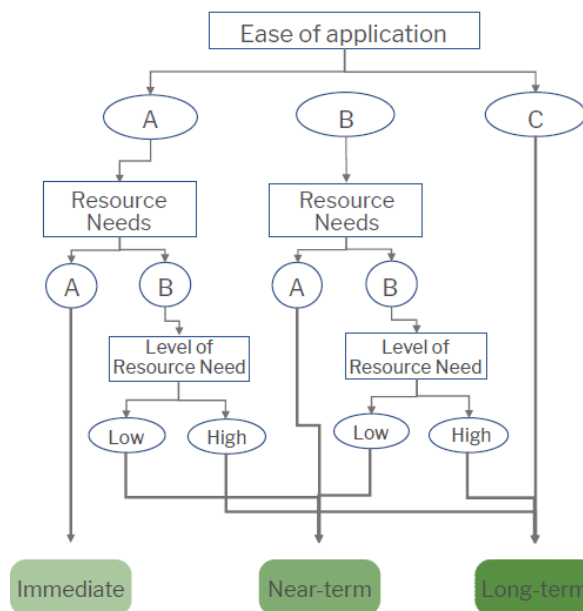


FIGURE 4 ADAPTATION IMPLEMENTATION

## INSTITUTIONALIZE RESILIENCE

To meet the needs of Louisiana’s residents today and into the future, implementing adaptation actions and considering ways to build resilience through agency actions and investments must be an ongoing process. Agencies are encouraged to begin to institutionalize this resilience lens at decisions points throughout their programs and mission areas and to report out their findings to the governor, other state leaders, and the public. Through the vulnerability assessment and the development of clear adaptation actions to meet those challenges, the groundwork for changes to agency behavior and improved outcomes for Louisiana’s residents can be established and continued over time and across administrations. To encourage the future use of this process by new resilience coordinators or administrations, [a manual](#) was developed to provide context, links to the tools, and guidance for completing the exercise.



# Summary of Agency Findings

## AGENCY-IDENTIFIED VULNERABILITIES

Today, state agencies are having their key missions affected by both extreme weather events and the slower, yet still transformational changes happening in the environment. In the future, even more of these impacts can be expected no matter the success of the Coastal Master Plan or from other investments by the state or federal government. These impacts carry clear consequences for agency missions, programs, clients, and/or assets, and so agencies must take an active role in building a Louisiana that is more resilient.

With the assistance of the CRO and CPEX, resilience coordinators across state government have begun to articulate the connections between the environmental challenges facing coastal Louisiana and their own missions. They have begun to position their agency within at least one of the resilience elements in FIGURE 2; and through the vulnerability assessment, they have outlined specific ways that physical changes happening across coastal Louisiana are impacting

their missions today and how they are likely to face increasing challenges in the future.

**The Department of Children and Family Services’ “mission is to work to keep children safe, helping individuals and families become self-sufficient, and provide safe refuge during disasters. As disasters expand their reach with coastal lands eroding, the impact on children, individuals and families will increase. A greater number of larger population areas will be at risk.” *Department of Children and Family Services***

**“Whether it is land loss, sea level rise, or damage from natural disasters, those factors can come into play in the business recruitment and retention process.” *Louisiana Economic Development***

**“Technical, financial, and programmatic assistance to all agricultural landowners and producers of the State is among the highest priorities of [Louisiana Department of Agriculture and Forestry], with the Louisiana coastal zone and adjacent areas clearly recognized as subject to unique and often extreme conditions and challenges typical of our coastal region such as storm surge or weather-induced tidal flooding, soil salination, land loss, and sea level rise.” *Department of Agriculture and Forestry***

The types of impacts identified span the built environment, the ability to deliver services, regulatory and environmental monitoring, and disruptions to the state economy, and result in an overall strain on the productivity of the state and its workforce. As highlighted by the Department of Culture, Recreation, and Tourism, coastal land loss and hurricane vulnerabilities threaten the very identity and history of the State of Louisiana. The following sections will summarize and provide examples of findings from across state government.



## ROBUST BUILT ENVIRONMENT: IMPACTS TO INFRASTRUCTURE AND ASSETS

The most common and expected vulnerability to state agencies are to buildings and assets like infrastructure, facilities, vehicles, or equipment. Generally, all state agencies operating in coastal Louisiana are exposed to this physical risk to one degree or another, or can expect to be in the years to come.

Offices or facilities in nearly all state agencies have been impacted by flooding or hurricane damages in recent years. But state assets are more than just office buildings. The availability of affordable housing in Louisiana is also at risk from extreme weather and flood events. When existing affordable housing stock is lost because of a disaster, it puts a strain on and increases the cost of all available housing throughout the state following the weather event.

**“Housing that at the time of construction was not considered high risk has undergone a change due to climate change. Now, what at one time was considered a safe location, is vulnerable to coastal impacts and flooding and wind concerns.” *Louisiana Housing Corporation***

This risk is also present for infrastructure related to health and safety like healthcare and drinking water, and to transportation networks like state highways, drainage structures, bridges, and ports that not only affect mobility and evacuations, but also have the potential for major economic impacts. An economic impact study of the state's roadways, completed in 2018, indicated that 4,100 miles of roadways with repair costs of \$1.2 billion were at risk of damage from coastal flooding and that risk would double to 8,600 miles of roadway with \$2.5 billion in repair costs in fifty years' time.<sup>1</sup> This trend of increasing exposure will continue. The National Oceanic and Atmospheric Administration's (NOAA) 2022 High Tide Flooding Annual Outlook documented a 300% increase in flood events since the year 2000 in the western Gulf of Mexico region, the highest increase in the United States and this risk is predicted to increase exponentially in the decades to come with Grand Isle seeing 200-245 high tide flood days in 2050.<sup>2</sup>

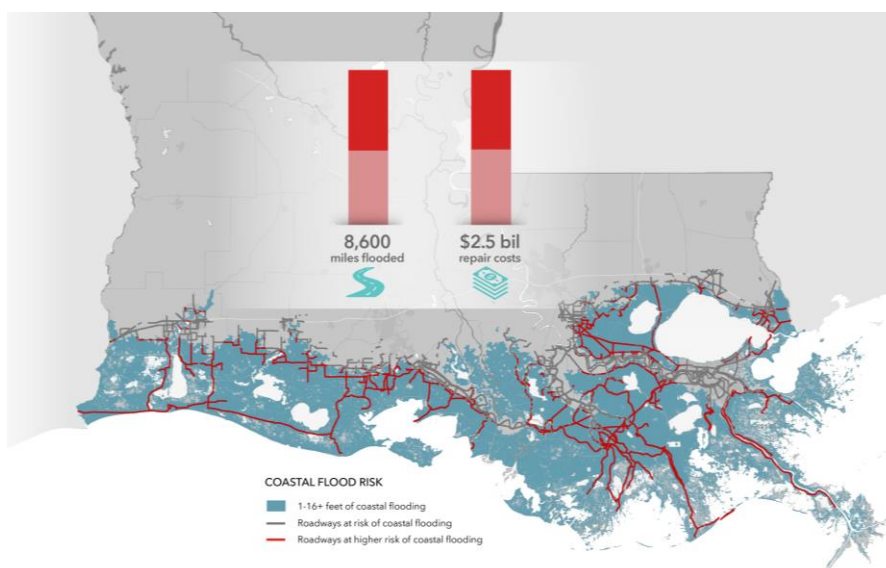


FIGURE 5 COASTAL FLOODING IMPACT ON TRANSPORTATION NETWORK

While the budgetary and economic impacts associated with the vulnerabilities to the built environment are well known and quantifiable, the impacts to service delivery can be even more complex and consequential.

**“Loss of [our] building results in an inability to conduct business from an office setting; loss of equipment results in an inability to perform day-to-day operations; office closures; and loss of recipient historical files.” *Office of Aging and Adult Services***

Many programs are provided by state government agencies through their facilities including public health services, services for people with developmental disabilities or aging adults, child welfare, family support, education, and the housing and reentry of incarcerated adults. During and after flood events, these services can be temporarily interrupted, halted, relocated, or scaled back as the infrastructure and buildings needed to provide these services are damaged or inoperable.

For example, the Public Health Unit in Cameron Parish, Louisiana provides services including family planning, high-risk nutrition, immunization, reproductive health, sexually transmitted diseases, tuberculosis, vital records, women, infants, and children, and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) monitoring. Their facility which provides these essential services has been closed for a total of more than five of the past seventeen years because of hurricane and flood damage. It was closed for seventeen months following Hurricane Rita, twenty-three months following Hurricane Ike, minimal closures for Hurricane Harvey, and was closed again in August of 2020 following Hurricanes Laura and Delta with repairs not yet begun as of August of 2022.

Another example of infrastructure vulnerabilities affecting important services was highlighted by the Department of Agriculture and Forestry and relates to their Food Distribution Program. This program is responsible for receiving, storing and distributing USDA donated commodities for the national school lunch program and other food programs, including the Emergency Food Assistance Program (which supplements diets of low-income and elderly persons) and the Summer Food Service Program (which provides healthy meals and snacks to children and teens in low income areas while schools are closed for summer). This program has a cold storage facility located in Jefferson Parish that is highly vulnerable to natural disasters putting at risk the delivery of essential services and programs well beyond the direct region of impact from a hurricane or flood event.

## HEALTH, OPPORTUNITY, AND CULTURE FOR ALL COASTAL RESIDENTS: IMPACTS TO SERVICES

**Delivering services to Louisiana’s most vulnerable residents all across coastal Louisiana is made more difficult by extreme weather and flood events.**

Through various agencies and offices, the State of Louisiana offers a range of vital services to vulnerable residents, services that are often in even higher demand following a natural disaster. Providing these services in the context of the coastal crisis becomes more challenging for a number of reasons including damages to facilities, client homes, or the homes of the workers who deliver those services. Other challenges include the temporary or permanent movement of clients and the disruption of telecommunications and transportation routes that make reaching clients all the more difficult.

For example, when facilities are damaged, services at Adult Day Health Care Centers and Program of All-Inclusive Care for the Elderly are unavailable. These facilities offer medical, nursing, social and personal care services for adults who have physical, mental, or functional impairments; and Medicaid and Medicare services that enable participants to remain in the community and enhance their quality of life. Others, who may be in a fragile position economically, may be further stymied by the interruption of state services like those offered at the Louisiana Workforce Commission's American Job Centers. The Louisiana Workforce Commission has sixty two American Job Centers (AJCs) located throughout the state, including the coastal area, who are exposed to weather events and the challenges of long term coastal change. These facilities serve populations such as disabled veterans, out of school youth, formerly incarcerated, those with disabilities, those who are basic skills deficient, and the unemployed, long-term unemployed, and the underemployed.

Finding and coordinating social service resources for sheltered individuals that can serve them from the emergency through to a better situation is another enormous challenge. Certain benefits, like Supplemental Nutrition Assistance Program (SNAP), may not just be a need because of the disaster, and assessing the needs of sheltered individuals should be a part of the process of response, sheltering, and long-term recovery.

**Certain programs are also triggered specifically by disasters that must be deployed quickly and efficiently to assist with impacted populations and communities.** After Hurricane Ida in 2021, over 323,000 people were able to utilize benefits from the Disaster Supplemental Nutrition Assistance Program (D-SNAP), the second largest distribution of aid in the history of the program.<sup>3</sup>

**When new demands are placed on state agencies in the lead up or aftermath of disasters, staff must find ways to maintain existing workloads while also performing these new duties.**

For the Department of Corrections, this occurs every time a hurricane threatens coastal Louisiana. The majority of inmates are housed by local Sheriffs across the coast. When storms approach, corrections officers transport inmates from at-risk locations to other facilities throughout the state. This is done both to ensure the safety of the inmates and in recognition that Sheriff's Office's staffs will also need to be away from work to weather the storm and assist their own families. When inmates are moved throughout the state it creates safety issues for them and the staff that transports them and it can significantly disrupt employment and reintegration services, court appearances, and doctor visits. Additional staff and budgetary burdens are also placed on the department when inmates from damaged coastal facilities must be re-housed in unaffected facilities.

When state employees are re-directed to disaster support or recovery services, whether they are corrections officers charged with

transporting inmates out of the path of a hurricane, staff at the Department of Children and Family Services who are deployed to run DSNAP, or those from multiple agencies working on emergency response 24-hours a day, workloads increase while staffing levels stay the same. As communities across coastal Louisiana find themselves managing disasters more often, this strain on workers and the corresponding impact on service delivery will also occur more often. It is also important to recognize that on many occasions, the staff working on disaster response and recovery

**"...Every program at DCFS is impacted because the staff assigned to shelters and [Disaster Supplemental Nutrition Assistance Program] activities must be covered by other staff not deployed. This reduces the number of available working staff and increases the workload of the remaining staff who are assisting clients outside their service areas while deployed staff work with others."**

***Department of Children and Family Services***

may also be dealing with damages to their own homes, struggling to find child care, or assisting relatives who may have evacuated.

## VIBRANT ECONOMIC ACTIVITY: IMPACTS TO THE ECONOMY

As the coast undergoes changes and becomes more susceptible to storms and chronic flooding, damages to assets and infrastructure will become more common for the public sector, private sector, and residents. According to NOAA, Louisiana had the second highest cumulative damages in the country from billion-dollar disasters between 1980 and 2021. At

approximately \$270 billion, Louisiana's disaster losses are carried by a relatively small population and economy compared to Texas and Florida, the country's number one and number three ranked states for disaster losses. Damages from Hurricane Ida alone accounted for 15-20% of Louisiana's total 2021 economic output.<sup>4</sup>

**“[Businesses] may also face challenges recruiting and retaining the workforce needed for their operations, especially if the community in which they are located is struggling post-storm to maintain services or quality of life amenities or if costs like flood insurance or property insurance outpace what they are able to afford.”**

***Louisiana Economic Development***

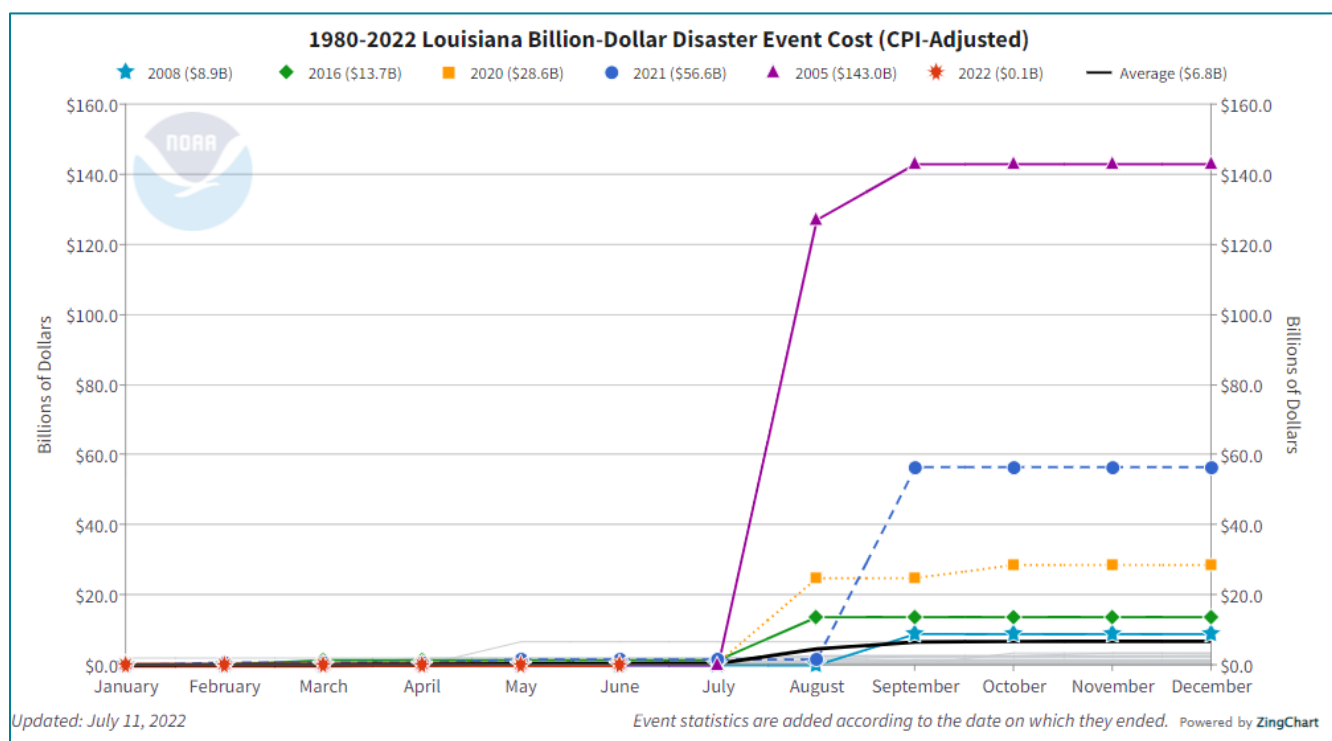


FIGURE 6 LOUISIANA BILLION-DOLLAR DISASTER EVENTS

**Even when businesses or offices are not damaged, impacts to the homes of workers and their families and/or the inability to access goods and services can produce negative economic impacts for the state and its people.**

In addition to economic losses, storms are also disruptive to the economy in other ways. Some businesses close and never reopen, others struggle when employees evacuate or relocate, and in certain sectors, finding workers is made more difficult when recovery efforts create high demand for construction workers.

These economic impacts materialize in rising costs of living or doing business in Louisiana both from direct payments to rebuild after disaster and the indirect costs from rising insurance premiums and higher interest rates for borrowing from financial institutions or bond markets. **With every hurricane, each increase in relative sea level, and the continued loss of coastal habitat, Louisiana’s potential for being stigmatized as disaster-prone also grows. This makes the task of recruiting and retaining businesses and workers more challenging.**

At one major international chemical manufacturer located in coastal Louisiana, they not only recruit a workforce to run the plant, but also to conduct research and development activities for the company’s global operations. This requires attracting highly qualified individuals in an internationally competitive market and these efforts have been made harder by the vulnerability of the community to impacts from natural disasters. In other cases, major industrial operations have been staffed as though they were offshore facilities due to the remote or vulnerable nature of the facility.

**Physical risks from extreme weather can also serve to compound other external changes, be they economic, political, or technological, that can affect a business’ or individuals ability to stay in their community.** No matter the tipping point or final straw, some communities across coastal Louisiana are facing challenges of retaining their tax bases which provide funding for critical local services and the types of investments in infrastructure that can reduce flood risk.

## SUSTAINABLE NATURAL ENVIRONMENT: IMPACTS TO THE ENVIRONMENT

Existing changes to the environment and those projected for the future are also creating challenges for the regulation and management of the state’s natural resources.

**Wildlife and Fisheries, “has an important role in responding to the coastal crisis by finding ways to make its properties and their services more resilient and sustainable and considering the influences of sea level rise, storm impacts, and subsidence on wildlife and fisheries resources, as well as recreational opportunities, within the state.” Louisiana Department of Wildlife and Fisheries**

Many of the activities occurring at the Department of Environmental Quality (DEQ), the Department of Natural Resources (DNR), or Wildlife and Fisheries (LDWF) depend on sampling, gauges, or monitoring stations located throughout coastal Louisiana. The vulnerability of these sites includes risk of damage from extreme weather and the loss of access to due long term changes in the environment. These sites collect data that informs environmental and community safety both directly following an event and through contributions to long-term databases and management decisions.

For example, disruptions from disasters can affect the ability to conduct inspections at facilities and the delay in response to environmental concerns. This occurred after Hurricane Laura in 2020 when two of DEQ’s five fixed air monitors in the Lake Charles area lost power as the hurricane came ashore and three others lost power the following day. This left the closest working air monitor seventy miles away in Lafayette. DEQ was able to position mobile air monitors later in the week and receive some data from the Environmental Protection Agency following a flyover. But according to the U.S. Coast Guard’s National Response Center, at least 50 pollution events were linked to Hurricane Laura, including a large fire at a chlorine facility, highlighting the risks posed to the environment and people from extreme weather.<sup>5</sup> The Advocate conducted a similar analysis in the days prior to Hurricane Ida’s landfall in 2021,



which suggested that the storm's predicted path across Louisiana included 590 sites that produce or store toxic chemicals could be in harm's way.<sup>6</sup>



PHOTO 1 FIRE AT A CHLORINE PLANT IN LAKE CHARLES FOLLOWING HURRICANE LAURA IN 2020

## AGENCY IDENTIFIED ADAPTATION OPTIONS

Adaptation actions are measures that can be taken to maintain or improve the ability of an agency to meet its mission in the face of the coastal crisis. These adaptations can take the form of policy changes, resource allocation, projects, and others. As the vulnerability assessments point out, the severity and frequency of environmental change is stressing the ability of state agencies to deliver for the residents of Louisiana and challenging them to adapt at a pace that can keep up with those challenges.

But, just as vulnerabilities presented by changes to Louisiana's coast crossed the four elements of resilience and pointed to consequences that cascaded throughout Louisiana, state agency resilience coordinators have begun to identify adaptation options that can address those varied needs. The following section provides a summary and examples of adaptation options proposed by state agencies.

## ROBUST BUILT ENVIROMENT: ADAPTATIONS FOR INFRASTRUCTURE AND ASSETS

**Information related to physical risk from extreme weather and persistent environmental change in the coastal area can immediately be applied to inform decisions related to the permitting, construction, maintenance, remodel, repair, or relocation of state-owned or operated assets.** The Louisiana Housing Corporation (LHC) has already begun including mandatory construction elements in some of its requests for proposals in order to increase the hardiness of housing stock. Requirements include specific siting and elevation guidelines, roofing standards, storm water management, flood-proofing, emergency power, and elevated mechanical systems. LHC also awards additional points for commitments by builders that adopt even more robust building techniques or materials or that pursue Enterprise Green

Communities Certifications. At Les Maisons De Bayou Lafourche, a resilient, affordable housing community in Lafourche Parish, impacts from Hurricane Ida were minimal in comparison to the devastation seen across the majority of the community.



PHOTO 2 LES MAISONS DE BAYOU LAFOURCHE, A RESILIENT, AFFORDABLE HOUSING COMMUNITY IN LAFOURCHE PARISH. PHOTO BY CLAIRE BANGSER

To address the highways, drainage structures, and bridges at risk from flooding and surge events, the Department of Transportation and Development has proposed updating the state hydraulic manual and incorporating resilience needs during the construction and maintenance of existing infrastructure. The state hydraulic manual is used to inform the design of roadways and hydraulic structures throughout the state, so they can adequately manage surface runoff from the roadway, roadside channels and streams crossing the project without causing flood or erosion damage to the project or property. The current hydraulics manual dates from 2011.

The Department of Environmental Quality identified the creation of permitting rules to constrain the siting of landfills, hazardous waste facilities, mine tailings, and other structures with the potential to pollute the environment or harm human health because of disaster impacts or chronic environmental changes.

**Efforts should be taken to fortify existing facilities to ensure continuity of service and reduce economic damages.**

Multiple state agencies suggested adaptations such as procuring backup generators, hardening existing facilities, constructing vehicle and equipment storage facilities away from areas of greatest risk, and only renting space outside of the 100-year flood plain to protect their facilities and assets. Because this risk is shared across agencies, a consolidated approach by the state could be a cost-effective way to produce guidance for renting, remodeling, and the new construction of state facilities.



## HEALTH, OPPORTUNITY, AND CULTURE FOR ALL COASTAL RESIDENTS: ADAPTATIONS FOR SERVICE DELIVERY AND SUSTAINING CULTURE

Recognizing the challenges of providing services to vulnerable residents in the aftermath of storms and other bouts of extreme weather along Louisiana's coast, agencies such as the Department of Children and Family Services, the Louisiana Workforce Commission, and the Office of Culture, Recreation, and Tourism proposed adaptations to improve health, opportunity, and culture for all coastal residents.

**The “no wrong door” model should be applied to all Louisiana residents seeking services after a disaster.** Many government programs operate on a “pull model” where those seeking services must seek out, apply, and “pull down” services from different providers to meet their needs. The Department of Children and Family Services is currently piloting a “no wrong door” model in Lafayette and St. Landry Parishes that would switch to a “push” model where the appropriate and qualifying services are “pushed” down from agencies to assist a person in need. In this system the entire community would be served by a single platform supported by highly coordinated community-based resources so that an individual would only need to interact with a single portal to obtain all of their food, clothing housing, utility, or other support services without having to navigate multiple state, local, and federal agencies. Applying this model of post-disaster support could not only enhance the ability to meet a family's basic needs like food, shelter, and medical care, but it could also be applied to federal post-disaster programs so that the burden of understanding and seeking out different programs is taken off of those who have been impacted and put into the hands of a coordinated set of government and nonprofit agencies.

**People must be mobile following a disaster; so too should their service providers.** The COVID-19 pandemic accelerated adaptations across government and the private sector, particularly as it pertains to staff ability to work remotely. These same adaptations should be utilized to facilitate service continuity following disasters by allowing staff to work from home or other locations if there are damages to their offices or the infrastructure supporting their offices. Similarly, clients of agencies seeking services should be able to receive those services based on their need and not their location. At the Louisiana Department of Health, Adult Day Health Care Centers and Program of All-Inclusive Care for the Elderly centers have allowed evacuated participants to receive services at their client's temporary location instead of at their home center. Other services can be provided through temporary, mobile sites that are easier to access for affected community members and are fully functional while offices may be closed. In the aftermath of Hurricane Laura in 2020 and still in the height of the COVID-19 pandemic, DCFS partnered with the Louisiana Office of Technology Services to run the Disaster Supplemental Nutrition Assistance Program (D-SNAP) virtually for the first time. Interviews for eligibility were conducted over the phone and disaster electronic benefit transfer cards and notices of decision were mailed directly to applicants to avoid in-person enrollment events and reach a disbursed population.

**Cultures and traditions need to be nurtured as environmental change fractures communities.** Another human aspect of a changing coast is the way that disasters and more gradual changes serve to unravel communities and their culture. Since 2019, the Folklife Program at the Office of Culture, Recreation, and Tourism has supported “Passing it On” and “Sense of Place and Loss” workshops to sustain the traditional cultures of coastal Louisiana and to explore the connections between art, tradition, and science to inspire advocacy and creativity in the face of land loss and cultural shifts.

Additional strategies to address the cultural aspects of the community resilience conversation are being developed through monthly online gatherings of the Bayou Culture Collaborative and their working groups.



## VIBRANT ECONOMIC ACTIVITY: ADAPTATIONS FOR ECONOMIC AND WORKFORCE DEVELOPMENT

Adaptation options suggested by Louisiana Economic Development (LED) and the Louisiana Workforce Commission are designed to combat the business and workforce recruitment and retention challenges and the stigmatization created by extreme weather; and to invest more heavily in the maturation of the water management and low- and no-carbon energy sectors.

**Louisiana's achievements to document, plan for, and implement projects to protect and restore the coast and build resilience should be more widely advertised.** Through partnerships with the Coastal Protection and Restoration Authority, the Water Institute of the Gulf, the Restore the Mississippi River Delta Campaign, local economic development organizations, and others, Louisiana could develop communications materials to promote the state's successes in implementing coastal protection and restoration measures. Similarly, businesses that do locate in higher risk areas of the coast should be introduced to the data and modeling available to help understand and anticipate current and future risks from land loss and coastal storms to help inform the design of their facilities and resilience plans.

**Disaster preparedness should also include businesses and coastal parishes.** State agencies that regularly interface with federal business and economic development organizations like the Small Business Administration, the Economic Development Administration, or the Department of Labor could provide trainings and services to improve the capacity of businesses to access federal programs in order to recover from disasters and support their workers. State agencies involved in economic development and workforce programs could also serve as resources and connectors for parishes and regional economic development organizations that are setting out to update long-term plans or resilience plans.

### **Continue to invest in the diversification of coastal economies.**

An economic impact study from 2017 indicated that CPRA investments of between \$630 and \$840 million per year would support 7,800 to 10,500 jobs each year, \$460 to \$620 million in wages, and between \$1.1 and \$1.5 billion in annual output.<sup>7</sup> This sizeable and growing water management economy is currently being supported by a joint effort by CPRA and LED

known as the Coastal Technical Advisory Center, or CTAC. CTAC's mission is to assist Louisiana-based, small businesses to obtain contracts with entities involved in the protection and restoration of the coast. LED has also championed projects in the green energy and low carbon energy sectors with \$16 billion in capital investment and 6 of the top 7 economic development announcements from 2021 in this arena.<sup>8</sup> LWC also proposed a "green energy committee" to work with employers and other partners to train the future workforce needed for the low-carbon economy.



## SUSTAINABLE NATURAL ENVIRONMENT: ADAPTATIONS FOR THE NATURAL ENVIRONMENT

Adaptations can help overcome challenges posed to natural resources management and their regulation. These can include attention to sampling locations and gauges, outreach and education efforts to local resource managers and users, and the incorporation of climate impacts into agency-funded research agendas.

**Evaluate monitoring locations and optimize for remote data transmission and the survivability of equipment through extreme conditions.** As certain locations of sampling or monitoring sites become less tenable with coastal change agencies can evaluate adjusting those locations or transitioning the gauges to include satellite data transfer capabilities to prolong the ability to collect data during events and as access becomes more difficult. Other gauges may need to be fortified to withstand harsher conditions.

**Serve as a resource to local parishes and users of the natural resources.** Agencies like LDWF can assist local governments with the development of contingency plans, improvements to coastal sustainability, guidance for how to minimize storm impacts and manage other environmental challenges by offering expertise, access to facilities to host workshops, holding professional meetings, and through hands-on demonstrations of best-available infrastructure design, operation, and habitat management.

**Environmental agencies can adjust their research agendas to more directly address impacts of coastal change and the challenges of the long-term sustainability of coastal habitats and resources.** Specific research on sea level rise, hurricane impacts and frequency, and other topics related to the environmental changes occurring along the coast could help inform decisions related to species abundance, population trends, and ecology.

# Moving Forward

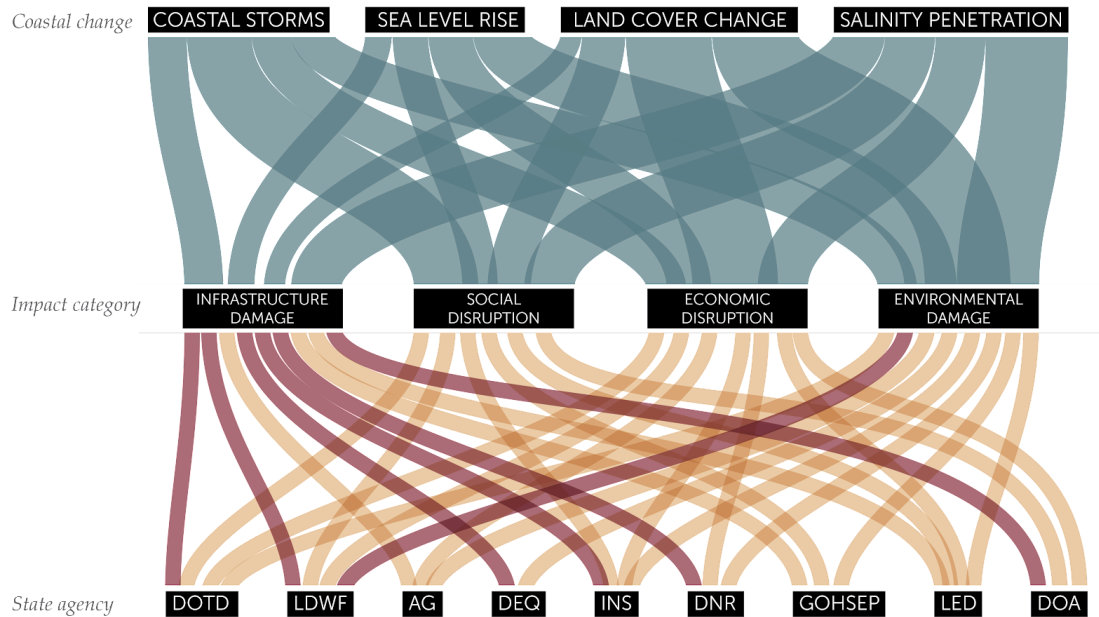


FIGURE 7 CASCADING IMPACTS OF THE COASTAL CRISIS

The following section contains recommendations intended to further advance the overall mission of building a more resilient state of Louisiana. It is built from experiences working across agencies and through interactions with Chief Resilience Officers around the country.

## CHALLENGES AND COMPLEXITIES

It is undeniable that while everyone along the coast is at risk from chronic and acute environmental risks, our most vulnerable and marginalized populations experience these impacts more severely and are less able to evacuate, recover, adapt, or relocate. And yet, when it comes to building resilience or mitigating risk the conversation primarily revolves around infrastructure investments. **As resilience work in Louisiana evolves, more attention should be focused on how these disaster events and changes to the environment affect people and the social services that support them. Adaptation options for building social and community resilience are simply not as plentiful or well-developed as those for enhancing the resilience of infrastructure. Continuing to develop the “people side” of community resilience must be a priority.**

A second challenge relates to the types of risks we are confronting. **Agencies and others are quick to recognize the urgency of adapting to acute extreme weather events, but they are less practiced and prepared to meet the slower-moving, chronic impacts of a changing coast. It is not just about elevating or hardening the structures we have today or maintaining continuity of services during and after a hurricane, but planning for where people, structures, and services will be in the future and how the demand for those services may change. This is extremely difficult both conceptually and operationally.**



**More effective adaptations will also require even more collaboration.** Projects led by a single agency and designed to mitigate against one type of hazard are growing inadequate to meet the needs of communities. Federal programs like FEMA's Building Resilient Infrastructure and Communities has already begun rewarding integrated resilience projects with multiple partners over more traditional projects with a single function like elevations. Projects of the future will need to deliver multiple benefits to people facing different types of overlapping vulnerabilities. Similarly, programmatic or policy interventions will need to straddle the purviews of two or more agencies, or insert themselves into the space between existing agencies. **State agencies successfully understood and articulated their relationship to the coastal crisis, but more work is needed to develop their appreciation for their relationship to each other and how those relationships can be leveraged for adaptation. Greater collaboration needs exist not just across agencies, but with impacted communities themselves.**

An example of a project that would provide multiple benefits to a community on sunny days and after disasters is from architectural, design, and interiors firm NANO in New Orleans. NANO's conceptual design for an integrated project at the Harrison Ave. Bridge that links Bayou St. John with City Park and includes exterior solar panels and charging stations, evacuation accessibility, a healthcare market, cooling stations and cool storage, vegetation and plantings that offer shade and water absorption, and water purification, storage, and supply. This single project would advance resilience across all four elements described in Figure 3.



FIGURE 8 HARISON AVE. BRIDGE BY NANO ARCHITECTURE & INTERIORS

Finally, **capacity is a fundamental constraint to building a more resilient state and coast.** The mantra of “do more with less” has produced a state workforce that struggles to meet their daily duties and responsibilities, becomes further stressed and stretched thin by near-constant disasters, and has little time or energy remaining to plan for the future or anticipate new challenges. Adaptation requires rethinking what you are doing today, planning for the future, and doing something new—all of which require human resources. Agencies that have been the most successful contributors to the Adaptive Governance Initiative have been those with support from their leadership and at least one other additional staff person assigned to assist. Building champions for resilience across state government from different perspectives and different sets of skills and expertise and understandings of what it means to serve people is critical to building long-term resilience but will require the capacity to do so.

## IMMEDIATE AND LONGER-TERM NEXT STEPS

### 1. Dedicated resources, expertise, coordination, and leadership are essential.

Planning for the future, anticipating challenges and opportunities associated with trends in environmental data, and championing a cohesive vision for a more resilient state of Louisiana will need to remain a priority for the state in the years to come. While this cross-agency work began in the coastal context, it is also abundantly clear that there are many other climate change related impacts that will be faced across Louisiana like extreme heat, drought, vector borne disease, and wildfire. As the state evolves its approach to building resilience cross government, it should do so through a multi-hazard and statewide approach. These efforts to improve governance and meet challenges across the state should also be shared with the public and informed by the public through a variety of accessible venues.

To adequately lead and advance these goals, it will be essential to establish permanent roles, structures, and processes within government. Through these established roles, structures, and processes, government agencies can be resourced, supported, and given the capacity to engage in both long term planning and the implementation of adaptation actions; a single, clear message and statement of priorities can be communicated across state government and to partners at the federal and local levels; and efforts to obtain and deploy funding for cross-agency or multi-agency projects and programs can be lead and coordinated.

### 2. Additional partners are necessary for achieving a more resilient Louisiana.

Bringing all state agencies to the table for building resilience is just the beginning of adapting to the impacts of climate change across Louisiana. Interdependencies between levels of government, people, and infrastructure abound, and the framework, principles, and processes of building resilience undertaken in the Adaptive Governance Initiative should be expanded to include additional partners throughout the state. Local governments are an obvious next set of partners and utilities and other major institutions like universities or school systems, religious denominations, and private sector entities.

### 3. Begin preparing receiving communities.

One immediate application of this multi-agency and ground-up focus on building resilience in coastal Louisiana should be toward vulnerable communities that fall outside of planned levee alignments, or that will face persistent land loss despite the implementation of ecosystem restoration projects. By working across state agencies, through federal programs, and with local governments and residents, resources to build more resilient communities can be mobilized to improve the infrastructure, ecosystem, economy, and or social fabric of communities.

A second key element of long-term resilience building in coastal Louisiana must also look beyond the planning window of the coastal master plan and ask, “How can inland communities prepare to receive, welcome, and provide opportunities

to coastal residents that are no longer able, or no longer wish to live with the threat of storm surge and other environmental risks?” The work of preparing infrastructure, providing housing, preserving culture, and readying the economy in places that face relatively fewer or more manageable environmental risks in future decades cannot be accomplished in the days or weeks after a major disaster or in year 49 of a 50 year plan. By working together and with communities, state agencies should endeavor to make investments to prepare and enhance the infrastructure, environment, social and cultural resources, and economy of receiving communities.

#### **4. Three Immediate Steps to Build a More Resilient State.**

Over two years of engagement with resilience coordinators, several agencies articulated overlapping challenges and needs related to their own agency’s capacity to adapt to the changing conditions of Louisiana’s coast. A longer list of recommendations has been prioritized into these three strategies that can immediately be acted upon.

##### **A. Integrate resilience criteria into Louisiana’s capital outlay process.**

State assets of all types have to be protected and upgraded to address today and tomorrow’s environmental risk. One place to begin to systematically ensure that state investments perform as expected for the entire life of the investment is to site them and design them with environmental risk in mind. Florida began requiring considerations of sea level rise in the construction of buildings in its coastal zone in 2020, New York and New Jersey have created “climate resilience design guidelines,” and recently North Carolina issued an executive order to “improve resilience of state buildings against flooding.”

##### **B. Adopt FEMA’s Enhanced State Hazard Mitigation Plan**

Louisiana currently has a standard approved State Hazard mitigation Plan (SHMP) that requires a thorough identification of existing hazards and prompts the development of projects to mitigate those hazards. Adopting an Enhanced State Hazard Mitigation Plan could increase the benefits of the hazard mitigation planning process and help reinforce the cross-agency nature of resilience building. Notably, Enhanced SHMP also make the state eligible for 20% of HMGP funding after declared disasters which is a substantial increase from the 15% offered under standard SHMPs. To receive enhanced status, states must document the timely, accurate, and complete applications, reports and analyses for all Hazard Mitigation Assistance projects; show a history of working across agencies and stakeholders to become more resilient; commit to statewide programs and capacity building; effectively use existing mitigation programs; and have the capacity to implement its own plan and support local and tribal governments in implementing theirs. This process must begin at least 12 months before expiration.

##### **C. Develop a more coordinated, strategic, multi-agency approach to managing resilience funding**

The paradigm shift occurring in the federal government from disaster recovery to a more pre-disaster mitigation or resilience focus needs to be met strategically by the state of Louisiana. While distinct federal programs have their own criteria and requirements, they often share similar goals and ultimately fund similar types of projects. Greater coordination at the state level regarding how each program can best be used to build toward holistic resilience and contend with future environmental conditions would allow for more strategic leveraging of funding sources and delivering higher impact, multi-benefit projects. This can begin with greater and more intentional collaborations between agencies that have a large role in recovery programs and those with a more pre-disaster, long range focus.



# Conclusion

As the state contemplates the degree of change projected for coastal Louisiana in the decades to come, singular natural disasters will also be joined by the cumulative effects of slower moving changes like salt water intrusion, habitat shifts, and land loss that will have additional, dramatic implications for even the most determined, prepared, well-resourced communities, and the healthiest ecosystems. In addition to coastal impacts, other environmental risks from climate change will manifest across Louisiana posing challenges for the state and its people in myriad ways. In the face of these challenges, Louisiana must establish structures, processes, programs, and projects that will promote a holistic resilience that crosses all of its inter-related systems and anticipates all environmental hazards.

Louisiana has led the nation in its response to the engineering challenges posed by the coastal crisis. Through ecosystem restoration projects and structural and nonstructural hurricane risk reduction projects, the Coastal Protection and Restoration Authority has systematically built a stronger, more sustainable coast. The time has come to more fully integrate and involve the other state agencies, local governments, and all others who can contribute resources and expertise to address the entirety of the social, environmental, economic, and infrastructure implications of the environmental challenges facing our coast and our state as a whole.

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## THE KRESGE FOUNDATION

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## Supporting Documents:

List of Participating Agencies and Resilience Coordinators

Agency Report Cards

Vulnerability Assessment Tool

Resilience Manual



# Resilience Coordinators

NOVEMBER 7, 2022

## Participating Agencies and Coordinators

Agency	Resilience Coordinator	Additional Staff
Agriculture and Forestry	Joey Breaux	
Children and Family Services	Terri Ricks	Gillian Addison, Cassandra Large
Public Safety and Corrections	Rhett Covington	
Culture, Recreation, and Tourism	Michael Ince	Maida Owens
Division of Administration	Jacques Berry	
Economic Development	Brad Lambert	
Environmental Quality	Jonathan McFarland	
Health	Mark Thomas	Christy Johnson, Debra Boudreaux
Housing Corporation	Todd Folse	
Insurance	Warren Byrd	
Natural Resources	Jason Lanclos	
Revenue	Luke Morris	
Transportation and Development	Patrick Landry	Billy Williamson
Veterans Affairs	Holly Talley	
Wildlife and Fisheries	Cole Garrett	
Workforce Commission	Lisa Williams	

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDAF

**Agency: Department of Agriculture and Forestry**

**Resilience Coordinator: Joey Breaux**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

Technical, financial and programmatic assistance to all agricultural landowners and producers of the State is among the highest priorities of the LDAF, with the Louisiana coastal zone and adjacent areas clearly recognized as subject to unique and often extreme conditions and challenges typical of our coastal region such as storm surge or weather induced tidal flooding, soil salination, land loss and sea level rise. To meet the challenges for agriculture in coastal LA regions, LDAF aids delivery of science-based agricultural conservation practices and programs, develops and supports coastal protection and restoration initiatives based on benefit/cost analysis representative of actual agricultural lands, processes, products, infrastructure, economic, and ecological benefits, as well as implementing coast wide wetland re-vegetation projects through a multi-agency partnership to enable a more resilient Louisiana coast. Through these efforts the LDAF, its Soil & Water Conservation Districts, and their private lands cooperators, work to ensure a productive future for coastal LA Ag enterprises such as rice, cattle, sugarcane, crawfish, alligator and forage production, and unhindered commercial navigation and port access along the entire LA coast.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future? In*

*which regions of the coast or parishes is your agency most impacted by coastal change? How*

*does vulnerability within your agency affect other government functions and services?*

The most significant impacts to the LDAF mission could occur within any of the major LDAF public services provided to promote, protect or enhance agriculture, forestry and soil and water resources but especially in the food storage and delivery sector.

Which programs, services, and physical assets are most vulnerable now and in the future? The Food Distribution Services administered by the LDAF/Office of Animal Health.

In which regions of the coast or parishes is your agency most impacted by coastal change? Jefferson, La in Jefferson parish is the location of the agencies most vulnerable cold storage facility.

How does vulnerability within your agency affect other government functions and services? If, in the event of natural disaster, food resources and food deliveries are redirected to impacted areas and relief workers, other agencies or services may be impacted in efforts to overcome localized food shortages, alternative food storage facilities, and additional trucks, drivers and stevedores.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDAF

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Additional Drivers	Near-term	USDA Food & Nutrition Services/FEMA	USDA, GOHSEP, LDOTD	Insufficient funds, too few properly licensed drivers
Generators	Medium-Term	USDA Food & Nutrition Services/FEMA	Integrated Food Service, International Food Solutions	Insufficient funds, inadequate storage facilities
fuel/fuel storage	Medium-Term	USDA Food & Nutrition Services/FEMA	USDA, GOHSEP, LDOTD	Insufficient funds
staff-admin/stevedores	Medium-Term	USDA Food & Nutrition Services/FEMA	USDA, GOHSEP, LDOTD	Insufficient funds, worker availability
Additional food supplies	Long-term	USDA Food & Nutrition Services/FEMA	Integrated Food Service, International Food Solutions	Insufficient funds
Alternative food storage	Long-term	USDA Food & Nutrition Services/FEMA	Integrated Food Service, International Food Solutions	Insufficient funds

How might your agency navigate or remove the identified roadblocks?

By continuing to seek additional funding sources that will support the adaptations, encouraging broader infrastructure maintenance and support for more widespread food and fuel storage and delivery, training, certification and competitive wages for necessary workers and drivers.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDAF

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

The introspective evaluation necessary for the vulnerability assessment was an excellent opportunity to recognize, reevaluate and reaffirm agency values, goals and objectives, and the relevance and significance of many of the LDAF's activities to the goals and objectives of our Coastal Master Plan.

Flood Protection, Natural Processes, Coastal Habitats: The LDAF and SWCD implementation of the coastal vegetative planting program, Inter-agency water resource and nutrient management through beneficial aquatic and vegetative nutrient assimilation as well as all other SWCD-led private lands Resource Management System conservation planning in low prairie, coastal freshwater/intermediate and brackish/saline tidal marsh continue to significantly support these three goals.

Cultural Heritage, Working Coast: The local conservation delivery process in coastal LA is not unlike that of any other region of the US, but the working relationships between owners, managers and users of our State's coastal private lands and the SWCDs and their state and federal partners is historic and strong. This relationship is often built on decades of trust-building and tract-specific conservation plan adaptations to best accommodate changing landscapes, and land-use intentions, with proper management of the supporting ecosystem being key. The people, the landscapes, land-uses and ecosystems remain unique and cultivating cross-governmental relationships necessary to continue these critical coastal conservation and resilience efforts into the future is the only way locally-led conservation initiatives can be expected to advance, and probably the only way they ever have.



# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DCFS

**Agency: Department of Department of Children and Family Services**

**Resilience Coordinator: Terri Ricks**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

DCFS provides the supports for ongoing need and emergency sheltering during disasters. It is a member of the Recovery Support Function 3 (RSF3) group in partnership with Louisiana Department of Health and Louisiana Department Of Education.

RSF3 Purpose: and Mission

Mission - The Health and Social Services RSF mission is for the State government to assist locally-led recovery efforts in the restoration of the public health, health care, and social services networks to promote resilience, health and well-being of affected individuals and communities. b. Functions 1) Restore and improve health and social services networks to promote resilience, health, independence, and well-being of the whole community 2) Establish a focal point for coordinating recovery efforts specifically for health and social services needs State of Louisiana Emergency Operations Plan 2014 State of Louisiana ESF 14-7 July 2014 Emergency Operations Plan 3) Establish an operational framework outlining how agencies plan to support health and social recovery efforts c. Roles and Responsibilities 1) The Department of Health and Hospitals and the Department of Children and Family Services have the primary responsibility for initiating, organizing, and coordinating all aspects of the Health and Social Services Recovery Support Function. 2) The support agencies for Health and Social Services are responsible for developing and maintaining plans, procedures and asset inventories to support the primary coordinator. Support agencies include, but are not limited to: a) Department of Education b) Louisiana State University c) Louisiana Board of Regents

The ongoing mission of RSF3 has been established to encompass more than just response and recovery efforts but provide linkages between needs during "blue sky" times as well as during disasters.

The ongoing mission is to restore basic health and social services functions; identify critical areas of need for health and social services, children and youth needs, as well as key partners and individuals with disabilities and others with access and functional needs and populations in short- term, intermediate, and long-term recovery. The mission of the Health and Social Services (HSS) Recovery Support Function (RSF) and the Louisiana (LA) RSF-3 is to assist locally led recovery efforts in the restoration of the public health (including behavioral health), healthcare and social services networks to promote the resilience, health and well-being of affected individuals and communities. The HSS RSF/LA RSF-3 is concerned with restoring the capacity, or assisting in the continuity of, and reconnecting impacted communities and displaced populations to essential health and social services, including services provided to children in schools and childcare settings. The HSS RSF/LA RSF-3 is concerned with disaster impacts to systems of health care, environmental health, behavioral health and social services including educational and other services delivered in schools and child care settings.

The Department of Children and Family Services recognizes the inequities that exist from marginalized communities. Our core values are to treat all people with dignity, compassion and respect, while providing effective service delivery with integrity. To this end, the purpose of the Diversity, Equity and Inclusion (DEI) Unit is to promote belonging, workforce wellness, equity and inclusion for all staff as well as the population served. The DEI Unit will work to create a culture of learning and inclusive excellence where staff members, support programs, and initiatives address the needs of diverse populations. In addition, our goal will consist of designing and leading diversity, equity and inclusion initiatives with equity at the center.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DCFS

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future?*

*In which regions of the coast or parishes is your agency most impacted by coastal change?*

*How does vulnerability within your agency affect other government functions and services?*

The agency's Mission is to work to keep children safe, helping individuals and families become self-sufficient, and providing safe refuge during disasters. As disasters expand their reach with coastal lands eroding, the impact on children, individuals and families will increase. A greater number of larger population areas will be at risk. Critical Transportation Needs (CTN) will increase as will the need for State CTN shelters.

The programs most needed from DCFS during disasters are sheltering and Disaster Supplemental Nutrition Assistance Program (DSNAP). This does not mean other services aren't needed during disasters as well. Every program at DCFS is impacted because the staff assigned to shelters and DSNAP activities must be covered by other staff not deployed. This reduces the number of available working staff and increases the workload of the remaining staff who are assisting clients outside their service area while deployed staff work at shelters.

Region 5 and Region 1 are at risk in the coastal areas.

One of the most significant affects on other government functions and services is the lack of ability to coordinate and find social service resources for sheltered individuals that transcends their existing situation through the emergency to a better situation through equitable services provided for diverse populations. SNAP benefits, for example, may not be just an emergency need, and inclusion of every individual in the assessment of ongoing need for food should be a part of the process of response, sheltering, and long-term recovery.

Most social service agencies are affected by disasters and ongoing issues with equitable access to services.

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
No Wrong Door Diversity, Equity, and Inclusion Strategy	Medium-term	State General Fund	Baton Rouge Chamber of Commerce, CASA of LA, LCTF, APHSA-EDI, Governor's Office of Indian Affairs, Pelican Center for Children and Families	Funding sustainability; capacity building; interagency capacity building/partnerships (DEI concept is not statewide as of yet)
No Wrong Door Poverty	Medium-term	State General Fund, Grant from Kresge	Baton Rouge Chamber of Commerce, CASA	Funding sustainability; capacity building;

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DCFS

Competency Strategy		Foundation and Consulting Contract	of LA, LCTF, APHSA-EDI, Governor's Office of Indian Affairs, Pelican Center for Children and Families, Communications Across Barriers	interagency capacity building/partnerships (DEI concept is not statewide as of yet), Statewide utilization, contract and procurement limitations, time for training
No Wrong Door People and Systems Infrastructure Strategy	Medium-term	State General Fund, FEMA reimbursement, Child Support Enforcement (CSE) Employment & Training, CSE Incentive, CSE 4D.	Louisiana Association of United Ways, United Us, LA 211, State Agencies, Community Based Organizations, Local governmental entities	Lack of statewide State Agency Program participation in the referral network and system. Lack of statewide enterprise funding support for state agency participation.

How might your agency navigate or remove the identified roadblocks?

Continue to form partnerships with local, state and federal agencies to implement and demonstrate the same or similar No Wrong Door service continuum throughout sunshine, response and recovery such as the one existing with DCFS and Department of Corrections. Develop greater understanding poverty to better understand the issues individuals and families in poverty face in responding to and recovering from disaster.

## D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

Coordinated efforts of Social Service partners at State Agencies, Federal Agencies, and Community Based Organizations providing resources will support the five master plan objectives.

Objective: Flood Protection: Increase equity in availability of housing by identifying where marginalized individuals have historically lived in high flood risk areas. This can be accomplished through the statewide use of a single statewide infrastructure model that allows state agencies to refer individuals based on assessments and eligibility available in the system for housing, financial literacy training, occupational training, home loan programs, etc.

Objective: Natural processes: DCFS Enterprise efforts toward Diversity, Equity and Inclusion; Poverty Competency; Systems and Infrastructure will support efforts to create sustainable coastlines.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DCFS

Objective: Coastal Habitats: DCFS Enterprise efforts toward Diversity, Equity and Inclusion; Poverty Competency;

Systems and Infrastructure will support efforts to preserve coastal habitats by developing resilience in all members of our communities so they can better respond and recover from disaster situations.

Objective: Cultural Heritage: Identification of marginalized individuals and communities such as native and black populations in rural Louisiana along the coast. Outreach for provision of benefits such as SNAP and DSNAP and coordination of resources on an ongoing basis. Data from the closed loop referral system that describes gaps between need and resources available in the community.

Objective: Working Coast: Equitable resource coordination is essential to developing a working coast. Training often requires additional supports such as social services benefits, transportation, child care, and other supports that facilitate training, job search or education. This requires coordination not just with other governmental agencies but also community providers.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: CRT

**Agency: Department of Department of Culture, Recreation and Tourism**

**Resilience Coordinator: Mike Ince**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

As an agency with multiple cultural and historical sites, that house artifacts and stories of the Louisianians it is critical we prepare and adapt to the formidable climate crisis we are experiencing. From Grand Isle State Park to the Cabildo Museum on Jackson Square where the Louisiana Purchase was executed our department is responsible for the identity and history of the State of Louisiana. Storm surge from increased hurricane activity and land subsidence threaten the many cultural assets the Department of Culture, Recreation and Tourism is responsible for protecting. To best represent those critical needs our office has leaned in on working with CPRA and our local parish and city governments with addressing the issues that face our state parks, museums, and cultural sites.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

The inability to protect or secure our state cultural sites and museums. Storm surge, wind damage, and the threat of fire all plague the core mission of our office. Which is to protect and curate our many historical sites and artifacts.

*Which programs, services, and physical assets are most vulnerable now and in the future?*

Grand Isle State Park, Jimmie Davis State Park, Bayou Segnette State Park, Fort Pike and Fort McComb (\$50 million renovation cost), Fontainebleau State Park, Cypressmore State Park, Scenic Byways program, The Cabildo and Presbytery Museums, Statewide Tourism, Seafood Promotion and Marketing Board etc.

*In which regions of the coast or parishes is your agency most impacted by coastal change?*

Jefferson Parish, Orleans Parish, Calcasieu Parish, St. Bernard Parish

*How does vulnerability within your agency affect other government functions and services?*

Threats to coastal parishes and state owned assets located within those parishes presents numerous obstacles and threatens both the cultural and the communities located adjacent to them. This threat puts an undue burden financially to the state and places state workers in harm's way while working to secure the cultural assets or historical sites before a hurricane or TS.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: CRT

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
State Park Wastewater		HB 1,	DOA, DEQ	State Park Wastewater
State Park Heritage Sites		HB 1, NTHP,	DOA, NTHP, Nat. End. Hum.	State Park Heritage Sites
LA State Museums Weatherization		HB 1, GOHSEP		LA State Museums Weatherization

How might your agency navigate or remove the identified roadblocks?

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

By first identifying our most critical assets and the threats posed to these cultural sites and artifacts we can begin to identify the inhibitors to protecting and preserving their place in our state. By protecting and shoring up sites such as Grand Isle State Park (one of a couple "coastal" state parks) we are in essence working to prevent further beach erosion from the island which further enables future beach and shore restoration projects. These actions preserve natural habitat for wildlife, and the seafood industry while providing Louisianians with a public asset that exemplifies the spirit of Louisiana. Our tourism industry and state identity are in numerous ways derived with our ability to live and adapt to life on or near the water. Our actions provide feedback in real time each year during hurricane season, therefore it is critical that our state agencies work together to implement the state coastal master plan and provide the best quality of life to our residents who's very way of life depends on it.

The **Louisiana Division of the Arts Folklife Program** partners with the Louisiana Folklore Society to offer strategies to help ensure Louisiana's cultural traditions are passed on to future generations. The collaborative offers a way to connect anyone interested in the human dimension, the cultural coast, and the impact of migration upon our culture. The collaborative supports Louisiana fully addressing the human dimension in environmental planning as stated in LA SAFE's strategy 5: Support Healthy Communities, Regional Culture, and Recreational Access to Nature.

Since 2019, the Folklife Program has supported Passing It On workshops to sustain the traditional cultures of coastal Louisiana. Sense of Place and Loss workshops explore the connections between art, tradition, and science to inspire advocacy and creativity in the face of land loss and cultural shifts.

While restoring the physical coast has received the most focus and funding, cultural concerns and the human dimension have received less attention. Seeing a need to address this gap in the community resilience conversation, the

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: CRT

collaborative offers monthly online gatherings to connect those interested in the human dimension and to raise awareness. Working groups are preparing recommendations to address this issue.



# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LED

**Agency: Louisiana Economic Development**

**Resilience Coordinator: Brad Lambert**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

Continued negative impacts along the Louisiana coast could impact LED's efforts to recruit and retain businesses. Whether it is land loss, sea level rise or damage from natural disasters, those factors can come into play in the business recruitment and retainment process. If companies view the risk of being in Louisiana as being "too high," they could choose not to locate in the state or choose to move their operations into another state. Companies might want to avoid physical risk, or actual damage from natural disasters. But even perceptions of potential risk are enough that some companies eliminate potential sites/location from consideration. Workforce availability along the coast might also be impacted for similar reasons, if workers eventually make decisions to move to "higher ground."

Lack of progress along the coast could influence future business decisions about Louisiana. And certainly a hurricane season like 2020 and 2021 could also continue to frustrate Louisiana residents and/or businesses or create doubt among individuals considering to relocate to Louisiana, potentially impacting the economic base and the future workforce.

To this point in time, Louisiana's coast has offered unique access to infrastructure and natural resources that remain attractive for certain industry sectors, despite the current and future challenges of land loss and hurricane storm surge (ports/maritime/trade; oil and gas exploration and production/support services; LNG; fisheries).

Lastly, LED can provide strategic direction to the state as it seeks to grow and diversify the economy and attempt to take advantage of new, lower-carbon opportunities (offshore wind, hydrogen, etc.).

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future?*

*In which regions of the coast or parishes is your agency most impacted by coastal change?*

*How does vulnerability within your agency affect other government functions and services?*

Continued negative impacts along the Louisiana coast could impact LED's efforts to recruit and retain businesses and help provide a trained and qualified workforce for the private sector.

- Businesses large and small in Louisiana are forced to deal with disruptions from extreme weather, can experience damages from storms, as well as face increased costs of doing business in the face of higher insurance premiums following a significant weather event.
- Relatedly, businesses in high-risk areas or perceived high-risk areas may also face challenges recruiting and retaining the workforce needed for their operations, especially if the community in which they are located is struggling post-storm to maintain services or quality of life amenities or if costs like flood insurance or property insurance outpace what they are able to afford.
- First-hand experiences with extreme weather, difficulties dealing with post-storm insurance issues or media attention following disasters can create negative perceptions of Louisiana that can impact business retention and recruitment.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LED

Risks to overall economic health of a community:

- Physical risks from extreme weather can also serve to compound other external forces (economic, political, technological, etc.) that can affect a business' ability to stay in business and grow in a community. As a result of changes to the economic landscape from this suite of issues, communities along the coast may face challenges maintaining their tax bases, which support critical local services and infrastructure (including flood risk reduction infrastructure).
- One particular type of a non-physical risk potentially impacting Louisiana's coast is "transition risk" — where global economy-wide shifts away from carbon-intensive energy sources and industrial processes could jeopardize certain companies, workers and communities.

LED has historically worked closely with ports in the state, including coastal ports such as Port Fourchon, which is often referred to as one of the premier energy services ports in the country. In addition, three of the seven domestic LNG export facilities operating in the U.S. are located in southwest Louisiana. Those facilities right now are playing a considerable role in providing natural gas to the continent of Europe in the aftermath of Russia's invasion of Ukraine and subsequent economic sanctions and impacts. Those three LNG facilities have a significant coastal presence as well.

A healthy and sustainable Louisiana coast helps retain the many economic activities that occur along our working coast.

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Pursue business recruitment and retention strategies to diversify coastal economies and capitalize on opportunities to attract lower-carbon ventures	Near-term	Existing LED budget	Regional and Local Economic Development Organizations	Lingering perceptions that Louisiana is an "oil and gas state" and must remain loyal to the oil and gas industry
Assist in building out the water management and green energy sectors and provide entry points for local and small businesses, from a vendor and supplier standpoint	Near-term	Existing LED budget	Coastal Technical Assistance Center, Nicholls State University, Regional and Local Economic Development Organizations, The Water Institute of the Gulf	Workforce and workload challenges
Partner with federal stakeholders and economic development	Near-term	Federal government, state government	Federal Emergency Management Agency, US Small Business	Government funding availability and resources available for

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LED

organizations to improve the capacity of businesses to recover from disasters by better accessing state and federal programs and more fully engaging in disaster planning			Administration, US Economic Development Administration, REDOs, GOHSEP, Office of Community Development, Louisiana Business Emergency Operations Center, Small Business Development Center network	this sort of work; changes in elected leadership can result in different priorities
Support coastal parishes and coastal economic development organizations in conducting resilience planning and long-term planning	Medium-term	Existing LED budget (Louisiana Development Ready Community program)	REDOs and EDOs, LaBEOC	Staff time to devote to this kind of effort, for both LED as well as the parishes and organizations
Pair businesses that do locate in coastal areas with CPRA, the Water Institute of the Gulf and others to provide best available data on current and future flood risks	Medium-term	Resilience funding?	CPRA, TWIG, National Flood Insurance Program	Staff time to devote to this kind of effort
Partner with CPRA, regional and local economic development organizations and support firms to develop communications materials to promote Louisiana's coastal adaptation measures	Medium-term	Resilience funding?	CPRA, REDOs and EDOs, support firms	Coordination of messaging

How might your agency navigate or remove the identified roadblocks?

LED seems to always be navigating roadblocks. An important factor would be having the ability to dedicate staff time and resources to focus on and partner on activities like these that could be considered outside of LED's core mission of creating jobs and economic opportunities for Louisiana workers and businesses.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LED

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

LED has spent considerable time the last few years working in this energy transition space, along with other state agencies such as the Louisiana Department of Natural Resources and the Governor's Office of Coastal Activities. We are helping to recruit companies and spread the word that Louisiana is an ideal place for renewable energy projects, given Louisiana's history with traditional forms of energy. LED remains an active participant on Louisiana's Climate Initiatives Task Force, which produced in early 2022 the first Climate Action Plan for a state in the Gulf South.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DEQ

**Agency:** Department of Department of Environmental Quality

**Resilience Coordinator:** Jonathan McFarland

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

DEQ will provide comprehensive environmental protection in order to promote and protect health, safety and welfare and be a respected steward of the State's environment.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future?*

*In which regions of the coast or parishes is your agency most impacted by coastal change?*

*How does vulnerability within your agency affect other government functions and services?*

The department may be unable to maintain continuous monitoring or respond promptly to environmental concerns due to inaccessibility during flood inundation or following land loss in coastal parishes.

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Promote adaptive stormwater management practices with subsidized funding offers	Near-term	CWSRF/NonPoint	Local governments	Lack of interest/funding
Promote wetland accretion by permitting assimilation projects	Near-term	Permittee	Permittee	Site Requirements
Create permitting rules that constrain locations for landfills, hazardous waste dumps, mine tailings, and toxic chemical facilities	Medium-term	Agency	Regulated Community	Time and fiscal impact

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DEQ

Remove invasive species and restore native species	Near-term	CWSRF/NonPoint	Local governments/NGOs	Lack of interest/funding
Design estuaries with dynamic boundaries and buffers	Near-term	CWSRF/NonPoint	BTNEP	Lack of funding
Promote water demand management measures(through water reuse, recycling, rainwater harvesting, etc.)	Near-term	CWSRF/NonPoint	Local governments	Lack of interest/funding

How might your agency navigate or remove the identified roadblocks?

Education and outreach

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

These efforts support the goal of improving flood protection, recreating natural processes in Louisiana's delta, and promote continued availability to commerce and industry.



# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDH

Agency: Louisiana Department of Health

Resilience Coordinator: Christy Johnson

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

The mission of the Louisiana Department of Health (LDH) is to protect and promote health and to ensure access to medical, preventive and rehabilitative services for all citizens of Louisiana. LDH has oversight responsibilities including public health and other direct service programs for citizens in need, such as, behavioral health, developmental disabilities, aging and adult services, emergency preparedness, and the Medicaid program. These programs, supports and services must be present at all times as necessary to meet the needs of citizens with minimal interruption in all types of emergency situations.

In responding to the coastal crisis, LDH must be prepared to maintain continuity of essential functions including personnel; maintaining vital records, systems, and equipment; maintaining property and/or being prepared to pivot to alternate work sites/relocation; and to assure that lines of communication are maintained internally and externally. The ability to quickly re-organize to assure a seamless service delivery system to adjust to meet changing needs and move with citizens of Louisiana during emergent events is vital. Proactive planning and implementation of strategies at present in response to the coastal crisis, allows LDH to assure that citizens of Louisiana do not experience disruption in services as a result of an emergent event.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future? In*

*which regions of the coast or parishes is your agency most impacted by coastal change? How*

*does vulnerability within your agency affect other government functions and services?*

Health Unit closures have occurred throughout the state due to flood and wind damages caused by Hurricanes Rita, Ike, Harvey, Laura and Delta. These closures have greatly affected the Office of Public Health's ability to meet the public health needs of its citizens. While health units in other parishes throughout the state have managed to come back on line after being closed for a month or less, the Cameron Parish Health Unit (Region 5) remained closed for over a year following Hurricane Rita and was closed nearly two years following Hurricane Ike. **While immediate mitigation has taken place, needed repairs have not yet began.** *(This may not be the case today.)*

Temporary flooding limits staff access to buildings to conduct business from an office setting and loss of equipment results in the inability to perform day-to-day operations. Moreover, loss of access to recipient historical files greatly impacts Office of Aging and Adult Service's ability to provide services. Individuals receiving services at Adult Day Health Care Centers (ADHC) and Program of All-Inclusive Care for the Elderly (PACE) would be unable to receive those services when building location is damaged. In addition, operations are limited for participants seeking services for Permanent Supportive Housing (PSH), Money Follows the Person (MFP), Serious Mental Illness (SMI) transitions and Nursing Facility admissions. In addition, when providers and support coordination agencies, our partners who work closely with us to serve participants, lose building access and/or equipment due to flooding, this results in their inability to provide services to participants. Regions 1, 2, 3, 4, 5, 9 and 10 have been most impacted by these occurrences. In most cases, staff have been allowed to work from home to continue operations. Also, nearby ADHC and PACE Centers

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDH

have allowed evacuated participants to receive services at their location instead.

Temporary flooding has caused damage to the Office for Citizens with Developmental Disabilities OCDD) state-owned properties located in Belle Chase (Region 1) and Leesville (Region 6) approximately appraised at \$500, 00 and \$705,000 respectively. Although the buildings are no longer in use, maintenance and upkeep are required for both. Once a storm passes and it is safe to enter the buildings, OCDD staff normally assess for damages and follow protocol for repairs.

Temporary flooding caused by increased storm surges often leads to road closures and dangerous traffic conditions which make transportation to office and other sites necessary to conduct operations impenetrable for the Office of Behavioral Health staff and other staff from other offices. Many areas of the state with key highways such as I-10 are at risk of flooding and storm surge. In addition, storm damage results in temporary or permanent loss of regional Medicaid Eligibility Offices, State Office buildings, computer equipment and services. The agency will have a budgetary impact to restore operations. Members will be forced to seek assistance at alternate locations.

LDH's role of Emergency Preparedness for the Office of Public Health is carried out via "ESF8" which is a network of public and private organizations such as hospitals, EMS, and other healthcare essential services. LDH's "Engineering Section" is a regulatory entity that monitors the 1277 licensed Public Drinking Water Systems in the state. ESF8 and Engineering do not directly provide essential services of hospital care, EMS transport, or drinking water. Rather, ESF8 and Engineering coordinate and interface with the owners and operators of essential services. Louisiana's infrastructure — healthcare and drinking water — are increasingly susceptible to catastrophic failure.

Facilities along the coastline tend to face increased risk of storm surge and hurricane winds causing coastal erosion. The International Building Codes for medical infrastructure have certainly changed over the years to keep up with changing threats, but regardless of the IBC changes, there is a cost of compliance and ongoing maintenance. Elevations and other semi-permanent fortifications of facilities are costly; and the range of cost proposals will vary amongst the facility types. The cost to maintain a readiness posture requires a sustainable funding source.

## C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Expand remote capabilities for regional staff. (OCDD)	Near Tem	State General Fund	OTS	Manufacturing delays of hardware.
Leveraging Appendix K flexibilities to minimize service interruption (OCDD)	Immediate	State General and Federal Funds	Centers for Medicaid and Medicare Services.	
Hybrid Work Schedule (Medicaid)	Near - term	N/A	N/A	Lack of electricity/internet services and/or work site

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDH

100% Telework (Medicaid)	Near- term	N/A	N/A	Lack of electricity/internet services
Shift work to non-affected regions including Customer Call Center duties (Medicaid)	Near - term	N/A	LDH Regional Offices	Workload burden on non-affected regions
Alternate work site- LDH offices (Medicaid)	Near - term	N/A	LDH Regional offices	Travel, lack of office space, computer equipment, work-life balance
Alternate Work site – Health Units (Medicaid)	Medium - term	N/A	OPH	Travel, lack of office space
<b>PLANNING</b> <u>CCW/ADHC</u> - Review Emergency Preplanning Procedures/Policies/ Forms for areas of improvement. (OAAS)	Present- January 2023		POC Development Team in OPTS.	No Roadblocks expected
<u>LT-PCS</u> - Review Emergency Preplanning. Development of Procedures/Policies/ Forms. (Update Emergency Plan Forms with primary and secondary plans for evacuation.) (OAAS)	Present- January 2023		POC Development Team in OPTS.	No Roadblocks expected
<b>EVACUATION PROCESS</b> <u>CCW/ADHC/LT-PCS</u> – Evacuation of participants that have no family or natural supports - Should be identified in the development of each participants' Emergency Plan. The Plan should include specifics as to evacuation site/location, transportation/phone numbers, equipment needed and who will	Present- December 2022		OBH DOTD EOC- Parish COA- Parish	Time needed to develop SC Resources and Training to identify emergency places/services for evacuation available by regions.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDH

help ensure goes with participant. Add to the LDH Website and link in OPTS. (OAAS)				
<b>POST EVACUATION FOLLOW UP</b> <u>CCW/ADHC LT-PCS</u> – Develop a procedure to identify and visit recipients who evacuate to general population shelters; evaluate need to move to a MSNS shelter. Have a hotline publicized by media when storms are coming? Links on LDH website to media, GOHSEP, parish EOCs, etc. with information related to available shelters, closures, evacuation, etc. (OAAS)			OPH EOC Governor LDH Press Team	Lack of/inability of Staff to travel to general population shelters to ID and evaluate clients. Client access to internet. Lag in current info on external sites.
<b>POST EVACUATION SERVICES</b> <u>CCW/ADHC/LT-PCS</u> - Agreements, Procedures, Policies in place to allow for exception to certain requirements in emergency situations. Formal policies to address services such as: home-delivered meals; virtual visits for well checks; ability for providers in other regions to provide services to evacuated participants; allowance for Spouses to serve as DSW; allowing services out of state without necessary prior			Policy Section	<u>LT-PCS</u> – Lack of available providers with the capacity to serve evacuees.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDH

approvals; identifying providers able to provide services temporarily in regions to which clients evacuate. (OAAS)				
<b>POST EVACUATION SERVICES</b> <u>Nursing Facility Admissions</u> – Procedures/Policies for nursing facility admissions in unaffected regions to assist with finding/approving admit of evacuated residents to other nursing facilities. (OAAS)			Policy Section	Limitation of space for Nursing Facility.
The increasing frequency of severe weather events will likely facilitate an increase in requests for assistance related to pumps to clear roads for access to healthcare; and buildout of temporary structures, aqua-dams, and sandbagging measures that would redirect flooding waters from entering a facility. (OPH)				
Facilities tend to add on and make changes to their building envelope to mitigate severe weather effects. There are approximately 1,500 healthcare settings in Louisiana of which 120 are acute care hospitals and 387				

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## Agency Progress Report: LDH

are nursing facilities. (OPH)				
Hazard Vulnerability Assessment, Return on Investment (ROI), current building codes, prevention and/or mitigation augmentation measures would be a complex consideration at the facility level when assessing impacts and shaping proposals for (potential) funding of these essential services. (OPH)				
Over the last 20 months, the investments already made in generators, aqua-dams, preparedness, and response contracts provided some relief from recent disasters. There are ongoing costs to review and monitor plans, upkeep caches, maintain generators, and maintain readiness contracts for staffing personnel. Stronger storms require consideration for extended post-storm effects such as how long a facility will be without power, water, or electricity and whether the extent of the storm damage (or coastal erosion, or extended flooding) will allow access for supplies to resource a facility's – or				



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community's – needs. (OPH)				
<b>Bienville Building:</b> Services would continue by those staff able to relocate or who would be working from home. (OBH)	Present – December 2022	State General Fund	OTS	Loss of electricity/internet services
<b>Galvez Parking Garage:</b> Services would continue by those staff able to relocate or who would be working from home. (OBH)	Present-December 2022	State General Fund	N/A	N/A
<b>ELMHS:</b> New facilities would need to be constructed long term and private facilities or jail based restoration would need to be utilize in the short term who would be working from home. (OBH)	Present-December 2022	State General Fund	N/A	<ul style="list-style-type: none"><li>• Loss of electricity/ internet services</li><li>• Facility inaccessible</li></ul>
<b>CLHS:</b> New facilities would need to be constructed long term and private facilities in other areas of the state would be contracted with to house the 120 patients in the short term. (OBH)	Present-December 2022	State General Fund	N/A	<ul style="list-style-type: none"><li>• Loss of electricity/ internet services</li><li>• Facility inaccessible</li></ul>

How might your agency navigate or remove the identified roadblocks?

The Department will need to address recruitment and retainment of qualified engineers in the face of the unique staffing challenges presented by the current job market.

## D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

The Department continues to build resiliency into our infrastructure throughout the state. This is also a consideration during maintenance of the existing infrastructure. Additional armoring is being provided to highways in the coastal zone as the loss of coastal buffers increases the threat of not only major storm surge events, but also exposure to greater wave action erosion and more frequent overtopping due to increasingly higher tides.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LHC

**Agency: Louisiana Housing Corporation**

**Resilience Coordinator: Todd Folse**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

Housing and supportive services around housing is essential to the stability of Louisiana families. The most vulnerable are those who are low to moderate income. Our mission is clear, to ensure that every Louisiana resident is granted the opportunity to obtain safe, affordable, energy efficient housing. LHC administers federal and state funds through programs designed to advance the development of resilient, energy efficient and affordable housing for Louisiana families. LHC is the driver of the housing policy for Louisiana and oversees the state's Disaster Housing Task Force.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future?*

*In which regions of the coast or parishes is your agency most impacted by coastal change?*

*How does vulnerability within your agency affect other government functions and services?*

What are the most significant potential impacts to my agency's mission? Loss of housing stock in vulnerable communities. Increased insurance cost is effecting affordable housing viability. Housing that at time of construction was not considered high risk has undergone a change due to climate change. Now what at one time was considered a safe location, is not vulnerable to coastal impacts and flooding and wind concerns.

Which programs, services, and physical assets are most vulnerable now and in the future? Housing stock located in low lying areas. Particular vulnerable are older developments that are now at risk in an extreme weather event.

In which regions of the coast or parishes is your agency most impacted by coastal change? Storm intensity is becoming more sustained further inland than in the past. Particular vulnerability is south of Interstate 10 and locations near water.

How does vulnerability within your agency affect other government functions and services? We cannot afford to lose any affordable housing. The need of housing for low to moderate income households are not being met; therefore, if we lose additional housing stock, this puts a strain on all available housing throughout the state. More expensive housing alternatives are the only options available following a weather event.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LHC

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Design construction above base flood elevation	Near-term	HUD-CDBG/DR,HOME, NDRC,Etc.	HUD	Community resistance, Nimby, cost
IBHS "Fortified" construction standards	Near-term	HUD-CDBG/DR,HOME, NDRC,Etc.	HUD	Community resistance, lack of certifiers, cost and contractor education
High efficiency construction	Medium-term	HUD-CDBG/DR,HOME, Etc.	HUD	Community resistance, lack of certifiers, cost and contractor education
Flood proofing	Medium-term	HUD-CDBG/DR,HOME, FEMA, Etc.	HUD, FEMA	Cost, contractor education

How might your agency navigate or remove the identified roadblocks?

Education of all stake holders, increased funding opportunities and investments in staff development. Our core mission will help eliminate the identified roadblocks.

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

Our Agency continues to build resiliency into our housing and infrastructure throughout the state. This is also a prime consideration during maintenance of existing housing and infrastructure. Additional codes and standards such as IBHS are being utilized in coastal zones as the loss of coastal buffers increases the threat of not only major storm surge events, but also exposure to greater wave action erosion and more frequent over topping due to increasingly higher tides.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DPSC

**Agency: Department of Public Safety & Corrections, Corrections Services**

**Resilience Coordinator: Rhett Covington**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

As coastal land loss progresses and hurricane storm surge moves further inland, facilities used for housing prisoners located along the coast will become more vulnerable. This vulnerability requires the evacuation of incarcerated individuals to other facilities which are not in harm's way in advance of projected storm impacts.

The Department's role in this function is to:

- 1) Provide guidance and assistance in safely evacuating offenders from state and local facilities during emergency events through the direction of the DPS&C Incident Management Center;
- 2) Decrease instances of local populations being housed in state facilities during evacuation events; and
- 3) Decrease reliance on state facilities and local jails south of the I-10/I-12 corridor to house state incarcerated adults.

This need to move the individuals around the state not only poses public and staff safety risks, but causes strain on staffing and facility resources. To safely transport these individuals requires the movement of transport vehicles and staff into high-risk areas, causing possible negative impacts on contraflow and evacuation. It also creates unique challenges for ensuring facilities are able to meet healthcare needs of an unfamiliar population in temporary holding areas, get individuals to previous scheduled doctors' appointments, present individuals for court orders, and continue services such as educational training, employment readiness, and reentry programming.

Additionally, as coastal facilities become more susceptible to damages from extreme weather, the amount of time and expense related to re-housing those inmates in unaffected facilities and rehabilitating damaged facilities and equipment creates additional burdens on the Department.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future? In*

*which regions of the coast or parishes is your agency most impacted by coastal change? How*

*does vulnerability within your agency affect other government functions and services?*

The most significant impacts to the mission of the DPSC are:

- 1) Flooding and loss of the Louisiana Correctional Institute for Women in 2016 and the length of time it is taking to replace that facility;
- 2) Lack of sufficient state facility capacity north of the I-10/I-12 corridor necessitating partnership with local sheriffs to house state offenders in their jails;
- 3) The age and state of repair of existing facilities and transport vehicles that make them more vulnerable to disaster events and less able to absorb evacuees;

# Adaptive Governance Initiative

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## Agency Progress Report: DPSC

- 4) Encourage improvements to locally owned and operated facilities along the coast used for housing incarcerated adults so that they and the equipment they contain are better able to withstand extreme weather events,
- 5) Make efforts to ensure the continuity of necessary appointments and services so that inmate transport for safety is less disruptive to their medical care, court proceedings, or job training or reentry programs when possible.
- 6) Gather information on population trends in coastal parishes annually to better inform decisions around facility utilization and placement.

When incarcerated adults near release, it is best practice to place them in employment prior to release in an area of the state they will live in once released. Additionally, it is best practice to house them geographically near the place they will live upon release to allow community providers and family to assist them in reintegrating successfully. Most of the state's population lives at or south of the I-10/I-12 corridor, so this complicates these reentry best practices. Programs and facilities that serve reentering populations in this region are vulnerable. Examples include but are not limited to Plaquemines Parish Detention Center, Lafourche Parish Jail, Terrebonne Parish Jail, and Nelson Coleman Detention Center in St. Charles Parish.

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Rebuild LCIW on higher ground and in compliance with new flood zone requirements to minimize reliance on local jails to house female incarcerated adults.	Near-term	State General Funds and FEMA	FEMA	increased costs of materials and labor and lack of funding
Repair/Rebuild outdated housing units at existing state facilities to maximize housing of adult males in state facilities less likely to be impacted.	Medium-term	State General Funds		funding and resistance from public on costs
Build new state prisons to decrease/ eliminate reliance on local jails to	Long-term	State General Funds		funding and resistance from local sheriffs due to potential lost

# Adaptive Governance Initiative

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## Agency Progress Report: DPSC

house incarcerated adults.				revenue and public on costs of such facilities
Provide education to local sheriffs about flood risk and encourage them to update their facilities to make them more storm resilient.	Near-term	State General Funds		costs of updating facilities and potential loss of state revenue for housing state offenders
Coordinate with receiving facilities so that inmate services such as health, legal, and employment are not disrupted due to transit and temporary housing. (Through temporary in-person staff increases or making access to telemedicine or tele-court available?)	Near-term	State General Funds		technology infrastructure (both need for updates and potential damage/disruption during emergency events); HIPAA and other limitations on information sharing and coordination
Gather information on population trends in coastal parishes annually to better inform decisions around facility utilization and placement.	Long-term	State General Funds		

How might your agency navigate or remove the identified roadblocks?

Our agency cannot navigate or remove funding roadblocks or sheriff resistance to loss of revenue resulting from fewer offenders being held in local jails. We can advocate for the state to appropriate the funding and educate sheriffs and the general public and work with our partners to make a transition from dependence on local jails to dependence on state facilities.



# Adaptive Governance Initiative

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## Agency Progress Report: DPSC

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

By reduced reliance on facilities below the I-10/I-12 corridor to house incarcerated adults in state custody (other than those in transitional work programs), local sheriffs can reduce economic losses from flooding by having smaller jails and fewer employees to be displaced. However, this also means that we will potentially offer less support to employers on or near the coast unless we keep transitional work programs viable in the region.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: Revenue

**Agency: Louisiana Department of Revenue**

**Resilience Coordinator: Luke Morris**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

The mission of the Louisiana Department of Revenue (LDR) is to fairly and efficiently collect taxes in order to fund state government activities. LDR is often called upon to assist taxpayers impacted by hurricanes and other storms, especially those that are negatively affected along Louisiana's coastline and surrounding areas. The industries most at risk if the Louisiana coastline is not properly maintained or restored are the commercial fishing industry, the oil and gas extraction industry, shipping/ports and petrochemical and the tourism industry. These industries account for hundreds of thousands of jobs and billions of dollars in total sales. When storms impact these and other industries along the coastline and surrounding areas, it is often necessary for LDR to extend tax filing and/or tax payment deadlines in order for taxpayers to locate records and prepare required information.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future?*

*In which regions of the coast or parishes is your agency most impacted by coastal change?*

*How does vulnerability within your agency affect other government functions and services?*

LDR has offices all across the state of Louisiana, including areas such as New Orleans and Lafayette. The New Orleans and Lafayette offices service a large majority of the coastal parishes. In the case of continued coastline deterioration or major storms, LDR may have to shut down the regional offices that service the coastal parishes for an extended period of time. Closure of these offices often makes it harder for taxpayers to reach the department and to file and pay taxes. The most significant potential impact on LDR's mission is that the agency may not be able to efficiently collect state tax revenue from groups of taxpayers who reside or work in the coastal areas. The state tax revenues collected by LDR are utilized to provide much needed public services within the state; therefore, reduced state tax revenues collected by LDR would result in budget cuts for state government as well as reduced availability of public services. These potential losses impact the entire state of Louisiana, not just the coastline.

# Adaptive Governance Initiative

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## Agency Progress Report: Revenue

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Reduction of income tax rates in exchange for repeal of the federal income tax deduction	Medium-term	Louisiana state general fund		
Ensure that LDR offices outside the coastal areas have enough room for employees located in coastal areas in case of storm or other coastal impact	Near-term	LDR budget		
Develop educational materials for taxpayers on various storm-related issues that may arise such as disaster sales tax rebates	Near-term	LDR budget		

How might your agency navigate or remove the identified roadblocks?

Proper education of taxpayers and the legislature of the dangers of future coastal loss and the need to incentivize coastal preservation and/or restoration.

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

LDR can continue to help support the goals and objectives of the state's Coastal Master Plan in a variety of ways. First, LDR can continue to extend filing and payment deadlines. When LDR extends deadlines to file returns or pay taxes after a hurricane or other storm, the agency provides the taxpayer adequate time to properly calculate the amount of tax due as well as time to gather documentation. Additionally, LDR can encourage the legislature to enhance current tax credits or provide new tax incentives specifically for coastal preservation and restoration purposes. These types of incentives may include the following:

1. Provide an increased percentage for R&D credit for research whose purpose is to preserve or restore the Louisiana coastline;
2. Make the R&D credits for coastal restoration or preservation research refundable and/or transferable;
3. Provide tax credits or other preferential tax items for donations to CPRA; and
4. Encourage utilization of carbon sequestration credits at the federal level.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DOTD

**Agency: Department of Transportation and Development**

**Resilience Coordinator: Patrick J. Landry**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

The Louisiana Department of Transportation and Development (DOTD) owns, operates, and maintains major transportation infrastructure throughout the coastal zone. DOTD also manages the Port Priority Program and oversees intermodal transportation in the state. The resiliency of this infrastructure is critical before, during, and after disasters: facilitating evacuations, maintaining emergency access, and expediting returns, thereby reducing socioeconomic impacts.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future? In*

*which regions of the coast or parishes is your agency most impacted by coastal change? How*

*does vulnerability within your agency affect other government functions and services?*

Highways, drainage structures, and bridges are the primary assets owned by DOTD. These structures are at risk from multiple flooding sources, with strong surge events presenting the most extreme risks in the coastal areas. The Department maintains its focus in investing in resilient infrastructure to maintain service to vulnerable coastal communities. However, the Department's role does not end at the edge of the highway.

Louisiana's economy is heavily dependent on the robust network of ports throughout the state. In particular, the ports in the coastal areas are vital to international commerce and offshore oil and gas production. The Ports & Waterways Division seeks to continuously improve the maritime transportation infrastructure for freight movement and river cruise industry. Maintaining services at these ports in the face of coastal changes is both difficult and important, requiring focus and adaptability.

These ports and their associated waterways are only one part of the interconnected system of multimodal commerce, working in conjunction with the aviation, rail, and commercial trucking industries to provide goods and services to the citizens of our state. Disruptions to these multimodal assets could have major economic impacts not only to the state, but to national and international interests, as well.

The Department is also tasked with funding and managing the Statewide Flood Control Program. When federal funding opportunities are expended, the Statewide Flood Control Program is left as the primary source of state funds for local flood control improvements. The increasing vulnerabilities in the coastal zone is expected to increase demand for these state dollars. With costs increasing and the state's fuel tax rates unchanged, the Department will be forced to decide between flood control improvements and much-needed transportation projects.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: DOTD

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Update of DOTD Hydraulics Manual will be undertaken in the very near future. The Hydraulics Manual is used to inform the design of roadways and hydraulic structures throughout the state.	Near-term	Agency Operating Budget	Federal Highway Administration (FHWA)	Staffing
Carbon Reduction Strategy	Medium-Term	Carbon Reduction Program and/or other FHWA formula funds	FHWA Metropolitan planning organizations (MPOs)	No known roadblocks identified to date

How might your agency navigate or remove the identified roadblocks?

The Department will need to address recruitment and retainment of qualified engineers in the face of the unique staffing challenges presented by the current job market.

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

The Department continues to build resiliency into our infrastructure throughout the state. This is also a consideration during maintenance of the existing infrastructure. Additional armoring is being provided to highways in the coastal zone as the loss of coastal buffers increases the threat of not only major storm surge events, but also exposure to greater wave action erosion and more frequent overtopping due to increasingly higher tides.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDWF

**Agency:** Department of Department of Wildlife and Fisheries

**Resilience Coordinator:** Annie Howard

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

LDWF owns and manages several coastal properties including Wildlife Management Areas (WMAs), Wildlife Refuges, and Conservation Areas not only to conserve the state's wildlife and fisheries resources and their habitat, but also to ensure that these properties' natural functions related to resiliency, such as storm surge attenuation and floodwater storage, are preserved. These properties also provide the public with an array of outdoor recreational opportunities from hunting, fishing, boating, canoeing/kayaking, hiking, birding, and more. LDWF is responsible for managing the state's fisheries resources to support both the Louisiana commercial and recreational fisheries through permitting/licensing, seasons/regulations, and species population monitoring. Following natural disasters, LDWF (Office of Fisheries) often administers relief grants and other financial assistance aimed at alleviating financial impacts to our hardworking commercial fishing community. In addition, LDWF's Wildlife Diversity Program is responsible for conserving Louisiana's rare, threatened, and endangered plant species, non-game birds, and natural communities, many of which are located within the coastal zone. LDWF also supports important programs such as the Louisiana Artificial Reef Program, hatcheries, and controlling invasive species. LDWF provides outreach and education programs such as boating and hunters safety. Finally, LDWF has an important mission in law enforcement. In the aftermath of major floods and hurricanes, LDWF's Enforcement Division plays a vital role in search and rescue operations, reprioritizing their responsibilities to maximize critical services rendered in this time of need. LDWF has an important role in responding to the coastal crisis by finding ways to making its properties and their services more resilient and sustainable and considering the influences of sea level rise, storm impacts, and subsidence on wildlife and fisheries resources, as well as recreational opportunities, within the state. To ensure success in maintaining and expanding opportunities to the users of the resources and to ensure continued sustainable populations of fish and wildlife species, the department must enhance citizen participation, create opportunities to inform the public and exchange ideas and concerns, and make decisions that include scientific, social and economic factors. Prudent stewardship of the state's renewable natural resources contributes significantly to the quality of life of the state's citizens, our state's overall resiliency, and to the economic well-being of the state. We serve almost two million direct users and countless others who benefit indirectly.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future?*

*In which regions of the coast or parishes is your agency most impacted by coastal change?*

*How does vulnerability within your agency affect other government functions and services?*

LDWF's mission is to manage, conserve, and promote wise utilization of Louisiana's renewable fish and wildlife resources and their supporting habitats through replenishment, protection, enhancement, research, development, and education for the social and economic benefit of current and future generations; and to provide opportunities for and to encourage the use and enjoyment of these resources in a safe and healthy environment both on land and on water. Both of these missions could be impacted by coastal change due to extreme fluctuations in environmental conditions LDWF's coastal properties and those species within our purview, will experience as coastal habitats continue to degrade. LDWF's most vulnerable physical assets now and in the future are buildings/offices and properties located within the coastal zone, including WMAs, wildlife refuges, office buildings, Grand Isle hatchery and lab, boat storage and more. Many of LDWF's services (i.e., permitting, licensing, tags, and educational programs) can be accessed/accomplished online or handled



# Adaptive Governance Initiative

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## Agency Progress Report: LDWF

further inland at headquarters in Baton Rouge, or other locations. Functions and services that LDWF coastal properties provide, such as hunting/fishing/wildlife viewing, may be impacted in the future depending on the extent of coastal change. Data collection such as LDWF's fishery independent data program, assessing fish populations, and other research may also be impacted by changing coastal conditions. Conservation programs may need to adjust as coastal change causes habitat and species shifts due to continued degradation. Changes may even need to occur in how different species are managed, based on future conditions. LDWF is impacted coastwide by coastal retreat, as the agency has offices, properties, and missions (i.e., CSAs, data collection, etc.) throughout the Louisiana Coastal Zone. For the most part, other government functions and services would not be impacted by LDWF coastal change vulnerability.

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
Procure portable back-up generators for use at coastal buildings and assets (i.e., offices, Grand Isle Lab, Oyster Hatchery, etc); update procedures to ensure staff can continue working if properties/buildings are inaccessible after storm events; Additions and/or repairs to buildings are constructed to hurricane standards; any opportunities to relocate field offices are evaluated	Medium-term	state funds; federal monies may be available for disaster response command centers	other state agencies or local governments that can utilize these properties/buildings	getting equipment to areas that may be inaccessible; funding; ability for staff to sample efficiently from a new location; moving staff and potentially impacting their commute/work schedule
Limiting repairs/new construction to those projects that are necessary for basic accessibility for the public; restricting the replacement of permanent buildings and/or only using portable buildings/structures,	Long-term	State funds	local governments; state parks	funding; public demand for more accommodations; funding requirements

# Adaptive Governance Initiative

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## Agency Progress Report: LDWF

when necessary				
Dedicating disaster relief funds to improve boating access points to ensure accessibility after weather events (e.g., floating docks, extended boat ramps; Develop outreach materials based on those facilities that deal with chronic flooding, accessibility issues that provide alternative locations for recreational activities; ensure that chronic flooding/accessibility issues are considered when evaluating locations for new access points/recreational areas	Long-term	federal disaster funds; federal funds; state funds	local governments; business owners; state agencies	Compliance requirements; supply chain issues with construction supplies; fuel costs; availability of access areas along the coast that will not be impacted by storm events/flooding
Continual evaluation and updating to ensure all sampling locations are relevant; record keeping to ensure changes in sampling locations are documented and communicated to those using the data; evaluating sampling efforts to ensure efforts are prioritized based on the direct use of the collected data (e.g., season setting vs. long term monitoring); Replacing old gauges with the most durable gauges available; transitioning to gauges with satellite data transfer capabilities;	Long-term	Federal funds; state funds	Federal agencies; universities; state agencies; non-profit organizations; local governments	Accessibility to sampling locations post disaster events; availability of employees in impacted areas; responsible entity to organize efforts; coordination with all entities that manage gauges in the area

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## Agency Progress Report: LDWF

continually assessing/improving gauge stations to optimize survivability of equipment and prolong data collection during events				
develop contingency plans/programs in the event a coastal facility is no longer available; Assist local Parishes with development, education, and contingency plans/programs for coastal sustainability, minimizing impacts from storms, or climate-based environmental changes through access to facilities for workshops, professional meetings, and hands-on demonstrations of best-available infrastructure design and operation and habitat management.	Long-term	Federal funds	Other state agencies and/or local governments that may have available facilities	A disaster event may cause an interruption in a program with no time to change plans; interest and participation in programs may change based on location
Incorporate climate-change, sea-level rise, frequency of hurricane impacts, and long-term sustainability of habitats as a component of research projects directed at species abundance, population trends, and ecology in research projects within the State Wildlife Action Plan, University cooperatives, and Department priority research.	Near-term	federal funds; Rockefeller; Ducks Unlimited; LWF Foundation, universities, and others	USFWS, USGS, Ducks Unlimited, Universities, and others	None beyond resistance from some researches based on variability in climate models

# Adaptive Governance Initiative

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## Agency Progress Report: LDWF

Continual evaluation of vegetation control needs in coastal areas	Long-term	federal funds, aquatic plant control fund	local governments	Funding; efforts may decrease in other areas if coastal changes result in an increased need for vegetation control
Ensure all back-up power equipment is functional for inland buildings and facilities; develop contingency plans for alternative sites to continue work (i.e., hatchery rearing sites) if necessary; construct enclosed building to store vessels and equipment out of harm's way from extreme hurricane systems	Long-term	Rockefeller; other state and federal funds; FEMA	Coordination with USFWS, DOTD, and others; local governments	Funding availability; difficult to plan for storm damage in Inland areas; property availability

How might your agency navigate or remove the identified roadblocks?

Constantly work to identify potential funding for efforts; coordinate with other local, state, and federal agencies to accomplish goals; make resiliency a priority within LDWF

## D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

LDWF supports the goals and objectives of the state's Coastal Master Plan including flood protection, natural processes, coastal habitats, cultural heritage, and working coast. Many LDWF properties include water control structures and/or feature other restoration strategies, as the agency is continuing to employ ways to manage flooding issues and combat habitat decline on its coastal properties. LDWF is working with CPRA on a variety of projects both on LDWF property and off to restore natural processes (e.g., PAL WMA Crevasse projects), and coastal habitats (e.g., Queen Bess and Rabbit Island Bird Habitat Restoration Projects). LDWF is part of the Louisiana Trustee Implementation Group (LA TIG), which consists of five state agencies, as well as four federal agencies, and is responsible for making funding decisions to restore injuries to a variety of natural resources as part of the BP oil spill in 2010. LDWF also provides habitats suitable to support an array of commercial and recreational activities coastwide through the oyster cultch and artificial reef programs. In addition, LDWF works closely with commercial fishing industries and others to identify ways of effectively managing the sustainable populations of fish and wildlife species, while also supporting these industries.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LDWF

Through the Louisiana Watershed Initiative, LDWF endeavors alongside OCD, CPRA, DOTD, and GOHSEP to maximize the natural functions of our states floodplains and other coastal habitats with the intention of increasing our state's resilience to natural disasters. These efforts are helping build cross-government coastal resilience with the development of updated Operational Guidance documents and the implementation of various State Projects and Programs. Via Memorandum of Understandings and the Fish and Wildlife Coordination Act, LDWF staff provides comments and recommendations to DNR, DEQ, and other state and federal permitting authorities including USACE and FERC. Through this and other technical assistance provided, we aim to ensure impacts to those coastal fish and wildlife resources which bolster our state's resiliency are avoided, minimized, and/or appropriately mitigated.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LWC

**Agency: Louisiana Workforce Commission**

**Resilience Coordinator: Megan Warde**

### A. Description of Agency Role

In the text box below, describe how your agency understands its role in responding to the coastal crisis.

With our mission of "we put people to work," that is what our agency strives to do. We work with employers and job seekers to provide programs and services to assist with workforce needs and remove barriers of employment to vulnerable populations. At LWC, we are dedicated to training Louisiana natives to ensure that we have the best trained local workforce to fulfill employers' needs on coastal projects.

While serving job seekers and employers in areas from recruitment, education and training, and unemployment services, there are many aspects of workforce that can be affected by a natural disaster or the future of coastal erosion.

From having to endure layoffs, replacing employees who have relocated, dealing with unemployment insurance, and training new employees, we are here to help employers endure the challenges that arise during these events.

Navigating Disaster Unemployment benefits, training for a new career, and finding new employment are all ways that we help individuals affected by natural disasters in their time of need.

### B. Summary of Coastal Change Impacts

In the text box below, provide a summary of your agency's vulnerability assessment findings, using the following questions as narrative prompts.

*What are the most significant potential impacts to my agency's mission?*

*Which programs, services, and physical assets are most vulnerable now and in the future?*

*In which regions of the coast or parishes is your agency most impacted by coastal change?*

*How does vulnerability within your agency affect other government functions and services?*

With 62 American Job Centers (AJCs) located throughout the state, we have many offices that are embedded into the coastal communities of Louisiana. This puts these centers at risk for current and future weather and coastal events, although with the increase in severe weather further inland, many are vulnerable.

With the American Job Centers being exposed to weather events, this also has the ability to affect programs that serve some of our most vulnerable populations at the physical offices. The local AJCs serve populations such as disabled veterans, out of school youth, formally incarcerated, basic skills deficient, or those with disabilities, as well as the unemployed, long-term unemployed, underemployed, etc. By providing education and training programs to these populations, as well as work searches and supportive services, barriers to employment are removed once they enter one of the programs at the local office.

Incumbent Worker Training Program (IWTP) - with IWTP funded out of the UI trust fund dollars, it is vulnerable after a large weather event when many individuals unexpectedly file for unemployment insurance, which reduces the dollars in the trust fund to support IWTP.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LWC

Employer and business services - many times, after a severe weather event, employers are left navigating uncharted territories when it comes to having to file mass layoffs, replacing key employees who have left town or are unavailable, or training staff to take on additional responsibilities. Assisting these employers when they don't know who to reach out to can impact their ability to handle their workforce needs.

On the Job Training (OJT)/Individual Training Accounts (ITA) - when a weather event takes place, existing OJT and ITA contracts may be compromised if the employee is no longer able to work or the employer is no longer able to employ the individual. Also, new OJT/ITA contracts are difficult to establish with employers who are unable to contact local and state staff housed in an affected area and individuals who are displaced from the community.

Rapid Response - with a large number of employers having to do mass layoffs, it is hard to identify who needs assistance after a disaster, and employers do not always know who to contact.

Louisiana Rehabilitation Services - locating individuals who were receiving services from LRS may be difficult if they are displaced.

The OWD grant programs that businesses had typically participated in were not also being contracted due to: contract expiration and lack of personnel to help re-contract, the OJT contract specialist at the AJC has retired so the duties are still being disbursed, employers overwhelmed with lack of employees and applicants, new business personnel were overwhelmed and unfamiliar with the programs, and in general a lack of program applicants interested along with the closure of the AJC.

When the coastal industry's hub in region 3 was directly hit by Hurricane Ida, buildings and telecommunication were destroyed so the ability to communicate resources through entities such as the AJC, LRS, & Social Services, etc. were strained with businesses as well as the community. The local community resource partners slowly found places to access the community but there was a noticeable lack in resource seeking engagement in the area.

Some businesses had closed down for good from the hurricane destruction and others have been struggling due to some employees evacuating the area entirely and did not come back, some left the industry to join in the construction industry's efforts with recovery with the enticement of increase in wages, the destruction of the business locations which needed/still need repair to operate, and since then there has been a noticeable lack in applicants in the area in general.



# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LWC

### C. Adaptation Strategies to Support Louisiana's Changing Coast

In the table below, list (in order of priority) the adaptation actions your agency has developed to address its identified coastal vulnerabilities.

Proposed Adaptation Action	Implementation			
	Timeline	Funding Sources	Partners	Potential Roadblocks
AJCs - Rent buildings that are outside of the 100 year floodplain	Long-term		AJCs	contracts in place, funding
AJCs - have generator backup in case of electricity loss	Medium-term		AJCs	funding
More mobile units to deliver program and service information to affected area	Long-term		LHRDI (Rapid Response)	funding, staffing
Partner with other agencies/programs to find job seekers via job fairs.	Near-term		DoC, Goodwill, Veterans, LRS	
Create disaster training programs for employer education pre-disaster	Near-term		LHRDI (Rapid Response), chambers	
Conduct trainings with locals to prepare in case of a disaster.	Medium-term		American Job Center Staff and LWDA Board Directors	staffing
Cross train LWDA board directors to track displaced participants from other areas.	Medium-term		American Job Center Staff and LWDA Board Directors	staffing
Create a "Green Energy Committee" to work with employers and train future workforce	Near-term		LCTCS; CPRA; Employers; Chambers; AJCs	

How might your agency navigate or remove the identified roadblocks?

Our agency will make an effort to work with our partners to ensure we are collaborating on projects to work on coastal resiliency. Whether it is creating new training programs, training those currently or formerly incarcerated, or proactively working with employers to give them the tools needed to address their needs, it is something that we can work on as an agency.

# Adaptive Governance Initiative

In accordance with Executive Order Number JBE 2020-19

## Agency Progress Report: LWC

### D. Supporting the Coastal Master Plan

Describe how your agency's efforts through the Adaptive Governance Initiative (conducting a vulnerability assessment, developing adaptation actions, and updating your strategic plan) support the [goals and objectives of the state's Coastal Master Plan](#). Also describe how your agency's efforts are helping build cross-government coastal resilience.

At Louisiana Workforce Commission, we have multi-faceted programs across our departments. With the mission of "we put people to work," we plan to make sure that Louisiana natives have all of the tools and training needed to remove barriers to employment.

We would like to make sure the local American Job Center employees and LWDA Board Directors have the training needed to navigate programs and services related to continue to fulfill program participants and employer needs after a disaster.

With training programs created and completed prior to coastal erosion and natural disasters, we can make sure that those who have needs from LWC, whether job seekers, program participants, or employers, will have the tools needed to navigate what to do after a storm or flooding hits the area. With employers and program participants in coastal areas, as well as storms affecting areas further inland, we can educate local staff, as well as employers, how to best offer and utilize our services needed during the aftermath of a weather event.

By partnering with other agencies and across the state, we can train the best local workforce to complete the work needed on coastal projects. Whether it's training for preventive coastal projects, or future green energy initiatives, we want the residents of Louisiana to have the ability to perform the work needed in this capacity. Working with CPRA, the LCTCS schools, and Department of Corrections, we can make sure that we are creating training programs and adjusting curriculum to meet the needs of employers.

Through our hard work and dedication to supporting the efforts of the Coastal Master Plan, we can partner with other entities and work together to ensure we are all doing our part to do what is needed to support coastal resilience.