Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

The Climate Change Adaptation Inventory is a compilation of climate adaptation activities and research initiatives taking place at the federal, state, and local levels in communities adjacent to the Gulf of Mexico. The inventory focuses specifically on those projects and efforts that address climate change or sea level rise. Research activities captured by the inventory are limited to those projects that have applications to coastal communities, particularly planning and development, land management, and socioeconomic initiatives.

The inventory's intended audience includes National Oceanic and Atmospheric Administration (NOAA) staff members, keystone partners, and stakeholders. It is a living document that will be maintained by the NOAA Gulf Coast Services Center. Addendums to listed project information and new project suggestions for the inventory are encouraged. To make a suggestion for the inventory, please contact Marian Hanisko at Marian.Hanisko@noaa.gov or (228) 818-8840.

Last update: November 21, 2011

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NOAA Gulf Coast Services Center

Title
2010 International Conference on Sea Level Rise in the Gulf of Mexico

Brief Description
The overall goal of the conference was to share knowledge among researchers studying the natural processes and human dimensions of sea level rise in the Gulf of Mexico and to engage decision makers and the public in planning for the future. The conference was designed to achieve the following objectives:

1) Provide a forum for presentation of the latest research on sea level rise, including the physical, biological, and human dimensions aspects of the phenomenon;
2) Renew, continue, and start new collaborations among researchers;
3) Inform government, industry, and the public on the nature, causes, and impacts of sea level rise;
4) Inform researchers and the public of the issues facing industry and government regarding sea level rise; and
5) Examine, compare, and consider new policy and regulatory frameworks impacting how society copes with sea level rise.

Target Audience
Scientists, local elected officials, planners, attorneys, natural resource managers, education, outreach, and extension specialists

Website
www.sealevelrise2010.org/index.htm

Point of Contact (POC) Name
James Gibeaut, Harte Research Institute, Texas A&M University–Corpus Christi

POC Phone
(361) 825-2060

POC E-mail
james.gibeaut@tamucc.edu

Partners
British Consulate Houston, Rice University,
Harte Research Institute, Texas A&M University–Corpus Christi,
The Gulf of Mexico Foundation,
U.S. Environmental Protection Agency

Type of Resource
Conference

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Complete

Date
March 2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Adaptation Planning

Brief Description
This page on the Florida Department of Economic Opportunity, Community Planning and Development website explains what it means to designate an area as an "adaptation action area." Use of this designation may allow local governments to consider coastal management policies that improve resilience to coastal flooding. The web page explains impacts of sea level rise and suggests adaptation planning strategies that are categorized as protection, accommodation, and retreat.

Target Audience
Local elected officials, planners

Website
http://www.floridajobs.org/community-planning-and-development/programs/technical-assistance/community-resiliency/adaptation-planning

Point of Contact (POC) Name
Julie Dennis, Department of Economic Opportunity

POC Phone
(850) 717-8478

POC E-mail
Julie.Dennis@deo.myflorida.com

Partners
Florida Department of Economic Opportunity

Type of Resource
Website, regulations

Project Category
Community Adaptation

State
Florida

City or County

Status
Complete

Date
March 2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Adaptation to Climate Change in the Houston-Galveston Area: Perceptions and Prospects (A Report to the Houston-Galveston Area Council)

Brief Description
The Houston-Galveston Area Council (H-GAC) created a panel to examine the impacts of climate change in the Houston-Galveston region. In 2008, this H-GAC "Foresight Panel on Environmental Effects Report" outlined the effects of climate change and made adaptation recommendations for regional constituents. The project and report referenced here were initiated to explore in more detail some of the issues and questions raised during the Foresight Panel process. The objectives of this project were to further consider the impacts of climate change in the area and the utility of adaptation as an alternative solution, and to examine the responsiveness of the constituents to the Foresight Panel report.

Target Audience
Local elected and appointed officials, city and county staff members, members of the H-GAC

Website
http://bush.tamu.edu/research/capstones/mpsa/projects/2009/AdaptionToClimateChange.pdf

Point of Contact (POC) Name
Dr. Eric Lindquist, Project Advisor
Institute for Science, Technology and Public Policy
Texas A&M University

POC Phone
(979) 862-3857

POC E-mail
elindquist@bushschool.tamu.edu

Partners
Bush School of Government and Public Service, Texas A&M University, Houston-Galveston Area Council

Type of Resource
Adaptation Plan

Project Category
Community Adaptation

State
Texas

City or County
Houston-Galveston

Status
Complete

Date
May 2009

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Adapting to Climate Change through the Integration of Land Use Planning and Hazard Mitigation in Coastal Communities: Mandeville, Louisiana

Brief Description
The community targeted in this project is Mandeville, Louisiana, located on the north shore of Lake Pontchartrain in St. Tammany Parish. The city elevation is relatively low, and the risk of flooding from both storm surge and rain events will only increase with climate change. At the same time, the population is expected to increase. Our project will provide the community of Mandeville with the information it needs to create a long-term plan that incorporates sea level rise into its decision making. This will allow Mandeville to grow sustainably and resiliently.

Target Audience
Local elected officials, planners

Website

Point of Contact (POC) Name
Melissa Daigle, Legal Coordinator
Louisiana Sea Grant

POC Phone

POC E-mail
Mtrosc2@tigers.lsu.edu

Partners
Louisiana Sea Grant College Program, City of Mandeville

Type of Resource
Adaptation Plan

Project Category
Community Adaptation

State
Louisiana

City or County
Mandeville

Status
Ongoing

Date
October 2010

Funding Source
Sea Grant Coastal Communities Climate Adaptation Initiative (CCCAI)

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Adaptive Decision Making for Sea Level Rise on the Gulf Coast

Brief Description
Halcrow is currently developing tools to facilitate the rapid assessment of flood risks under alternative scenarios, alongside tools to support a decision-pathways approach to sea level rise adaptation planning. Understanding lead times, risk reduction performance, and cost-effectiveness of option combinations allows decision makers to consider potential alternative responses under various sea level scenarios.

Target Audience
Local elected officials, planners, floodplain managers, emergency managers

Website

Point of Contact (POC) Name
Adam Hosking, Halcrow, Inc.

POC Phone
(813) 876-6800

POC E-mail

Partners
Halcrow, Inc.

Type of Resource
Decision support tool

Project Category
Community Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Assessment of Sea Level Rise in Coastal Mississippi

Brief Description
This assessment focuses on the sea level rise vulnerabilities of Mississippi's three coastal counties. The document provides a range of sea level rise that coastal communities in Mississippi are likely to experience in the future. It also discusses potential impacts to communities and habitat. Mitigation strategies are also presented.

Target Audience
Local elected officials, planners, floodplain managers, emergency managers, natural resource managers

Website
http://www.dmr.state.ms.us/CMP/CRMP/pdfs/2011-slr-final.pdf

Point of Contact (POC) Name
Tina Shumate

POC Phone
(228) 523-4123

POC E-mail
Tina.Shumate@dmr.ms.gov

Partners
Mississippi Department of Marine Resources and Eco-Systems, Inc.

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Mississippi

City or County

Status
Complete

Date
July 2011

Funding Source
Gulf of Mexico Alliance

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Charlotte Harbor Regional Climate Change Vulnerability Assessment

Brief Description
This is a six-county assessment that examines the past and current climate in the Charlotte Harbor, Florida, region in conjunction with three scenarios of climate change through the year 2200. These scenarios focus on various levels of mitigative action (low, medium, and high) that are undertaken to reduce human influence on climate change.

Target Audience
Local elected and appointed officials, planners, floodplain managers, natural resource managers, economists, tourism professionals

Website
www.chnep.org/NEP/agendas-2010/CAC/ClimateChangeVulnerabilityAssessment.pdf

Point of Contact (POC) Name
Dr. Lisa B. Beever, Director
Charlotte Harbor National Estuary Program

POC Phone
(239) 338-2556

POC E-mail
lbeever@swfrpc.org

Partners
Charlotte Harbor National Estuary Program
U.S. Environmental Protection Agency (EPA)
Southwest Florida Regional Planning Council

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Florida

City or County
Charlotte Harbor

Status
Complete

Date
February 2010

Funding Source
U.S. Environmental Protection Agency

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
City of Punta Gorda Adaptation Plan

Brief Description
This project builds upon a Charlotte County–Punta Gorda Metropolitan Planning Organization (MPO) study addressing sea level rise implications for infrastructure. The information developed in the climate change adaptation plan will be applied to the selected city to evaluate its overall climate-change vulnerability "score." With public participation, mitigation strategies and adaptation techniques will be identified and a process for implementing identified actions will be developed. The plan will be available for other cities to tailor to their own circumstances.

Target Audience
Local elected and appointed officials, planners, floodplain managers, natural resource managers, economists, tourism professionals

Website
www.chnep.org/projects/climate/PuntaGordaAdaptationPlan.pdf

Point of Contact (POC) Name
James W. Beever III and Lisa B. Beever

POC Phone
(239) 338-2556

POC E-mail
lbeever@swfrpc.org

Partners
Southwest Florida Regional Planning Council, Charlotte Harbor National Estuary Program, City of Punta Gorda, Florida

Type of Resource
Adaptation Plan

Project Category
Community Adaptation

State
Florida

City or County
Punta Gorda

Status
Complete

Date
November 2009

Funding Source
U.S. Environmental Protection Agency

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Climate and Resiliency Engagement Panel (C-REP)

Brief Description
The National Oceanic and Atmospheric Administration (NOAA) formed the Gulf of Mexico Regional Collaboration Team (GoMRCT) to address regional issues. GoMRCT recognizes the need to identify priorities and improve the responsiveness to local and regional climate-related priorities through stronger engagement with constituents in the region. C-REP serves as the primary mechanism for NOAA GoMRCT to receive regional direction on this topic. C-REP will play a vital role for GoMRCT by providing input and guidance to address regionally relevant climate and resilience issues that impact the Gulf of Mexico's built and natural environment. The 30-member C-REP is composed of individuals from the private sector, state agencies, academic institutions, federal agencies, and nonprofit organizations. Invited members represent each of the five Gulf of Mexico states.

Target Audience
Local and regional elected officials; state and federal education, outreach, and extension (EOE) specialists; decision makers

Website

Point of Contact (POC) Name
Matthew Capps, NOAA Climate and Resiliency Engagement Specialist
LaDon Swann, Director, Mississippi-Alabama Sea Grant Consortium
Buck Sutter, Team Lead of NOAA Gulf of Mexico Regional Collaboration Team

POC Phone
(251) 545-1909 – Matthew
(228) 818-8841 – LaDon

POC E-mail
mcapps@gulfquesteoe.org
swanndl@auburn.edu
Buck.Sutter@noaa.gov

Partners
Mississippi-Alabama Sea Grant Consortium
NOAA Gulf of Mexico Regional Collaboration Team
NOAA Engagement Program
NOAA Coastal Storms Program
Gulf of Mexico Alliance Resilience Priority Issue Team

Type of Resource
Workgroup

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County
NA

Status
Ongoing

Date
October 2009–present

Funding Source
NOAA Gulf of Mexico Extension, Outreach and Education (EOE) Program
Mississippi-Alabama Sea Grant Consortium, and GulfQuest

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Climate Change and the Florida Keys

Brief Description
This study provides alternative estimates, using scenario-planning techniques, of the medium- and long-term socioeconomic effects that may arise from climate change in the Florida Keys. The researchers used four global scenarios from a 2000 report by the Intergovernmental Panel on Climate Change (IPCC); however, the scenarios for the Keys were updated based on scientific developments since 2000. Projections for the Keys were developed for each scenario looking at population trends, income, remaining land, coral cover, and total income. A series of policy recommendations are included at the conclusion of the report.

Target Audience
Coral reef managers, policy-makers, residents

Website
http://sanctuaries.noaa.gov/science/socioeconomic/floridakeys/climate_change/welcome.html

Point of Contact (POC) Name
Billy Causey, Regional Director
Florida Keys National Marine Sanctuary

POC Phone

POC E-mail
billy.causey@noaa.gov

Partners
Socioeconomic Research and Monitoring Program, Florida Keys National Marine Sanctuary Program (FKNMS)
National Oceanic and Atmospheric Administration (NOAA)

Type of Resource
Publication, policy

Project Category
Community Adaptation, Habitat Adaptation

State
Florida

City or County

Status
Complete

Date
2010

Funding Source
NOAA 's Coral Reef Conservation Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Climate Change and Water Management in South Florida

Brief Description
The intent of this report is to focus on climate change at the regional level by providing an overview of how it may affect South Florida's resources. The paper includes an analysis of the potential threats of climate change and sea level rise to the area's water supply, flood control, coastal ecosystems, and regional water management infrastructure. Descriptions of the potential impacts of climate change on South Florida's water resources are based on the best-available science combined with the collective experience and best professional judgment of district staff members.

Target Audience
Local elected officials, planners, natural resource managers

Website
http://research.fit.edu/sealevelriselibrary/documents/doc_mgr/447/South%20Florida%20Water_Management_&_CC_-_SFWMD_2009.pdf

Point of Contact (POC) Name
Interdepartmental Climate Change Group
South Florida Water Management District

POC Phone

POC E-mail

Partners

Type of Resource
Publication

Project Category
Community Adaptation

State
Florida

City or County

Status
Complete

Date
2009

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Climate Literacy Partnership in the Southeast (CLiPSE)

Brief Description
Climate Literacy Partnership in the Southeast (CLiPSE) is developing the foundation of a partnership for improving climate literacy in the Southeast U.S. The target audience includes children and adults being reached through formal and informal learning environments. The project is enabling the regional population to make informed climate change-related decisions. The project is identifying and engaging strategically positioned organizations and individuals to develop a regional partnership with a shared vision and effective relationships and connections. It is identifying target groups; determining their understanding of climate change and its local impacts; cataloging related educational materials; creating workshops, providing training and professional development; and pilot-testing pre-existing key educational resources.

Target Audience
K-12 and informal education audiences

Website
http://www.clipse-project.org/index.html

Point of Contact (POC) Name
Karen McNeal, Assistant Professor
Department of Geosciences

POC Phone
(225) 578-6283

POC E-mail
Ksm163@msstate.edu

Partners
National Science Foundation, Mississippi State University,
Jackson State University, University of Mississippi, University of Alabama in Huntsville

Type of Resource
Workgroup

Project Category
Community Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County
Coastal counties in each state

Status
Ongoing

Date
2010

Funding Source
National Science Foundation

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Climate Perception Study

Brief Description
The Gulf Sea Grant Programs in conjunction with NOAA's Coastal Storms Program are sponsoring a climate perceptions study that will include focus groups and telephone surveys of coastal residents in all five Gulf states. Although this is not a needs assessment, it will provide relevant, local information about climate perceptions that will inform the messaging efforts of the larger Climate Community of Practice. Survey experts from LSU will be working with the project planning team to design focus group and survey questions, conduct telephone surveys, and compile results at the conclusion of the study.

Target Audience
General public and coastal decision-makers

Website

Point of Contact (POC) Name
Chuck Wilson, Executive Director Louisiana Sea Grant College Program

POC Phone
(225) 578-6283

POC E-mail
cwilson@lsu.edu

Partners
Gulf of Mexico Sea Grant Programs
NOAA Coastal Storms Program
Climate Community of Practice

Type of Resource
Survey, perceptions study

Project Category
Community Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County
Coastal counties in each state

Status
Ongoing

Date
January 2011 – December 2011

Funding Source
Gulf of Mexico Sea Grant Programs
NOAA Coastal Storms Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Comprehensive Southwest Florida/Charlotte Harbor Climate Change Vulnerability Assessment

Brief Description
This report assesses five scenarios of climate change through the year 2200. These scenarios include a condition that involves a future in which mitigative actions are undertaken to reduce the human influence on climate change; a 90% probable future predicted by the Intergovernmental Panel on Climate Change; a 50% probable future predicted by IPCC; a 5% probable future predicted by the IPCC; and a worst case scenario in which no actions are taken to address climate change. This report also assesses significant potential climate changes in air and water and the effects of those changes on climate stability, sea level, hydrology, geomorphology, natural habitats and species, land use changes, economy, human health, human infrastructure, and variable risk projections, in southwest Florida.

Target Audience
Local elected officials, economic development professionals, natural resource managers, planners, tourism professionals

Website
http://www.chnep.org/projects/climate/ClimateChangeVulnerabilityAssessment.pdf

Point of Contact (POC) Name
James W. Beever III
Southwest Florida Regional Planning Council

POC Phone
(239) 338-2550, ext. 224

POC E-mail
jbeever@swfrpc.org

Partners
Southwest Florida Regional Planning Council and the Charlotte Harbor National Estuary Program

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Florida

City or County
Polk, Hardee, Sarasota, Desoto, Charlotte, and Lee Counties

Status
Complete

Date
2008

Funding Source
U.S. Environmental Protection Agency

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Confronting Climate Change in the Gulf Coast Region: Prospects for Sustaining our Ecological Heritage

Brief Description
This report examines the potential impacts of climate change on Gulf Coast ecosystems. It is designed to raise awareness about climate change and broaden public understanding of its potential impacts and solutions. The report is written for the public, state and national policymakers, and business leaders.

Target Audience
The public, policy makers, business leaders

Website
www.ucsusa.org/gulf/gcchallengereport.html

Point of Contact (POC) Name
Robert R. Twilley

POC Phone
(225) 578-6431

POC E-mail
rtwilley@lsu.edu

Partners
Union of Concerned Scientists and the Ecological Society of America

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Complete

Date
2001

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Developing a Barrier Island Geohazards Map: Galveston Island, Texas

Brief Description
The Galveston Island Geohazards map shows areas that vary in their susceptibility to geological processes such as sea level rise, land subsidence, erosion, and storm surge flooding. Areas at imminent risk include existing critical habitats such as estuarine wetlands, freshwater wetlands, and the beach/dune system. Future risk areas include areas of uplands projected to become critical environments in 60 years. The island core unit has a low hazard potential because it is relatively high in elevation and interior to the island making it less susceptible to geohazards than other parts of the island.

Target Audience
Natural resource managers, planners, developers

Website
www.beg.utexas.edu/coastal/GalvHazIdx.php

Point of Contact (POC) Name
James Gibeaut, Harte Research Institute, Texas A&M University

POC Phone
(361) 825-2060

POC E-mail
James.gibeaut@tamucc.edu

Partners
Texas A&M University and the University of Texas at Austin

Type of Resource
Map

Project Category
Community Adaptation, Habitat Adaptation

State
Texas

City or County
Galveston Island

Status
Complete

Date
2007

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Developing a Climate Change Community of Practice

Brief Description
This effort brings extension, outreach and education (EOE) experts together to identify the potential economic, social, and ecological impacts of sea-level rise. Workshops provide participants with current, science-based information about the rate of SLR across the Gulf Coast, anticipated impacts to the natural and built environments, and practical tools for communicating risk to constituents. The goal is to establish a long-term community of practice among EOE specialists and insure continued information exchange on sea-level rise and other climate and coastal hazard issues.

Target Audience
Federal and state education, outreach, and extension (EOE) specialists and decision makers, including local elected and appointed officials, planners, floodplain managers, and emergency managers

Website
www.masgc.org/climate/cop/index.html

Point of Contact (POC) Name
LaDon Swann, Director, Mississippi-Alabama Sea Grant Consortium
Karl Havens, Director, Florida Sea Grant
Buck Sutter, Gulf of Mexico Regional Team Lead
Deputy Regional Administrator, Southeast Region
National Marine Fisheries Service

POC Phone
(251) 438-5690

POC E-mail
swanndl@auburn.edu
khavens@ufl.edu
buck.sutter@noaa.gov

Partners
Mississippi-Alabama Sea Grant Consortium, Florida Sea Grant, Texas Sea Grant, Louisiana Sea Grant, Gulf of Mexico Regional Collaboration Team, NOAA Coastal Services Center

Type of Resource
Workshop

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Ongoing

Date
April 2010

Funding Source
NOAA National Sea Grant College Program

Notes
This is an ongoing effort. The initial workshop took place on April 19-21, 2010.

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Effects of Climate Change on Florida's Ocean and Coastal Resources

Brief Description
The Florida Oceans and Coastal Council prepared this report to provide a foundation for future discussions of the effects of global climate change on Florida's ocean and coastal resources and to inform Floridians about the current state of scientific knowledge regarding climate change.

Target Audience
Legislators, policymakers, governmental agencies, and members of the public who are working to address, or who are interested in, issues related to climate change in Florida

Website
www.floridaoceanscouncil.org/reports/

Point of Contact (POC) Name
Becky Prado, Office of Coastal and Aquatic Managed Areas, Florida Department of Environmental Protection

POC Phone

POC E-mail
rebecca.prado@dep.state.fl.us

Partners
Florida Oceans and Coastal Council

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Florida

City or County

Status
Complete

Date
2009

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title

Effects of Fire on Water Quality, Plant Production, and Biogenic Accretion in a *Juncus roemerianus D*ominated Marsh

Brief Description

This study will assess the effects of fire on a *Juncus roemerianus* marsh at Grand Bay National Estuarine Research Reserve by quantifying changes in water quality and nutrient availability, plant production, biogenic accretion, and hurricane-debris removal before and after a prescribed burn. Prescribed burning is a technique employed by land managers to maintain habitat and preserve biodiversity within coastal marshes. It is also being studied as a mechanism to enhance accretion and combat sea level rise.

Target Audience

Natural resource managers

Website

Point of Contact (POC) Name

Julia Cherry, University of Alabama
Chris May, The Nature Conservancy of Michigan
Mark Woodrey, Grand Bay NERR

POC Phone

(205) 348-8416 (Julia)

(228) 475-7047 (Mark)

POC E-mail

julia.cherry@ua.edu

Partners

University of Alabama, The Nature Conservancy, Grand Bay National Estuarine Research Reserve

Type of Resource

Publication

Project Category

Habitat Adaptation

State

Mississippi

City or County

Moss Point

Status

Ongoing

Date

2010

Funding Source

Mississippi-Alabama Sea Grant Consortium

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Florida Forever Work Plan

Brief Description
The plan contains a list of lands that sequester carbon, provide habitat, protect coastal lands or barrier islands, and otherwise mitigate to help adapt to the effects of sea level rise.

Target Audience
Natural resource managers

Website
www.srwmd.state.fl.us/documents/Land%20Acquisition%20and%20Management/FloridaForeverWorkPlan_2008.pdf

Point of Contact (POC) Name
Jerry A. Scarborough, Executive Director, Suwannee River Water Management District

POC Phone
(386) 362-1056

POC E-mail

Partners
Suwannee River Water Management District

Type of Resource
Publication

Project Category
Habitat Adaptation

State
Florida

City or County

Status
Complete

Date
2007

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Florida Planning Toolbox

Brief Description
The Florida Planning Toolbox was made possible by a grant from the Florida Department of Community Affairs to further regional visioning initiatives in Florida. The toolbox provides descriptions and examples of planning tools designed to protect and enhance natural resources, promote economic prosperity for all residents, and enable a sustainable quality of life.

Target Audience
Planners, elected officials, public

Website
www.cues.fau.edu/toolbox/

Point of Contact (POC) Name
James F. Murley, Director, Florida Atlantic University's Center for Urban and Environmental Solutions

POC Phone
(954) 762-5855

POC E-mail
jmurley@fau.edu

Partners
Florida Department of Community Affairs, Florida State University, Florida Atlantic University

Type of Resource
Web Tool

Project Category
Community Adaptation

State
Florida

City or County

Status
Complete

Date

Funding Source
Florida Department of Community Affairs
Emily Hall Tremaine Foundation, Marisla Foundation,
Rockefeller Brothers Fund, Sandler Family Support Foundation

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Florida: Public Opinion on Climate Change

Brief Description
The goal of this study was to measure the perceptions of Florida residents about the causes and consequences of climate change, and about potential solutions. The main findings are presented in this report and are intended to aid policy makers, educators, the private sector, and environmental organizations in their planning efforts in response to climate change.

Target Audience
Elected officials, educators, private sector, nongovernmental organizations

Website
http://environment.yale.edu/uploads/FloridaGlobalWarmingOpinion.pdf

Point of Contact (POC) Name
Anthony Leiserowitz, Yale University

POC Phone
(203) 432-4865

POC E-mail
anthony.leiserowitz@yale.edu

Partners
Yale School of Forestry and Environmental Studies, University of Miami, National Science Foundation, Columbia University Center for Research on Environmental Decisions

Type of Resource
Publication, perceptions study

Project Category
Community Adaptation

State
Florida

City or County

Status
Complete

Date
2009

Funding Source
U.S. National Science Foundation

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Florida's Energy and Climate Change Action Plan

Brief Description
On October 15, 2008, Florida Governor Charlie Crist received the second and final report of the Governor's Action Team on Energy and Climate Change. The report contains 50 policy recommendations and a suite of recommendations to guide the Florida Department of Environmental Protection in its development of a regulatory, market-based cap-and-trade emissions-limiting program. The report builds on the recommendations of the Phase 1 report released November 1, 2007.

Target Audience
State elected officials

Website
www.dep.state.fl.us/climatechange/actionplan_08.htm

Point of Contact (POC) Name
Florida Governor's Action Team on Energy and Climate Change

POC Phone

POC E-mail

Partners

Type of Resource
Publication, policy

Project Category
Community Adaptation

State
Florida

City or County

Status
Complete

Date
2008

Funding Source
Florida Department of Environmental Protection, Rockefeller Brothers Fund Blue Moon Fund, Emily Hall Tremaine Foundation, Sandler Family Support Foundation

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Florida's Resilient Coasts: A State Policy Framework for Adaptation to Climate Change

Brief Description
The project's final report will present a comprehensive policy framework that will assist Florida state government in assessing the likely impacts of climate change on its coastal regions and communities, and then developing and adopting policies and programs that will enable the state, its communities, and its residents to adapt to and adaptively manage those impacts over the near and long term.

Target Audience
State elected officials, community leaders

Website
www.communicationsmgr.com/projects/1349/docs/FAUResilientCoasts.pdf

Point of Contact (POC) Name

POC Phone

POC E-mail

Partners
Center for Urban and Environmental
Solutions (CUES), College of Architecture, Urban and Public Affairs, Florida Atlantic University; National Commission on Energy Policy (NCEP)

Type of Resource
Publication

Project Category
Community Adaptation

State
Florida

City or County

Status
Draft

Date

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Future Impacts of Sea Level Rise on Coastal Habitats and Species in the Greater Everglades – 2010 Progress Report

Brief Description
This project merges biologic and hydrologic modeling to develop tools to help resource managers anticipate the projected consequences of sea level rise in coastal South Florida, with a special emphasis on the Florida Everglades. One model will assess historical hydrologic conditions that supported past vegetation conditions and will create a simulation that represents the known coastal landscape prior to the construction of many canals and other drainage features. A second model will enhance predictive capabilities by incorporating different sea level rise scenarios and climate parameters into various restoration scenarios. Outputs will be used to enhance habitat suitability models for manatees and seagrass.

Target Audience
Natural resource managers

Website

Point of Contact (POC) Name
Barry Rosen, U.S. Geological Survey, Southeast Ecological Science Center

POC Phone
(407) 803-5508

POC E-mail
brosen@usgs.gov

Partners

Type of Resource
Model

Project Category
Habitat Adaptation

State
Florida

City or County

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Grand Bay National Estuarine Research Reserve (NERR) Sea Level Rise Activities

Brief Description
The NERR is involved in a number of sea level rise monitoring efforts including studying impacts on marsh birds; establishing Sediment Elevation Tables (SET), Continuously Operating Reference Stations (CORS), and tidal gauges; installing a 12-kilometer transect across NERR and National Wildlife Refuge properties from the Mississippi Sound to I-10 to monitor vegetation changes; and assisting migration of plant communities using Mississippi Emergency Management Agency and Federal Emergency Management Agency buyout properties.

Target Audience
Natural resource managers

Website
www.grandbaynerr.org

Point of Contact (POC) Name
David Ruple, Manager

POC Phone
(228) 475-7047

POC E-mail
david.ruple@dmr.ms.gov

Partners
Gulf of Mexico Alliance, University of Alabama, University of Southern Illinois, Louisiana State University, U.S. Geological Survey, Weeks Bay NERR

Type of Resource

Project Category
Habitat Adaptation

State
Mississippi

City or County
Moss Point

Status
Ongoing

Date
2009–2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Gulf Coast Climate Needs Assessment

Brief Description
The Gulf Coast Climate Needs Assessment is being conducted by the Southern Climate Impacts Planning Program (SCIPP), a NOAA Regional Integrated Sciences Assessments (RISA) program to determine: 1) the most significant climate-related issues facing stakeholders in Gulf Coastal areas today 2) the spatial and temporal scales in which Gulf Coast stakeholders make decisions 3) the most significant climate-related issues that stakeholders in the Gulf Coast area will face in the future; and 4) what stakeholders perceive as their biggest climate-related research needs and research gaps.

Target Audience
Coastal decision-makers (e.g., local government officials and staff)

Website
www.southernclimate.org

Point of Contact (POC) Name
Lynne Carter, Louisiana State University

POC Phone
(225) 578-8374

POC E-mail
lynne@srcc.lsu.edu

Partners

Type of Resource
Needs Assessment

Project Category
Community Adaptation

State
Texas, Louisiana, Mississippi

City or County
Coastal counties in each state

Status
Ongoing

Date
January 2011 – June 2011

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Houston-Galveston Area Council (H-GAC): Foresight Panel on Environmental Effects

Brief Description
H-GAC's Board of Directors established an expert panel to develop recommendations for local governments to adapt to potential changes in the region's climate and associated environmental effects. This Foresight Panel on Environmental Effects was composed of experts in climate change and local infrastructure planning. The purpose of the panel was not to address the validity of climate change models or the potential contributions of human activity to climate change. Rather, its charge was to recommend sound strategies for local governments to adapt to the potential effects of climate change should it occur.

Target Audience
Local elected and appointed officials, city and county staff members, planners, floodplain managers, emergency managers, natural resource managers

Website
www.h-gac.com/community/livable/fpee/default.aspx

Point of Contact (POC) Name
Amy Boyers, Senior Environmental Planner

POC Phone
(713) 993-2441

POC E-mail
amy.boyers@h-gac.com

Partners
Houston-Galveston Area Council

Type of Resource
Publication

Project Category
Community Adaptation

State
Texas

City or County
Houston-Galveston

Status
Complete

Date
2008

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Impact of Accelerated Sea Level Rise on Tidal Marshes and Storm Surge

Brief Description
This study applies the Sea Level Affecting Marshes Model (SLAMM) to predict the effects of different scenarios of sea level rise on the distribution patterns of tidal marshes along the Pascagoula River in southeast Mississippi. A major habitat concern associated with sea level rise is the potential loss of tidal marshes, which could have adverse effects on storm surge, shoreline protection, flood control, water quality, and habitat conservation. The results of this study will provide resource managers and planners with information about where conservation efforts should focus to protect these sensitive habitats.

Target Audience
Natural resource managers, local planners

Website

Point of Contact (POC) Name
Wei Wu, University of Southern Mississippi

POC Phone
(228) 818-8855

POC E-mail
wei.wu@usm.edu

Partners
University of Southern Mississippi
NOAA Coastal Storms Program

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Mississippi

City or County

Status
Ongoing

Date
2010

Funding Source
NOAA Coastal Storms Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: Gulf Coast Study

Brief Description
This study identifies climate change risks that challenge transportation networks across 48 coastal counties in Texas, Louisiana, Mississippi, and Alabama. The project will be conducted in multiple phases, the ultimate goal of which is to provide information and resources to help planners understand the risks associated with transportation planning in coastal areas and to provide potential adaptation strategies for consideration. The first phase of the study focused on a preliminary assessment of risks to transportation in the region. Phase II of the study is currently underway and is focusing on Mobile, Alabama. Investigators will look at the vulnerabilities of the most critical transportation assets to climate change impacts. Next, the Department of Transportation (DOT) will develop risk management tools to help transportation planners, owners, and operators determine which systems and assets to protect and how to do so. These methods and tools are intended to be replicable throughout other regions of the country. The research is sponsored by the U.S. DOT and the Center for Climate Change and Environmental Forecasting.

Target Audience
Local elected officials, DOT staff members, transportation planners, municipal staff members

Website
http://mobilempo.org/Climate_Change_Study/sap4-7-final-all.pdf

Point of Contact (POC) Name
Rob Kafalenos, Federal Highway Administration
Kevin Harrison, South Alabama Regional Planning Commission

POC Phone
(202) 366-2079
(251) 706-4635

POC E-mail
Robert.Kafalenos@dot.gov
KHarrison@sarpc.org

Partners
U.S. Department of Transportation (DOT), Federal Highway Administration, U.S. Geological Survey (USGS), U.S. Climate Change Science Program (CCSP), South Alabama Regional Planning Commission (SARPC)

Type of Resource
Publication

Project Category
Community Adaptation

State
Texas, Louisiana, Mississippi, Alabama

City or County

Status
On-going

Date
March 2008

Funding Source
U.S. Department of Transportation (DOT), Federal Highway Administration and the Center for Climate Change and Environmental Forecasting

Notes
As of November 2011, Phase II is on-going and will be complete sometime in 2013.

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Implications of Black Mangrove Colony Expansion in the Gulf of Mexico with Climate Change: Wetland Health and Resistance to Rising Sea Levels

Brief Description
The purpose of this study is to examine the regional and global implications of the expansion of mangrove populations with respect to predicted rises in sea level. Preliminary data suggest that black mangrove populations are clustered near inlet areas, indicating seed transport pathways are critical to establishment and, likely, the rapidity of habitat replacement.

Target Audience
Scientists, natural resource managers

Website

Point of Contact (POC) Name
Rebecca Comeaux, University of Texas at Austin

POC Phone

POC E-mail
r.comeaux@mail.utexas.edu

Partners
University of Texas at Austin, Texas A&M University

Type of Resource
Publication

Project Category
Habitat Adaptation

State
Texas

City or County

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Implications of Takings Law on Innovative Planning for Sea Level Rise in the Gulf of Mexico

Brief Description
Regulatory and planning officials sometimes hesitate to develop policies to address sea level rise because of the fear of compensable "takings" claims under Constitutional or statutory law. This project will address this fear by analyzing existing takings laws, developing legal arguments that consider sea level rise, and identifying innovative land use policies designed to withstand takings claims. The project includes three phases. During Phase I, investigators will examine takings law in Florida, Alabama, Mississippi, Louisiana, and Texas to provide a foundation for addressing the source of regulatory hesitancy, which will take place in Phase II. Phase III will include the development of innovative land use planning policies for sea level rise adaptation that are resistant to takings claims.

Target Audience
Elected officials, planners

Website

Point of Contact (POC) Name
Stephanie Showalter, University of Mississippi

POC Phone
(662) 915-7775

POC E-mail
sshowalt@olemiss.edu

Partners
Mississippi-Alabama Sea Grant Legal Program

Type of Resource
Publication

Project Category
Community Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Ongoing

Date
2010

Funding Source
Mississippi-Alabama Sea Grant Consortium

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Increasing Community Resilience to Future Hurricane Storm Surge: Collaborative Decision Support in Sarasota, Florida

Brief Description
The goal of the proposed research is to develop a methodology that helps local government officials and planners understand a range of options that allow coastal communities to grow their populations and develop their economies and infrastructures with less risk of significant loss from future hurricane storm surges. To reach that goal, the investigators will conduct a case study based in Sarasota, Florida, where they will work with officials, planners, and other stakeholders to include scenarios of sea level rise in local long-range planning activities and extend those activities to horizons more in line with sea level rise projections.

Target Audience
Local elected officials, planners

Website
www.climate.noaa.gov/index.jsp?pg=./cpo_pa/cpo_pa_index.jsp&pa=sarp&sub=projects/abstracts/2007/byarnal.jsp

Point of Contact (POC) Name
Brent Yarnal, Pennsylvania State University

POC Phone

POC E-mail

Partners
Pennsylvania State University and U.S. Geological Survey

Type of Resource
Publication

Project Category
Community Adaptation

State
Florida

City or County
Sarasota

Status
Ongoing

Date
2010

Funding Source
NOAA Climate Program Office, Sectoral Applications Research Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Integrated Ecosystem Restoration and Hurricane Protection: Louisiana's Comprehensive Master Plan for a Sustainable Coast

Brief Description
This plan emerged from the Coastal Protection and Restoration Authority (CPRA). It recognizes that Louisiana will be among the first places in North America to feel the effects of sea level rise. It prioritizes restoration of the Mississippi River Delta, innovative alternatives to traditional levees, and restoration of the Atchafalaya River Delta, as well as hurricane protection strategies.

Target Audience
Natural resource managers

Website
www.lacpra.org

Point of Contact (POC) Name
Sidney Coffee, Chair, Governor's Executive Assistant for Coastal Activities

POC Phone

POC E-mail

Partners

Type of Resource
Adaptation Plan

Project Category
Habitat Adaptation

State
Louisiana

City or County

Status
Complete

Date
2007

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Integrated Modeling for the Assessment of Ecological Impacts of Sea Level Rise

Brief Description
The project team will apply a series of models to predict sediment loadings to estuaries as a result of overland flow, shoreline and barrier island erosion, and salinity transport in numerous bay systems. This information will be used to model the evolution of intertidal marshes. Products of this research will include maps that delineate new tidal and habitat boundaries as a result of sea level rise, estimates of sediment loadings from overland runoff to estuarine systems, and projections of changing salinity distributions, marsh and shellfish habitat, land cover, and water resource impacts. Project outcomes will enable the management community to prioritize risk management strategies, reformulate set-back requirements, improve guidelines for construction of breakwaters and other coastal infrastructure, and assess water resource impacts and protection needs.

Target Audience
Natural resource managers

Website

Point of Contact (POC) Name
Scott C. Hagen, University of Central Florida

POC Phone
(407) 823-3903

POC E-mail
shagen@mail.ucf.edu

Partners
The Universities of Central Florida, Florida, and South Carolina, Florida State University
Northwest Florida Water Management District, Dewberry

Type of Resource
Decision-support Tools

Project Category
Habitat Adaptation

State
Florida, Alabama, Mississippi

City or County

Status
Ongoing

Date
2010

Funding Source
NOAA National Centers for Coastal Ocean Science

Notes
This project was awarded in spring 2010.

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Keeping Our Heads above Water: Surviving the Challenges of Sea Level Rise in Florida

Brief Description
The Florida Institute for Conservation Science has initiated a project to study and communicate issues related to the impacts of (and adaptation to) sea level rise in Florida. The first phase of this project included a scientific symposium, which was held January 18-20, 2010, at Archbold Biological Station. This meeting brought together scholars from several disciplines to share information on sea level rise and its impacts in Florida and to develop recommendations for further research and for changes in policy and management. Future phases of this project include technical publications, communications with policy makers and the public, and a larger conference focused on policy and management and involving a diversity of stakeholders and decision makers. The latter conference is tentatively scheduled for August 2010 at Fairchild Tropical Botanic Garden in Miami.

Target Audience
Researchers

Website
www.flconservationscience.org/programs/index.shtml

Point of Contact (POC) Name
Reed Noss

POC Phone
(407) 489-5778

POC E-mail
noss_r@bellsouth.net

Partners
Sponsored by the Florida Institute for Conservation Science
Co-Sponsors: The Nature Conservancy, Florida Native Plant Society, U.S. Fish and Wildlife Service, The Jelks Family Foundation, Disney's Animal Kingdom

Type of Resource
Conference, workshop

Project Category
Community Adaptation

State
Florida

City or County

Status
Ongoing

Date
January 2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Long Term Implications of Sea Level Change for the Mississippi and Alabama Coastlines

Brief Description
These proceedings document a sea level rise conference in Biloxi, Mississippi, September 27-28, 1990.

Target Audience
Federal, state, and local natural resource management agencies, local elected officials, consultants, developers, planners

Website
www.masgc.org/pdf/masgp/90-015.pdf

Point of Contact (POC) Name
Dave Burrage, Mississippi-Alabama Sea Grant Consortium,
Mississippi State University Coastal Research and Extension Center

POC Phone
(228) 546-1028

POC E-mail
daveb@ext.msstate.edu

Partners
Mississippi-Alabama Sea Grant Consortium, Mississippi Department of Wildlife Fisheries and Parks, Mississippi Department of Marine Resources, U.S. Environmental Protection Agency

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Mississippi

City or County

Status
Complete

Date
1990

Funding Source
NOAA National Sea Grant College Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Memorandum of Understanding for the Support and Activities of the Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: A Gulf Coast Study, Phase 2

Brief Description
This study is being conducted on behalf of the U.S. Department of Transportation (DOT) Center for Climate Change and Environmental Forecasting. The objective of the research is to build on the findings of the first phase (which was to conduct a transportation risk and vulnerability assessment) to develop more definitive information about impacts at the local level. This study will focus on the Gulf Coast and develop precise tools and guides for state DOTs, planners, and municipalities to help communities adapt to climate impacts. The Memorandum of Understanding (MOU) outlines the responsibilities of the Federal Highway Administration and the South Alabama Regional Planning Commission (SARPC) in completing Phase II of this transportation study.

Target Audience
Local elected officials, DOT staff members, planners, municipal staff members

Website
http://www.mobilempo.org/Climate_Change_Study/Climate_Change_Study.htm

Point of Contact (POC) Name
Kevin Harrison, Director of Transportation Planning at South Alabama Regional Planning Commission

POC Phone
(251) 433-6541

POC E-mail
kharrison@sarpc.org

Partners
Federal Highway Administration
South Alabama Regional Planning Commission

Type of Resource
Publication

Project Category
Community Adaptation

State
Alabama

City or County
Mobile and Baldwin Counties

Status
Ongoing

Date
2010

Funding Source
U.S. Department of Transportation (DOT), Federal Highway Administration, U.S. Geological Survey (USGS), U.S. Climate Science Program (CCSP)

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Modeling the Impact of Sea Level Change on Complex Coastal Systems and Infrastructure, Northeastern Gulf of Mexico

Brief Description
This three-year modeling effort is examining the potential consequences of accelerated sea-level rise and increases in tropical storm effects over the next 100 years on coastal systems of the Florida Panhandle. The project focuses on the Eglin Air Force Base region and utilizes models to quantify the impact of sea-level rise, storm surge, coastal erosion, wetland loss, and groundwater intrusion in addition to changes in coastal infrastructure. Results will be used to evaluate how to make reliable predictions of the effects of climate change on natural systems as well as coastal infrastructure and to enable cost-effective mitigation and adaptation strategies. Products associated with this study will include tools for predicting, mitigating, and adapting to the effects of sea-level rise and storm surge, which will better inform decision makers of the risks associated with the installation of infrastructure in coastal areas.

Target Audience
Coastal managers

Website

Point of Contact (POC) Name
Alan Niedoroda, URS Corporation

POC Phone

POC E-mail

Partners
URS Corporation

Type of Resource
Publication

Project Category
Community Adaptation

State
Florida

City or County

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
National Assessment of Coastal Vulnerability to Sea Level Rise: Preliminary Results for the U.S. Gulf of Mexico Coast

Brief Description
The coastal vulnerability index (CVI) for the Gulf of Mexico coast provides insight into the relative potential of coastal change due to future sea level rise. The maps and data presented here can be viewed in at least two ways: first, as a base for developing a more complete inventory of variables influencing the coastal vulnerability to future sea level rise to which other elements can be added as they become available; and second, as an example of the potential for assessing coastal vulnerability to future sea level rise using objective criteria.

Target Audience
Planners, natural resource managers, floodplain managers

Website
http://pubs.usgs.gov/of/2000/of00-179/index.html

Point of Contact (POC) Name
E. Robert Thieler, U.S. Geological Survey

POC Phone

POC E-mail
rthieler@usgs.gov

Partners
USGS

Type of Resource
Risk Assessment

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Complete

Date
2006

Funding Source
U.S. Geological Survey

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
National Estuarine Research Reserves' Sentinel Sites for Climate Change Impacts Initiative

Brief Description
National Estuarine Research Reserves (NERRs) in Texas, Mississippi, Alabama, and Florida have received support from the Gulf of Mexico Alliance to install geospatial and tidal monitoring infrastructure to assess changes in sea level. The data will be integrated into existing NERRS monitoring programs to evaluate the impacts of sea level rise on coastal ecosystems.

Target Audience
Natural resource managers

Website

Point of Contact (POC) Name
Laurie Rounds, NOAA Office of Ocean and Coastal Resource Management

POC Phone
(240) 753-4471

POC E-mail
laurie.rounds@noaa.gov

Partners
Mission-Aransas NERR, Grand Bay NERR, Weeks Bay NERR, Apalachicola NERR, Rookery Bay NERR, Gulf of Mexico Alliance, NOAA Coastal Services Center

Type of Resource

Project Category
Habitat Adaptation

State
Alabama, Mississippi, Texas, Florida

City or County

Status
Ongoing

Date
2009–2010

Funding Source
Gulf of Mexico Alliance

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
National Forest Carbon Program Brings Big Boost to Louisiana Refuges

Brief Description
Two central Louisiana national wildlife refuges are getting a big boost toward their habitat restoration goals with the donation of more than 245,000 native trees. Private support for the initiative comes from a mix of donations from corporations, foundations, and individual donors to The Conservation Fund's voluntary carbon offset program, Go Zero. Together with the U.S. Fish and Wildlife Service and Environmental Synergy Inc., the partners are restoring 814 acres of native oak and cypress trees at Grand Cote National Wildlife Refuge and Lake Ophelia National Wildlife Refuge near Marksville, Louisiana. As the forests mature, they are expected to trap an estimated 260,000 metric tons of carbon dioxide equivalent from the atmosphere. Go Zero works with companies and individuals to help reduce and then offset the carbon footprint of everyday activities.

Target Audience
Natural resource managers

Website
www.conservationfund.org/news/gozero_restores_louisiana_refuges

Point of Contact (POC) Name
Vanessa Vaughan, The Conservation Fund

POC Phone
(703) 908-5809

POC E-mail

Partners
Conservation Fund, U.S. Fish and Wildlife Service

Type of Resource
Case Study

Project Category
Community Adaptation

State
Louisiana

City or County

Status
Ongoing

Date
January 2010

Funding Source
Private support for the initiative comes from a mix of donations.

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
National Oceanic and Atmospheric Administration (NOAA) Regional Climate Services: Southern Region

Brief Description
This office will assess regional climate information needs and leverage existing expertise within NOAA and amongst its partners to deliver relevant tools and services and help stakeholders adapt to changing climate conditions.

Target Audience
Business and industry leaders; local, state and federal agency staff; academic institutions; and the public

Website
http://www.climate.gov

Point of Contact (POC) Name
David Brown

POC Phone
(817) 978-1100 ext. 158

POC E-mail
David.p.brown@noaa.gov

Partners

Type of Resource

Project Category
Community Adaptation, Habitat Adaptation

State
Texas, Louisiana, Mississippi, Alabama, Florida

City or County

Status
Ongoing

Date
2010

Funding Source

Notes
Regional office directors were announced September, 2010.

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
National Oceanic and Atmospheric Administration (NOAA) Southern Regional Climate Center

Brief Description
The mission of the NOAA Southern Regional Climate Center (SRCC) is to increase the use and availability of climate information in the southern region, including the states of Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, and Texas. SRCC activities include collecting weather and climate data from federal, regional, and local data networks; enhancing and preserving the quality of these data; developing data-centric climate products and decision-support tools; delivering data and data products to the citizens of its region; and conducting and supporting applied research.

Target Audience
Scientists

Website
www.srcc.lsu.edu/about.php

Point of Contact (POC) Name
Kevin Robbins, Director

POC Phone
(225) 578-1063

POC E-mail
krobbins@srcc.lsu.edu

Partners
NOAA Regional Climate Centers
Louisiana State University
NOAA National Climatic Data Center (NCDC)

Type of Resource
Web Tool

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Louisiana, Texas

City or County

Status
Complete

Date
2010

Funding Source
NOAA's National Climatic Data Center and Louisiana State University

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Parameterized Climate Change Projection Model for Hurricane Flooding, Wave Action, Economic Damages, and Population Dynamics

Brief Description
The project goal is to quantify the potential impact of sea level rise and hurricane intensification on hurricane-induced economic damages and on population dynamics at the coast. Investigators will pursue the following objectives:

1. Develop a general, parameterized response model for hurricane flood elevation and wave damage potential as a function of sea level rise and hurricane intensification.
2. Determine potential acceleration in hurricane flood elevation and wave height probability as a function of sea level rise and hurricane intensification.
3. Determine potential acceleration in hurricane-induced economic damages and population affected at the coast due to accelerating flood elevation and wave height probability.
4. Determine potential short- and long-term shifts in population dynamics at local and regional levels as well as the socioeconomic dimensions of such shifts.

Target Audience
Local, state, and federal planning and policy makers, including Texas General Land Office, Mississippi Coastal Civil Defense, Florida Department of Community Affairs, U.S. Army Corps of Engineers, Federal Emergency Management Agency

Website

Point of Contact (POC) Name
Jennifer Irish, Texas A&M University

POC Phone

POC E-mail

Partners
Texas Sea Grant (lead), Florida Sea Grant, Louisiana Sea Grant, Mississippi-Alabama Sea Grant Consortium, Texas A&M University

Type of Resource
Model, Publication

Project Category
Community Adaptation

State
Florida

City or County

Status
Ongoing

Date
January 2010

Funding Source
Mississippi-Alabama Sea Grant Consortium, NOAA Coastal Storms Program

Notes
Two-year project funded January 2010

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Post-Disaster Redevelopment Planning Network

Brief Description
Co-managed by the Florida Department of Economic Opportunity, Division of Community Development and the Florida Division of Emergency Management, this initiative is designed to help coastal and inland local governments prepare post-disaster redevelopment plans.The initiative is being conducted in five phases. Phase I resulted in draft guidelines developed by a focus group for post-disaster redevelopment planning. The information in the guidelines was obtained through a review of relevant literature and a survey of Florida local governments. In Phase II, the focus group tested the effectiveness of the guidelines by working with pilot communities (Panama City, Hillsborough County, Nassau County, Polk County and Manatee County) to design their Post-Disaster Redevelopment Plans with input from local working groups. During Phase III, the focus group analyzed the applicability of the guidelines to the pilots and incorporated the findings into the Post-Disaster Redevelopment Planning: A Guide for Florida Communities guidebook.

Additional work on this project is being conducted in two additional phases continuing through the end of 2011. Phase IV focused on providing guidance on how to implement, maintain and update the post-disaster redevelopment plans that were adopted. Phase V involves incorporating sea level rise data and concerns into the post-disaster redevelopment planning framework and planning processes.

Target Audience
Local government representatives, planners, emergency m anagers

Website
http://www.floridajobs.org/community-planning-and-development/programs/technical-assistance/community-resiliency/post-disaster-redevelopment-planning

Point of Contact (POC) Name
Julie Dennis, Department of Economic Opportunity
Emily Meyer, Florida Division of Emergency Management

POC Phone
(850) 717-8478
(850) 414-7768

POC E-mail
Julie.Dennis@deo.myflorida.com
Emily.Meyer@em.myflorida.com

Partners
Florida Department of Environmental Protection (DEP) and the
Florida Division of Emergency Management

Type of Resource
Publication

Project Category
Community Adaptation

State
Florida

City or County

Status
Ongoing

Date
October 2011

Funding Source
National Oceanic and Atmospheric Administration (NOAA) and the
Federal Emergency Management Agency (FEMA)

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Preparing Coastal Communities for Climate Hazards

Brief Description
NOAA's Coastal Storms Program is providing assistance to two communities in Mississippi and Alabama to help them incorporate sea level rise into their comprehensive plans.

Target Audience
Local elected officials, planners, floodplain managers, emergency managers

Website

Point of Contact (POC) Name
Tracie Sempier, Coastal Storms Program Outreach Coordinator

POC Phone
(228) 818-8829

POC E-mail
tracie.sempier@usm.edu

Partners
Mississippi-Alabama Sea Grant Consortium, NOAA Coastal Storms Program

Type of Resource
Adaptation Plan

Project Category
Community Adaptation

State
Alabama, Mississippi

City or County
Orange Beach, Alabama
Ocean Springs, Mississippi

Status
Ongoing

Date
2010

Funding Source
NOAA Coastal Storms Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Preparing for a Sea Change in Florida: A Strategy to Prepare for the Impacts of Global Warming on the States' Coastal and Marine Systems

Brief Description
This report provides a detailed, qualitative summary of the challenges facing coastal Florida from climate change and recommendations for solutions. On the issue of sea level rise, it lists three recommendations: 1) The state should undertake a comprehensive re-evaluation of the Coastal Construction Control Line Regulatory Program to ensure it is accomplishing its goals; 2) Florida Department of Environmental Protection should develop state wetlands conservation and restoration plans that promote wetland migration as sea levels rise; 3) Federal, state, and local governments should replace economic incentives for private development in high-risk areas with incentives to relocate and invest in coastal conservation.

Target Audience
Policy makers, elected officials, planners

Website
www.flcoastalandocean.org/PreparingforaSeaChange/Climate_Change_Guide_for_Florida_Preparing_for_a_Sea_Change.pdf

Point of Contact (POC) Name
Florida Coastal and Ocean Coalition

POC Phone

POC E-mail

Partners
Caribbean Conservation Corporation, Environmental Defense Fund, Gulf Restoration Network, Natural Resources Defense Council, National Wildlife Federation, Ocean Conservancy, Reef Relief, The Surfrider Foundation

Type of Resource
Publication

Project Category
Community Adaptation

State
Florida

City or County

Status
Complete

Date
2008

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Projecting Impacts of Relative Sea Level Rise and Erosion on Texas Barrier Islands

Brief Description
The Harte Research Institute is developing models of barrier islands that project changes in the distribution of habitats caused by sea level rise and erosion. Results from the model projections are being incorporated into hazards maps that illustrate where upland areas are likely to become wetlands, beaches, or dunes. The maps may be used to plan for future impacts to infrastructure, plan restoration and mitigation projects, and guide development away from areas prone to becoming future critical environments.

Target Audience
Local elected and appointed officials, city and county staff members, planners, floodplain managers, emergency managers, natural resource managers, the public

Website

Point of Contact (POC) Name
James Gibeaut, Harte Research Institute for Gulf of Mexico Studies

POC Phone
(361) 825-2060

POC E-mail
james.gibeaut@tamucc.edu

Partners
Harte Research Institute for Gulf of Mexico Studies

Type of Resource
Map, Model

Project Category
Community Adaptation, Habitat Adaptation

State
Texas

City or County

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Public Water Supply Utilities Climate Impacts Working Group

Brief Description
This group meets quarterly to bring water utility decision makers into the research process so that climate information is developed to meet their needs.

Target Audience
Water utilities, water management districts, and researchers

Website
http://waterinstitute.ufl.edu/workshops_panels/PWSU-CIWG.html

Point of Contact (POC) Name
Wendy Graham

POC Phone

POC E-mail
wgraham@ufl.edu

Partners
University of Florida Water Institute
Florida Climate Institute

Type of Resource
Working group

Project Category
Community Adaptation

State
Florida

City or County
Hillsborough, Pinellas, and Pasco Counties

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Public Workshop: Planning for Sea Level Rise and Hurricane Storm Surge in Sarasota County

Brief Description
Helping local officials integrate sea level rise into their future planning efforts was the focus of a public meeting on Monday, February 8, 2010, at Mote Marine Laboratory and Aquarium. Penn State University and University of Idaho researchers presented the findings of a three-year study that led to the creation of a collaborative method that local government officials and stakeholders can use as they plan for the changes expected to result from the future rise in sea level. This model integrates scenarios about storm surge, population growth, and economic and infrastructure development into long-range planning options for coastal communities. The study was supported by NOAA, the U.S. Geological Survey, and the National Science Foundation.

Target Audience
Local elected officials, planners, county and municipal staff members

Website

Point of Contact (POC) Name
Dr. Tim G. Frazier, Department of Geography, University of Idaho

POC Phone
(785) 766-2797

POC E-mail
tfrazier@uidaho.edu

Partners
Penn State University, University of Idaho, Marine Policy Institute at Mote Marine Laboratory, U.S. Geological Survey, NOAA

Type of Resource
Workshop

Project Category
Community Adaptation

State
Florida

City or County
Sarasota County

Status
Complete

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
The Resilient Coast: Policy Frameworks for Adapting the Built Environment to Climate Change and Growth in Coastal Areas of the U.S. Gulf of Mexico

Brief Description
This document examines existing legal and institutional frameworks that might hinder or facilitate adaptation to changes caused by climate change and population growth in the Gulf region. The authors have developed a set of recommendations including changes to the National Flood Insurance Program, incorporating hazard mitigation planning into community plans, community vulnerability assessments, and more that reflect steps coastal communities can take to help protect themselves from potential future hazards exacerbated by climate change.

Target Audience
Elected officials, policy makers, planners

Website
http://www.urban-nature.org/publications/documents/TheBuiltEnvironment08-sm_000.pdf

Point of Contact (POC) Name
John S. Jacob
Texas Sea Grant

POC Phone
(281) 218-0565

POC E-mail
jjacob@tamu.edu

Partners
Texas Sea Grant, Texas A&M University, National Sea Grant Law Center, University of Mississippi

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Complete

Date
2007

Funding Source
NOAA National Sea Grant Office

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
The Resilient Coast: Policy Frameworks for Adapting the Wetlands to Climate Change and Growth in Coastal Areas of the U.S. Gulf of Mexico

Brief Description
This document examines the ability of existing federal and state wetland regulations to protect wetland habitats from the impacts of sea level rise. The authors have developed a set of recommendations including policy changes, planning and development regulations, rolling easements, etc. that will enable wetland habitats to migrate as water levels rise.

Target Audience
Policy makers, natural resource managers

Website
www.urban-nature.org/publications/documents/ResilentCoastWetlands-sm.pdf

Point of Contact (POC) Name
John S. Jacob
Texas Sea Grant

POC Phone
(281) 218-0565

POC E-mail
jjacob@tamu.edu

Partners
Texas Sea Grant, Texas A&M University, National Sea Grant Law Center, University of Mississippi

Type of Resource
Publication

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Complete

Date
2008

Funding Source
NOAA National Sea Grant Office

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Responsiveness of Large Scale Habitat Restoration Projects to Sea Level Rise

Brief Description
NOAA's Restoration Center has supported several large-scale restoration projects that are designed to produce habitat features (e.g., salt marshes and oyster reefs) that create buffers that protect coastal communities from sea level rise, coastal storms, and flooding. In the Gulf of Mexico, projects are being implemented using innovative adaptive management restoration techniques that are designed to be long-lasting in the face of rising sea levels. The results of these projects will help managers determine which techniques will be responsive to sea level rise and will make shorelines more resilient to changing climate.

Target Audience
Natural resource managers

Website
www.nmfs.noaa.gov/habitat/restoration/

Point of Contact (POC) Name
Meg Goecker, NOAA Restoration Center

POC Phone
(251) 861-7509

POC E-mail
meg.goecker@noaa.gov

Partners
NOAA Restoration Center

Type of Resource
Case Study

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Louisiana, Texas

City or County

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Salt Marsh Adaptation

Brief Description
The Charlotte Harbor National Estuary Program (CHNEP) will inventory and map the physical extent of the five types of salt marsh present within the CHNEP study area. Researchers will then identify significant potential effects on these salt marsh ecosystems from anticipated climate change. An assessment of significant potential effects will be developed as well as identification of opportunities for avoidance, minimization, mitigation and adaptation that could be implemented. An interactive GIS mapping product depicting the project outputs will be uploaded to the CHNEP website or use by researchers and the public.

Target Audience
Local governments, planners, stakeholder groups, and the public

Website

Point of Contact (POC) Name
James W. Beever, Southwest Florida Regional Planning Council
Whitney Gray, Southwest Florida Regional Planning Council

POC Phone
(239) 388-2550 ext.224 (Jim)
(239) 338-2550 ext. 241 (Whitney)

POC E-mail
jbeever@swfrpc.org
wgray@swfrpc.org

Partners
Southwest Florida Regional Planning Council, Charlotte Harbor National Estuary Program

Type of Resource
GIS mapping tool

Project Category
Habitat Adaptation

State
Florida

City or County

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Sarasota Bay Estuary Program Sea Level Rise and Storm Surge Visualization Tool

Brief Description
The Sarasota Bay Estuary Progam (SBEP) is developing a sea level rise and storm surge visualization tool for Sarasota and Manatee counties to enhance public and stakeholder outreach and education efforts. Working with Mote Marine Laboratory, SBEP will also develop an adaptation plan that supports updates to local comprehensive plans for integrating adaptation strategies.

Target Audience
Local governments, planners, stakeholder groups, and the public

Website
http://sarasotabay.org/sealevelrise.html

Point of Contact (POC) Name
Mark Alderson, Director

POC Phone

POC E-mail
mark@sarasotabay.org

Partners
Environmental Protection Agency's Climate Ready Estuaries Program, Sarasota Bay Estuary Program, and Mote Marine Laboratory

Type of Resource
Visualization tool

Project Category
Community Adaptation, Habitat Adaptation

State
Florida

City or County
Sarasota and Manatee Counties

Status
Ongoing

Date
2010

Funding Source
Environmental Protection Agency's Climate Ready Estuaries Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Sea Level Rise and the Redevelopment of Galveston Island State Park Following Hurricane Ike

Brief Description
The beachside infrastructure and dune field at Galveston Island State Park, Galveston, Texas, were destroyed by Hurricane Ike on September 13, 2008. The remains of this infrastructure including most paved surfaces have been removed. High rates of relative sea level rise and subsequent inland migration of the park's beach prior to Hurricane Ike had narrowed the dune field to 30 feet or less, with either hard infrastructure or a natural wetland swale preventing inland dune development. A park redevelopment goal is to facilitate sand dune recovery both for protection of future park facilities and conservation of the active dune field's native plant community. New beach access and camping facilities will therefore need to anticipate sea-level-rise-induced beach and dune migration over an appropriate planning horizon. Historical aerial photography and elevation surveys were used to determine the past extent of active dune fields at the state park under relatively stable sea level conditions. Current beach migration rates inland were estimated as well as the expected width of the future dune field at the park. These were used to project the beach and active dune field location 50 years from the present.

Target Audience
Natural resource managers, planners

Website

Point of Contact (POC) Name
Andrew Sipocz, Texas Parks and Wildlife Department

POC Phone
(512) 389-4800

POC E-mail

Partners
Texas Parks and Wildlife

Type of Resource
Case Study

Project Category
Community Adaptation, Habitat Adaptation

State
Texas

City or County
Galveston Island

Status
Ongoing

Date
2010

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Sea Level Rise and Coastal Inundation Impacts Viewer

Brief Description
This is a next generation viewer based on a prototype tool that was developed for Mississippi and Alabama through a partnership with the U.S. Geological Survey, the U.S. Army Corps of Engineers, and Mississippi-Alabama Sea Grant. This tool will do the following: 1) Visualize impacts for various sea level rise scenarios overlaid on aerial imagery, street maps, and terrain maps in a lightweight map viewer with slider bar– photos of sea level rise on individual structures will illustrate site-specific impacts; 2) Discuss potential impacts to everyday coastal flooding given certain sea level rise scenarios; 3) Visualize the uncertainty of the elevation data used to perform this analysis; 4) Visualize marsh impacts; and 5) visualize social vulnerability data.

Target Audience
Planners, elected officials, emergency managers, floodplain managers, natural resource managers, transportation and industry officials

Website
http://www.csc.noaa.gov/digitalcoast/tools/slrviewer/

Point of Contact (POC) Name
Doug Marcy, NOAA Coastal Services Center

POC Phone
(843) 740-1334

POC E-mail
doug.marcy@noaa.gov

Partners
NOAA Coastal Services Center and Digital Coast Partners

Type of Resource
Visualization Tool

Project Category
Community Adaptation

State
Mississippi, Texas

City or County

Status
Ongoing

Date
2010

Funding Source
NOAA Coastal Services Center

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Sea Level Rise and Property Rights: A Gulf of Mexico Regional Sea Grant Legal Project

Brief Description
In February 2010, the Mississippi-Alabama Sea Grant Legal Program and project partners Florida Sea Grant, Louisiana Sea Grant Law and Policy Program, Harte Research Institute for Gulf of Mexico Studies, and Texas Wesleyan School of Law launched a new legal research and outreach program on the impact of the "regulatory takings" doctrine on the ability of local governments to implement sea level rise adaptation policies.

Target Audience
Planners, land use decision-makers

Website
http://masglp.olemiss.edu/GOM/GOMProject.html

Point of Contact (POC) Name
Stephanie Showalter-Otts, Director
Mississippi-Alabama Sea Grant Legal Program

POC Phone

POC E-mail
sshowalt@olemiss.edu

Partners
Florida Sea Grant College Program, Louisiana Sea Grant Law and Policy Program, Harte Research Institute, Texas Wesleyan University School of Law

Type of Resource
Website

Project Category
Community Adaptation

State
Florida, Alabama, Mississippi, Louisiana, Texas

City or County

Status
Ongoing

Date
2010

Funding Source
Gulf of Mexico Sea Grant Programs, the EPA Gulf of Mexico Office, the Northern Gulf Institute, and the U.S. Geological Survey.

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Sea Level Rise in the Face of Climate Change: An Assessment of Policy Tools for Local Adaptation to Sea Level Rise in Southwest Florida

Brief Description
In 2008-2009, the Marine Policy Institute assessed existing policy tools and opportunities that could help Florida local governments develop strategies to deal with sea level rise.

Target Audience
Local elected officials, policy makers at state and local levels, planners

Website
http://www.mote.org/index.php?src=gendocs&ref=Marine%20Policy%20Institute_Land-Sea%20Interactions&category=Marine%20Policy%20Institute

Point of Contact (POC) Name
Barbara J. Lausche, Marine Policy Institute,
Mote Marine Laboratory

POC Phone
(941) 388-4441

POC E-mail
blausche@mote.org

Partners

Type of Resource
Publication

Project Category
Community Adaptation

State
Florida

City or County

Status
Complete

Date
October 2009

Funding Source
Gulf Coast Community Foundation

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Sea Level Rise Visualization for Mississippi and Alabama

Brief Description
This tool shows areas along the Mississippi and Alabama coasts that are vulnerable to sea level rise. It illustrates the scale of potential flooding, but the tool does not account for erosion, accretion, subsidence, or future construction. Water levels are shown as they would appear during an average high tide. The purpose of the tool is to provide a resource for planners, emergency managers, resource managers, and other decision makers that can be used to influence plans for future placement of critical infrastructure as well as for habitat restoration and conservation.

Target Audience
Local elected and appointed officials, city and county staff members, planners, developers, floodplain managers, and natural resource managers

Website
http://gom.usgs.gov/slr/index.html

Point of Contact (POC) Name
K. Van Wilson, U.S. Geological Survey (USGS), Mississippi Water Science Center

POC Phone

POC E-mail
kvwilson@usgs.gov

Partners
USGS Mississippi Water Science Center
USGS National Wetlands Research Center
Mississippi-Alabama Sea Grant Consortium
NOAA Coastal Services Center

Type of Resource
Web Tool

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Mississippi

City or County

Status
Complete

Date

Funding Source
U.S. Geological Survey and NOAA Coastal Services Center

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Simulating Mississippi River Conditions after Future Perturbations

Brief Description
This is a two-dimensional model that includes all of the lower river passes and openings together with many of the dynamic forcings from the Gulf. Model results show the impact of future sea level rise on flow distribution through the various passes, as well as sediment transport behavior of the river system. This has implications for management strategies.

Target Audience
Natural resource managers

Website

Point of Contact (POC) Name
E. Karadogan, Louisiana State University

POC Phone

POC E-mail
ekarad1@lsu.edu

Partners
Louisiana State University

Type of Resource
Model

Project Category
Habitat Adaptation

State
Louisiana

City or County

Status
Ongoing

Date

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Sea Level Affecting Marshes Model (SLAMM) Analysis of Grand Bay National Estuarine Research Reserve and Petit Bois Island (Final Report)

Brief Description
This report documents how sea level rise (at various rates) will impact marshes in the study area through 2100.

Target Audience
Natural resource managers

Website
http://warrenpinnacle.com/prof/SLAMM/GrandBayFinal.pdf

Point of Contact (POC) Name
Sonia Najera, The Nature Conservancy
Mark Woodrey, Research Coordinator, Grand Bay National Estuarine Research Reserve

POC Phone
(228) 475-7047 (Mark)

POC E-mail
snajera@tnc.org (Sonia)
msw103@ra.msstate.edu (Mark)

Partners
NOAA Coastal Services Center
The Nature Conservancy
Gulf of Mexico Alliance
Grand Bay National Estuarine Research Reserve

Type of Resource
Publication

Project Category
Habitat Adaptation

State
Mississippi

City or County
Moss Point

Status
Complete

Date
2009

Funding Source
NOAA Coastal Services Center (CSC)

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Sea Level Affecting Marshes Model (SLAMM) Analysis of Southern Jefferson County, TX (Draft Report)

Brief Description
This report documents how sea level rise (at various rates) will impact marshes in the study area through 2100.

Target Audience
Natural resource managers

Website
http://warrenpinnacle.com/prof/SLAMM/TX_Jefferson_Report_Draft.pdf

Point of Contact (POC) Name
Sonia Najera, The Nature Conservancy

POC Phone

POC E-mail
snajera@tnc.org

Partners
NOAA Coastal Services Center
The Nature Conservancy
Gulf of Mexico Alliance

Type of Resource
Publication

Project Category
Habitat Adaptation

State
Texas

City or County
Jefferson County

Status
Draft

Date
2010

Funding Source
NOAA Coastal Services Center

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
The Socio-Economic Impact of Sea Level Rise in the Galveston Bay Region

Brief Description
This report models the impacts of two scenarios of sea level rise over the next 100 years (0.69 meters and 1.5 meters). For each of these scenarios, researchers estimated the impacts on population, including the number of households displaced, the number of buildings impacted, and impacts to industrial, hazardous, superfund, and solid waste sites.

Target Audience
Planners, floodplain managers, elected officials, emergency managers

Website
http://www.edf.org/sites/default/files/9901_EDF_Sea_Level_Rise_Report.pdf

Point of Contact (POC) Name
David W. Yoskowitz, Ph.D.,
James Gibeaut, Ph.D.

POC Phone
(361) 825-2966
(361) 825-2060

POC E-mail
david.yoskowitz@tamucc.edu
james.gibeaut@tamucc.edu

Partners
Harte Research Institute
Texas A&M University–Corpus Christi

Type of Resource
Publication

Project Category
Community Adaptation

State
Texas

City or County
Houston-Galveston

Status
Complete

Date
2009

Funding Source

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
South Florida Regional Planning Council Sea Level Rise Project

Brief Description
The Sea Level Rise Project is a study designed to illustrate what South Florida may look like in 200 years if current predictions of global warming cause sea levels to rise significantly.

Target Audience
Elected officials, planners

Website
www.sfrpc.com/whatsnew/slr.htm

Point of Contact (POC) Name
Manny Cela, South Florida Regional Planning Council

POC Phone

POC E-mail
celam@sfrpc.com

Partners
Environmental Protection Agency
Southwest Florida Regional Planning Council (SWFRPC)

Type of Resource
Publication

Project Category
Community Adaptation

State
Florida

City or County

Status
Complete

Date
2009

Funding Source
Environmental Protection Agency

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Southern Climate Impacts Planning Program (SCIPP)

Brief Description
The goal of this program is to help communities plan for weather and climate-related disasters in the southern United States, particularly in the face of changing climate. Focusing on the six-state study region of Oklahoma, Texas, Louisiana, Arkansas, Tennessee, and Mississippi, SCIPP concentrates on the high frequency of hazardous natural events that plague the region, including extremes in precipitation (droughts and floods) as well as other hazards that include severe storms and hurricanes. Partners hope to develop an all hazards Web-based geographic information system planning support tool for local hazard mitigation planning purposes. Other tools include climate model forecast information and climate risk assessments.

Target Audience
Local planners, floodplain managers, emergency managers, natural resource managers, local elected officials, universities, developers, nongovernmental organizations, insurance community

Website
www.southernclimate.org

Point of Contact (POC) Name
Lynne Carter, Louisiana State University

POC Phone
(225) 578-8374

POC E-mail
lynne@srcc.lsu.edu

Partners
University of Oklahoma, Louisiana State University, Oklahoma Climatological Survey, Louisiana Office of State Climatology, Southern Regional Climate Center, and National Weather Center at the University of Oklahoma

Type of Resource
Organization

Project Category
Community Adaptation, Habitat Adaptation

State
Louisiana, Mississippi, Texas

City or County

Status
Ongoing

Date

Funding Source
NOAA Climate Program Office

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Southeast Climate Consortium

Brief Description
The mission of the Southeast Climate Consortium is to use advances in climate sciences, including improved capabilities to forecast seasonal climate and long-term climate change, to provide scientifically sound information and decision-support tools for agricultural ecosystems, forests, and other terrestrial ecosystems, as well as coastal ecosystems of the southeastern U.S.

Target Audience
Natural resource managers, agriculture industry

Website
www.seclimate.org

Point of Contact (POC) Name
Keith Ingram, University of Florida

POC Phone
(352) 392-1864

POC E-mail
ktingram@ufl.edu

Partners
Auburn University, Clemson University, Florida State University, North Carolina State University, University of Florida, University of Alabama at Huntsville, University of Georgia, University of Miami

Type of Resource
Organization

Project Category
Community Adaptation, Habitat Adaptation

State
Alabama, Florida

City or County

Status
Ongoing

Date
2008

Funding Source
NOAA Climate Program Office, U.S. Department of Agriculture, U.S. Geological Survey, U.S. Department of Energy, NASA, U.S. Army Corp of Engineers

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
St. Tammany Parish, Louisiana Real-time Emergency Action Coordination Tool (REACT)

Brief Description
This tool collects meteorological data from various sources within St. Tammany Parish and surrounding areas. The data is combined with other relevant information and transferred to an emergency management operating system that analyzes the information using geographic information systems to provide a visualization of the data. As water rises, REACT captures the statistics about threatened areas including residents' phone numbers, roads, and critical facilities which may be vulnerable.

Target Audience
Emergency managers, local elected officials, planners, public works personnel

Website

Point of Contact (POC) Name
Elizabeth deEtte Smythe, Department of Engineering,
St. Tammany Parish

POC Phone
(985) 898-2552

POC E-mail
edsmythe@stpgov.org

Partners
St. Tammany Parish, National Aeronautics and Space Administration, Department of Homeland Security, Federal Emergency Management Agency, Boeing

Type of Resource
Web Tool

Project Category
Community Adaptation

State
Louisiana

City or County
St. Tammany Parish

Status
Completed

Date
2010

Funding Source
NASA, Department of Homeland Security, FEMA
Boeing

Notes
Presented at the Climate Community of Practice Meeting in St. Petersburg, FL
April, 2010

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
StormSmart Coasts

Brief Description
StormSmart Coasts is a Web resource dedicated to helping decision makers in coastal communities address the challenges of storms, flooding, sea level rise, and climate change. Each state's site features recent news and five main sections: Before the Storm, During the Storm, After the Storm, Funding, and Your Community (which allows local communities to create their own sites). A monthly newsletter and social media updates are also available.

Target Audience
Floodplain managers, planners, elected officials, emergency managers

Website
http://stormsmart.org

Point of Contact (POC) Name
Tracie Sempier, Coastal Storms Program Outreach Coordinator

POC Phone
(228) 818-8829

POC E-mail
tracie.sempier@usm.edu

Partners
NOAA Coastal Services Center, Gulf of Mexico Alliance, Coastal Storms Program, Mississippi-Alabama Sea Grant Consortium, NOAA Coastal Storms Program

Type of Resource
Web Tool

Project Category
Community Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Complete

Date
March 2010

Funding Source
NOAA Coastal Storms Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
StormSmart Connect

Brief Description
This website provides a forum for decision makers to share information, resources, and personal stories with one other to help protect coastal communities from weather and climate hazards.

Target Audience
Planners, floodplain managers, emergency managers, elected officials, developers

Website
http://stormsmart.org

Point of Contact (POC) Name
Tracie Sempier, Coastal Storms Program Outreach Coordinator

POC Phone
(228) 818-8829

POC E-mail
tracie.sempier@usm.edu

Partners
NOAA Coastal Services Center, Gulf of Mexico Alliance, Coastal Storms Program, Mississippi-Alabama Sea Grant Consortium, NOAA Coastal Storms Program

Type of Resource
Web Tool

Project Category
Community Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Ongoing

Date
2010

Funding Source
NOAA Coastal Storms Program

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
U.S. Department of Agriculture, Department of Energy, and National Science Foundation Agree to Joint Climate Change Prediction Research Program

Brief Description
The U.S. Departments of Agriculture (USDA) and Energy (DOE) and the National Science Foundation (NSF) have created a joint research program that designates nearly $50 million for new climate system models that can help decision makers develop adaptation strategies addressing climate change. The program seeks proposals that couple climate models at different spatial and temporal scales to erosion, geomorphic change, land use, water management, and food production.

Target Audience
Researchers, natural resource managers

Website
www.energy.gov/news/8777.htm

Point of Contact (POC) Name

POC Phone

POC E-mail

Partners
U.S. Department of Agriculture, U.S. Department of Energy, National Science Foundation

Type of Resource
Grant

Project Category
Community Adaptation

State
Alabama, Florida, Louisiana, Mississippi, Texas

City or County

Status
Ongoing

Date
March 2010

Funding Source
USDA, DOE, NSF

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Virtual Barrier Island

Brief Description
This tool is a three-dimensional virtual model of the Gulf of Mexico and Texas coastal environments for use in the classroom and with the public. The tool explores how sea level rise may impact the coastal zone.

Target Audience
K-12 and the public

Website
http://coastal.beg.utexas.edu/thscmp/vbi.htm

Point of Contact (POC) Name
Tiffany Caudle

POC Phone

POC E-mail
tiffany.caudle@beg.utexas.edu

Partners
Bureau of Economic Geology, University of Texas at Austin;
Harte Research Institute for Gulf of Mexico Studies,
Texas A&M University–Corpus Christi

Type of Resource
Web Tool

Project Category
Community Adaptation, Habitat Adaptation

State
Texas

City or County

Status
Complete

Date
2006

Funding Source
Texas Coastal Management Program, NOAA, Exxon Mobil, Meadows Foundation, Conoco Phillips

Notes

Gulf of Mexico Climate Change Adaptation Inventory

NOAA Gulf Coast Services Center

Title
Wetland Transgressions and Human Misdeeds: Topography, Development, and Sea Level Rise on the Gulf Coast

Brief Description
This paper examines development patterns along the Texas coast and how that pattern could be modified to enable wetland migration. The paper also presents data gaps in our understanding of the susceptibility of coastal wetlands to drowning by sea level rise.

Target Audience
Natural resource managers, planners

Website

Point of Contact (POC) Name
John Jacob, Texas Sea Grant

POC Phone
(281) 218-0565

POC E-mail
jjacob@tamu.edu

Partners

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