

# The Mississippi Gulf Coast Forest Restoration and Conservation Initiative

USDA

<b>Council Member:</b> USDA	Point of Contact: John Dondero
	Phone: 404-347-7200 (o) 405-519-9206 (c)
	Email: jdondero@fs.fed.us

**Project Identification**

Project Title: <b>THE MISSISSIPPI GULF COAST FOREST RESTORATION AND CONSERVATION INITIATIVE</b>		Project
State(s): <b>Mississippi</b>	County/City/Region: <b>See LOCATION INFORMATION</b>	
General Location: <i>Projects <u>must</u> be located within the Gulf Coast Region as defined in RESTORE Act. (attach map or photos, if applicable)</i> <b>Mississippi Gulf Coastal Plain</b>		

**Project Description**

**RESTORE Goals:** *Identify all RESTORE Act goals this project supports. Place a P for Primary Goal, and S for secondary goals.*

<input checked="" type="checkbox"/> P Restore and Conserve Habitat	<input type="checkbox"/> Replenish and Protect Living Coastal and Marine Resources
<input checked="" type="checkbox"/> S Restore Water Quality	<input checked="" type="checkbox"/> S Enhance Community Resilience
<input checked="" type="checkbox"/> S Restore and Revitalize the Gulf Economy	

**RESTORE Objectives:** *Identify all RESTORE Act objectives this project supports. Place a P for Primary Objective, and S for secondary objectives.*

<input checked="" type="checkbox"/> P Restore, Enhance, and Protect Habitats	<input checked="" type="checkbox"/> S Promote Community Resilience
<input checked="" type="checkbox"/> S Restore, Improve, and Protect Water Resources	<input checked="" type="checkbox"/> S Promote Natural Resource Stewardship and Environmental Education
<input type="checkbox"/> Protect and Restore Living Coastal and Marine Resources	<input checked="" type="checkbox"/> S Improve Science-Based Decision-Making Processes
<input type="checkbox"/> Restore and Enhance Natural Processes and Shorelines	

**RESTORE Priorities:** *Identify all RESTORE Act priorities that this project supports.*

<input checked="" type="checkbox"/> X Priority 1: Projects that are projected to make the greatest contribution
<input checked="" type="checkbox"/> X Priority 2: Large-scale projects and programs that are projected to substantially contribute to restoring
<input checked="" type="checkbox"/> X Priority 3: Projects contained in existing Gulf Coast State comprehensive plans for the restoration ....
<input checked="" type="checkbox"/> X Priority 4: Projects that restore long-term resiliency of the natural resources, ecosystems, fisheries ...

**RESTORE Commitments:** *Identify all RESTORE Comprehensive Plan commitments that this project supports.*

<input checked="" type="checkbox"/> X Commitment to Science-based Decision Making
<input checked="" type="checkbox"/> X Commitment to Regional Ecosystem-based Approach to Restoration
<input checked="" type="checkbox"/> X Commitment to Engagement, Inclusion, and Transparency
<input checked="" type="checkbox"/> X Commitment to Leverage Resources and Partnerships
<input checked="" type="checkbox"/> X Commitment to Delivering Results and Measuring Impacts

**RESTORE Proposal Type and Phases:** *Please identify which type and phase best suits this proposal.*

X Project     X Planning     X Technical Assistance     X Implementation     Program

**Project Cost and Duration**

<b>Project Cost Estimate:</b>		<b>Project Timing Estimate:</b>	
Total : \$21M	\$21,000,000	Date Anticipated to Start: <u>01/2016 or ASAP</u>	
		Time to Completion: <u>5</u> years	
		Anticipated Project Lifespan: <u>5</u> years	

## TABLE OF CONTENTS

<b>THE MISSISSIPPI GULF COAST FOREST RESTORATION AND CONSERVATION INITIATIVE EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>PROPOSAL NARRATIVE.....</b>	<b>5</b>
Introduction and Background .....	5
Restoration and Conservation Planning and Prioritization.....	7
Restoration and Conservation Project Implementation .....	7
Preparing for the Future: Outreach and Education .....	15
Monitoring and Measures of Success .....	16
Leveraging of Resources and Partnerships .....	17
<b>LOCATION INFORMATION .....</b>	<b>20</b>
<b>BUDGET NARRATIVE .....</b>	<b>26</b>
<b>ENVIRONMENTAL COMPLIANCE CHECKLIST .....</b>	<b>28</b>
<b>DATA AND INFORMATION SHARING PLAN.....</b>	<b>30</b>
<b>REFERENCES .....</b>	<b>32</b>
<b>OTHER .....</b>	<b>35</b>

## **THE MISSISSIPPI GULF COAST FOREST RESTORATION AND CONSERVATION INITIATIVE EXECUTIVE SUMMARY**

In April 2010, the Deepwater Horizon drilling platform exploded, killing 11 workers and spilling billions of barrels of crude oil into the Gulf of Mexico. The spill has had a negative impact on the coastal wetlands and estuaries of the Mississippi Gulf Coast. These wetlands and estuaries serve an important function as habitat for wildlife and fisheries. The seafood industry in coastal Mississippi alone is responsible for generating roughly \$450 million per year (Handley et al., 2012). Nearly all commercially and recreationally fished species from the Gulf of Mexico depend on estuaries for some part of their life cycle. Inland habitats and watersheds have a direct effect on the health of coastal wetlands and estuaries and “are critical to a sustainable Gulf of Mexico” (Walker et al., 2012).

A broad coalition of federal, state, and municipal government agencies and private conservation organizations have developed a strategy to restore and conserve habitat and water quality while providing economic opportunity in the Mississippi coastal plain. Restoring the health and resiliency of ecosystems within the coastal plain will help rehabilitate coastal wetlands and estuaries affected by the Deepwater Horizon oil spill. These projects complement those included in the state of Mississippi’s comprehensive plan for restoration. The state has recognized the value of previous ecosystem restoration efforts, which have included habitat conservation, restoration, and enhancement in addition to projects focused on coastal freshwater input and hydrology.

The Mississippi Gulf Coast Forest Restoration and Conservation Initiative is a collection of regionally scalable projects that; 1) plan and prioritize restoration opportunities, 2) implement restoration projects on public and private lands, and 3) create a foundation for future restoration and conservation projects. Planning and prioritization will be accomplished through development of an ecosystem modeling application. Restoration projects will be implemented throughout the Mississippi coastal plain and will include longleaf pine, coastal savanna, pitcher plant bog, bottomland hardwood forest, and mesic slope forest restoration. These forested ecosystems provide habitat for numerous threatened and endangered plants and animals. Additionally, coastal stream restoration, non-native invasive species control and detection, and updates to existing watershed restoration plan projects are proposed. To complement the effort of agencies and organization’s activities, a robust restoration outreach and education program targeting private forestland owners will be developed and implemented along with increases in funding for grants to these landowners to accomplish their restoration goals. This approach involves all ownership classes across the landscape including military installations. The proposed restoration and conservation activities protect the nation’s military readiness by facilitating the continuation of training at Camp Shelby.

This proposal represents the first phase of a multi-phase landscape scale ecosystem restoration strategy for the Mississippi coastal plain. The projects identified have been prioritized based on an analysis of critical needs, environmental compliance readiness, resource and partner

leveraging potential, and greatest predicted impact for residents within the coastal plain. Future phases will leverage the successful restoration activities of the initial phase and involve projects that are currently in the design and evaluation stage of development. The Initiative would complement other forest-focused, multi-phase proposed RESTORE projects that may be implemented throughout the Gulf region. See, for example, the concurrently pending *Apalachicola Project Phase 1: Restoring Apalachicola Bay and Region*. These proposed projects would contribute to a healthy, resilient, sustainable Gulf ecosystem for current and future generations. Similar proposals focusing on restoration of forested landscapes across the Gulf region are also under development and, in addition to helping rehabilitate coastal wetlands and estuaries, the proposed projects would reduce vulnerability to natural disturbance regimes, including hurricanes, to which these ecosystems have developed adaptations (Stanturf et al., 2007).

The Mississippi Gulf Coast Forest Restoration and Conservation Initiative is part of a broader, Gulf-wide effort by the USDA to engage partners and improve management of forested watersheds as a necessary step in restoring the waters and terrestrial habitats of the Gulf. Healthy forested watersheds are essential for Gulf health. Accordingly, USDA is mobilizing its internal resources from the Natural Resource Conservation Service and the U.S. Forest Service (in cooperation with State Foresters) as well as coordinating with external partners (including those active in the America's Longleaf Restoration Initiative) to promote similar projects in watersheds across the Gulf. Additional locations where the model outlined in this proposal could be replicated and scaled up are identified in the attached supporting materials (Fig. 5).

The total funding requested for this initiative is \$20,936,000 dollars. The timeline for the projects is 5 years and each project is scalable based on funding and responsive to regional priorities. The projects will create local employment opportunities and protect community infrastructure while reducing risk to human health, primarily through fuels treatments, flood mitigation, and improved water quality. The success of this initiative is highly likely and sustainable because all landowner classes are represented and the participating organizations and agencies have a long and successful history of collaborative restoration experience and shared restoration goals.

This proposal is submitted under the statutory authority of the "Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast Status Act of 2012", herein referenced as the RESTORE Act. The primary goal of this proposal is habitat restoration and conservation with a secondary goal of restoring water quality. Primary objectives of this proposal are restoration, enhancement, and protection of habitat while secondary objectives include; restoration, improvement and protection of water resources, improving science-based decision-making processes, promoting community resilience, and promoting natural resource stewardship. This landscape scale project meets RESTORE Act and Comprehensive Plan priority criteria by substantially contributing to the restoration and protection of the natural resources and wildlife habitats of Gulf Coast ecosystems.

## PROPOSAL NARRATIVE

### THE MISSISSIPPI GULF COAST FOREST RESTORATION AND CONSERVATION INITIATIVE

#### Introduction and Background

Forested wetlands and riparian forests in the southern U.S. provide a host of ecological services including timber production, wildlife habitat, enhancement of water quality, stream bank stabilization, nutrient cycling and sediment filtration (Wear and Greis, 2013). In addition, fuel reduction in forests (thinning, woody understory removal, savanna restoration, and prescribed fire) can lead to an increase in water table levels (Edwards et al., 2012, McLaughlin et al., 2013). Public and private conservation and land management agencies and organizations in Mississippi have a long history of working collectively to restore, enhance, and protect these critical ecosystems and their associated functions across the landscape. The public and private lands initiative outlined here will leverage these partnerships and implement additional landscape scale restoration efforts while helping reduce risk to human health and improving economic welfare.

The Mississippi Gulf Coast Forest Restoration and Conservation Initiative is a five-year project that focuses on restoring forests and streams on public and private lands throughout the Mississippi coastal plain, predominantly within the Pascagoula and Mississippi Coastal watersheds. The primary goal of this Initiative is habitat restoration and conservation with a secondary goal of restoring water quality. Primary objectives of this proposal are restoration, enhancement, and protection of habitat while secondary objectives include; restoration, improvement and protection of water resources, improving science-based decision-making processes, promoting community resilience and promoting natural resource stewardship. This landscape scale project meets RESTORE Act and Comprehensive Plan priority criteria by substantially contributing to the restoration and protection of the natural resources and wildlife habitats of Gulf Coast ecosystems.

The Initiative will; 1) plan and prioritize restoration opportunities, 2) implement restoration projects on public and private lands and 3) plan for future restoration and conservation projects. A proposed ecosystem modeling application will assist in prioritization of projects and ensure that restoration takes place in geographic locations where they will have the greatest impact. Initiative projects will include longleaf pine woodland forest, coastal savanna, pitcher plant bog, bottomland hardwood forest, and mesic slope forest restoration. These ecosystems provide habitat for numerous threatened and endangered plants and animals. Improved resiliency of selected coastal streams will be accomplished by addressing erosion and hydrology issues. An outreach and education program targeting private forestland owners will be developed and implemented along with increases in funding for grants to these landowners to help them accomplish their restoration goals. This outreach program, a long history of cooperation among partners with proven restoration experience, shared restoration goals, and the fact that a significant portion of the land in the project area is protected and managed by several of the partners (Table 1) gives the Initiative a high probability of success and

sustainability. Many of the strategies and basic habitat restoration techniques included in this proposal address ecosystem threats listed in Mississippi’s Comprehensive Wildlife Conservation Strategy (2005-2015).

USDA Forest Service (USFS)	Mississippi Forestry Commission (MFC)
USDA Natural Resources Conservation Service (NRCS)	The Nature Conservancy (TNC)
USDOI Fish and Wildlife Service (USFWS)	The Land Trust for Mississippi Coastal Plain (LTMCP)
American Forests Foundation (AFF)	U.S. Geological Survey (USGS)
U.S. Endowment for Forestry and Communities	Department of Defense/Mississippi Army National Guard (DOD/MSANG)
Wildlife Mississippi	Mississippi Department of Wildlife, Fisheries, and Parks
Soil and Water Conservation Districts	Mississippi Band of Choctaw Indians

**Table 1. MS Gulf Coast Forest Restoration and Conservation Initiative partners.**

The Pascagoula and Mississippi Coastal watersheds (Fig. 1) create and sustain functional terrestrial, riparian, aquatic, and wetland habitats, and associated populations of diverse native plant and animal species. Millions of gallons of clean, fresh water flow from seeps and springs within the proposed project areas into the streams and creeks that form these watersheds and eventually enter the Gulf of Mexico. Properly functioning wetlands help filter precipitation and slow runoff, are a buffer against downstream flooding, and provide forage, cover, and habitat for wildlife, including a large number of endangered, threatened, and declining species.

Near coast pine flatwoods, coastal wet pine savannas, pitcher plant bogs, bottomland hardwood forests, and mesic slope forests are characteristic components of Mississippi Gulf Coast ecosystems. These are embedded systems within the overall dominant longleaf pine ecosystem. Historically, longleaf pine covered 90 million acres within the southeastern U.S. but has been reduced to approximately 3 million acres today (Frost, 1993). In Mississippi, longleaf pine forests, from which the “Piney Woods” derives its name, once covered an estimated 11 million acres with fewer than 379,000 acres remaining today. Longleaf pine ecosystems are home to nearly 900 endemic plant species and 170 of the 290 reptiles and amphibians occurring in the southeast. These ecosystems host at least 29 federally listed threatened and endangered species (America’s Longleaf, 2009), including the red-cockaded woodpecker, gopher tortoise, black pine snake, Mississippi gopher frog and Louisiana quillwort, all of which are within Initiative project areas.

Upland areas that were once longleaf, characterized by a grassy, open understory are now predominately covered by loblolly and slash pine plantations with a thick understory of woody vegetation. These areas transition to hardwood-dominated riverine floodplain forests along streams. Mesic slope forests and wet flats often occupy the transition zone between uplands

and floodplain wetlands. These transitional zones and bottomland forests are important for watershed health and wildlife habitat.

Within the larger Coastal Streams and Pascagoula watersheds, specific geographic areas such as Turkey Creek, and the Tchoutacabouffa and Tuxachanie Rivers will be targeted for restoration and conservation activities. Proposed projects can be scaled up to include additional watersheds within the larger basins or down to specific targeted areas depending on available funding. The proposed activities were strategically chosen as the most sustainable and cost effective way, through natural resources management, to reduce risk and exposure to human health, help rebuild the economy in the MS coastal plain, and protect against natural weather systems and the effects of anthropogenic climate change for those affected by the Deepwater Horizon oil spill. The proposed activities form the foundation for future systematic management and conservation projects by substantially improving ecosystem resiliency, caring for the headwaters and streams of the landscape, developing models for prioritization of restoration activities, and educating private landowners.

### **Restoration and Conservation Planning and Prioritization**

#### *Ecosystem Modeling – A Science Based Approach to Restoration*

Ecological systems mapping of the project area will be conducted to better inform the partners about restoration needs and priorities for projects. The map will cover 1.5 million acres across an eight county area. Environmental factors and field reference plots will be used to define ecological zones. The map will also use environmental variables derived from LiDAR, (information on geology and soils) to model ecological systems. Information from conservation organizations in the state as well as the Mississippi Department of Wildlife, Fisheries, and Parks, Museum of Natural Sciences, and NatureServe, will be used to make the product as useful and inclusive as possible. This type of mapping has been successfully used by the U.S. Forest Service, The Nature Conservancy, Land Fire Partners, State Heritage Programs and Fire Learning Networks for biodiversity planning purposes. Map units are defined by NatureServe Ecological Systems, a consistent set of mid-scale ecological units, commonly used for biodiversity and fuels planning (<http://www.landfire.gov>; <http://natureserve.org>). The national framework of ecological units developed by the U.S. Forest Service in 1993 (Cleland et.al., 1997), specifies the consideration of landform, soils or geology, and potential natural vegetation in the classification of ecological units and ecological potential at various scales.

### **Restoration and Conservation Project Implementation**

#### **Coastal Streams and Riparian Restoration and Protection**

Forests provide the “cleanest and most stable” water supply of any other land use in the south (Wear and Greis, 2013). High quality water flowing from the uplands into the Mississippi sound is the foundation of the Mississippi Coast’s vibrant commercial and recreational fishing economy and the burgeoning ecotourism industry. Threats to watershed health that negatively impact this high quality water include land conversion, sedimentation, urbanization, pollution

from household and industrial waste, and non-native invasive species. Restoring the forested watersheds in the Mississippi coastal plain will not only help rehabilitate coastal wetlands and estuaries but will also increase the landscape's resiliency to growing development pressures, tropical storms, and catastrophic wildfires while improving recreation and economic opportunities for residents and tourists. Restoration could also increase timber value, carbon sequestration, and carbon storage (Johnsen et al., 2009).

Prior to Hurricane Katrina in 2005, the Land Trust for the Mississippi Coastal Plain was awarded a grant from EPA Region IV to build partnerships in six watersheds in South Mississippi. Criteria for selecting watershed partnership areas included; 1) watersheds that represented South MS both geographically and ecologically, 2) watersheds where LTMCP owned and managed lands, and 3) watersheds that demonstrated a need for restoration and protection. The six watersheds that were selected included Turkey Creek in Harrison County, Red Creek (stream sections flowing through Stone County), Old Ft Bayou in Jackson County, West Hobolochitto Creek in Pearl River County, Tchoutacabouffa River (stream sections flowing through Harrison County) and Upper Bay of St Louis (identified streams in Hancock County). The main goal of the watershed partnership was to develop and implement a solution-oriented action plan for each of these six watersheds. Each watershed plan had two primary objectives: 1) to research, identify and implement watershed protection and associated education strategies for each watershed, and 2) to research, design and implement watershed restoration and associated education strategies for each watershed. LTMCP proposes a review and update of the existing watershed plans and development of any necessary adaptive management strategies. The plan review will involve the original steering committee and evaluation of any new applicable data. Updates to these plans could potentially leverage new sources of funding and resources that were not available when the original plans were developed.

*Turkey Creek:* Turkey Creek flows approximately 12.9 miles in a southeasterly direction from its headwaters until its confluence with Bernard Bayou (Fig. 2). The headwaters are located just north of Interstate 10 and west of Highway 49. The drainage area is approximately 11,000 acres and lies within Harrison County. Native vegetation within the watershed includes species found in coastal wet pine savannas, mixed southern forests, bayhead swamps, and bottomland hardwood forests. The watershed is relatively flat, creating a slow-moving coastal stream and tidal creek. This urban watershed contains wetlands that have been identified by the EPA as Aquatic Resources of National Importance. These wetlands are one of the first and last watering sites for neotropical migrant birds travelling between North America, and Central and South America.

In 1866, a group of emancipated African-Americans exercised their newly acquired rights to purchase and settle 320 acres in Harrison County, MS. Historic land records listed this area as uninhabited "Swamp Land". Now known as Turkey Creek, the land encompasses bottomland and coastal maritime forests, freshwater marsh, and scrub-shrub habitats. The settlers created arable land and instituted sustainable agriculture practices. They supplemented their diet with fish, plants, and wildlife from the surrounding forests and streams and developed a viable, self-sufficient community bound together by culture and ecology.

Until the mid-1980's, Turkey Creek's community institutions and land-use remained remarkably unchanged as property was passed from generation to generation. Recently, however, this piece of American heritage has been critically threatened by airport expansion, municipal annexation, land speculation, deforestation, wetland destruction, commercial sprawl, spot zoning and political isolation. As a result, in 2001, the Mississippi Heritage Trust listed the entire community as one of the State's Ten Most Endangered Historical Places.

The Land Trust has been working with the citizens of Turkey Creek since 2003 when facilitated meetings were held with its citizens to assist in crafting a vision for their community and to explain the benefits of watershed restoration. The Turkey Creek community identified a greenway as one of their goals to serve as a buffer to the creek and increase outdoor recreation opportunities within the community. LTMCP has acquired over 300 acres along both sides of Turkey Creek. A partnership group, working collaboratively with LTMCP, has been created for this effort and includes the Turkey Creek Community Initiative (TCCI), North Gulfport Community Land Conservancy (NGCC), the City of Gulfport, Natural Resource Conservation Service (NRCS), MS Department of Marine Resources (DMR), MS Department of Environmental Quality (MDEQ), MS Department of Wildlife, Fisheries and Parks, MS Department of Transportation (MDOT), U.S. Environmental Protection Agency (EPA), and the Gulfport-Biloxi Airport Authority.

The NRCS and LTMCP propose complimentary projects within this historically significant watershed. The LTMCP will focus their efforts on Bayhead reforestation at the Mt. Pleasant/Audubon site in addition to maintenance and monitoring of the greenway. The NRCS will focus their efforts on stream restoration, including debris and sedimentation removal within the waterway that has been deposited through upstream construction and the Hurricane Katrina storm surge. This restoration project will also reduce the risk for flooding in the Forest Height Community. The goal will be to restore the stream to a pre-Katrina state. Environmentally friendly engineering measures will be used during the planning and restoration phases in accordance with national, state, and local permitting requirements. Project planning and implementation will be in accordance with the NRCS National/State Engineering Field Manual. Habitat restoration within the watershed will focus on enhancing habitat for rare animal and plant species. Protection efforts along the riparian buffer will focus on the promotion of NRCS conservation easement programs.

*Red Creek:* Red Creek has been the focus of past watershed planning efforts by the Land Trust for the Mississippi Coastal Plain. The plan needs to be updated to address changing needs within the drainage. The TNC-owned Red Creek Nature Preserve has significant erosion issues ranging from head cuts to sedimentation from old logging roads. Measures to alleviate these problems will be implemented to improve downstream water quality.

### Ecosystem Restoration

High yield tree production and decades of fire suppression have been major factors in determining forest cover associations, structure, and species composition in the MS coastal plain. The frequent, low intensity fire adapted longleaf ecosystems have been replaced by high density stands of young pine and heavy woody underbrush. These stands lack the necessary fine fuel understory to carry low intensity fires and maintain sustainable levels of coarse woody debris. The result is an accumulation of fuel that can lead to catastrophic, destructive wildfires. These fires threaten the lives, homes, and workplaces of coastal plain residents, negatively impact air quality, damage habitat and riparian areas, and are costly to manage. In order to restore these longleaf pine ecosystems, thinning and removal of off-site trees and heavy underbrush as well as reintroduction of low to moderate intensity fire on a 1- to 3-year return interval are necessary (Brockway et.al., 2002; Glitzenstein et.al., 2003).

### De Soto National Forest

The De Soto National Forest is one of sixteen range-wide significant landscapes identified as a high priority for longleaf pine restoration by the America's Longleaf organization in its *Rangewide Conservation Plan for Longleaf Pine* (2009). A total of 380,000 acres of National Forest Lands comprise the largest terrestrial footprint of naturally functioning ecosystems on the landscape in southern MS. Embedded within this footprint, and the greater longleaf pine ecosystem, are areas of pitcher plant bogs, coastal pine meadows, longleaf pine savannas, bayheads, riverine bottomland hardwood forests and mesic slope forests. These biologically diverse systems support a variety of wildlife, including red-cockaded woodpeckers, gopher tortoises, Mississippi gopher frogs, and several songbirds whose populations are in decline. Fire suppression, altered hydrology, land development, and past forest management strategies, such as planting loblolly and slash pine, threaten these habitats.

The U.S. Forest Service, National Forests in Mississippi recently revised their land management plan using an ecosystem-based approach (<http://www.fs.usda.gov/mississippi/>). The Forest Service will restore, enhance, and maintain pitcher plant bogs, ephemeral wetlands, wet pine savannas, pine flatwoods, mesic slope forests, bottomland hardwood forests and longleaf pine woodland habitats on the De Soto National Forest by restoring hydrologic function and vegetation structure in addition to reinstating a more characteristic prescribed fire regime. These proposed activities would reduce heavy fuels, treat invasive species, and address erosion issues. Habitat for the federally endangered red-cockaded woodpecker, the federally threatened gopher frog, and numerous globally and regionally rare plants, animals, pollinator species, and aquatic species would be maintained, improved, and restored (USFWS, 2003, Brooks and Stoufer, 2011). Exchanging the existing volatile fuel type for a more manageable fuel type would decrease the risk of catastrophic wildfire and the risk to the health of MS coastal plain residents. The specific geographies that will be the focus of this effort on the De Soto NF are the Biloxi Flats/Bayou Billie area and the Tchoutacabouffa River/Tuxachanie Creek watershed (Fig. 2).

### 16<sup>th</sup> Section/School Trust Lands

In accordance with Mississippi Code, Section 29-3-45, the Mississippi Forestry Commission is responsible for assisting school boards with the management of forestlands on school trust

property in Mississippi. Local school boards control 16<sup>th</sup> Section/School Trust Lands within the targeted watersheds. Through management and marketing agreements with the Mississippi Forestry Commission, a majority of these lands are used to generate timber revenue which helps cover operating costs for public education institutions. After harvest, these lands are generally replanted with loblolly or slash pine partly because these species are cheaper to plant than longleaf. An incentive program to replant and manage these lands with native longleaf pine will be established as a way to begin the restoration of an initial 3,000 acres of school trust property.

#### *NRCS Private Lands and Community Based Conservation and Restoration Initiatives*

Working collaboratively with local, state, and federal government agencies, the Mississippi Band of Choctaw Indians (Fig. 4) and other non-governmental entities, the NRCS has a history of successfully implementing sound restoration and conservation measures. Within the RESTORE project boundary, over 1,494,830 acres are suitable for longleaf ecosystem restoration, 746,508 acres are suitable for gopher tortoise habitat restoration, and 23,234 acres are suitable for gopher frog habitat restoration. Funding these proposed projects and programs will produce measurable restoration and conservation results.

Using the model of the Black Creek Initiative, NRCS will expand this successful private lands restoration program to the larger Coastal Streams and Pascagoula watersheds. This program will include the planning, delivery and implementation of core and essential conservation practices designed to enhance water quality and restore degraded habitats on these private lands. Funding will enable NRCS field office local technical staff and their partners access to these watersheds to address natural resource concerns across ownership classes. This effective, efficient, science-based program will target forest landowners in addition to those managing agricultural lands and pastures. Through existing programs such as EQIP (Environmental Quality Incentives Program), private landowners are eligible for compensation for restoration practices such as prescribed burning, planting of native vegetation, removal of invasive species and installing water quality best management practices. The projects funded through the RESTORE Act will complement these existing programs and will not be used as cost share for any federal program. Restoration emphasis will be; 1) restoring the longleaf ecosystem, 2) restoring and enhancing suitable and critical habitat for threatened and endangered species, 3) restoring bottomland hardwood forests, and 4) developing restoration agreements and permanent easements for long-term habitat protection and enhancements. This private lands conservation and restoration initiative will ensure long-term conservation benefits for landowners and residents in the MS coastal plain.

#### *The Nature Conservancy Nature Preserves*

TNC manages over 12,000 acres within the targeted watersheds ranging from coastal pine wetlands in the Old Fort Bayou drainage to bottomland hardwood forests along the Pascagoula River. Prescribed burning and treatment of invasive species will be the focus of restoration efforts on these preserves, which contain numerous listed rare plant and animal species and unique habitats. Longleaf pine ecosystems, bottomland hardwoods and coastal pine meadows will be positively impacted by the projects.

### Mississippi Sandhill Crane National Wildlife Refuge

The 19,200-acre Mississippi Sandhill Crane National Wildlife Refuge, located in a rapidly urbanizing area of Jackson County, is managed by the U.S. Fish and Wildlife Service specifically for the critically endangered Mississippi sandhill crane and for several declining grassland birds, like the Henslow's sparrow and yellow rail. The Refuge consists of wet coastal pine meadows and longleaf savannas with numerous extensive pitcher plant bogs and bayhead drains. Restoration activities will include restoration mulching and removal of woody vegetation, prescribed fire to replenish ecosystems, removal of non-native invasive plants and animals, planting of native grasses, re-creation of ephemeral ponds, hydrologic restoration through plugging ditches, erosion control measures, installation of water control structures, and planting of supplemental food.

### Grand Bay National Wildlife Refuge

Grand Bay National Wildlife Refuge is also managed by the U.S. Fish and Wildlife Service and has an acquisition boundary of 15,465 acres in the southeast corner of Jackson County MS, and the southwest corner of Mobile County, AL. The Refuge was established to protect one of the largest expanses of Gulf Coast savanna remaining in a relatively undisturbed state. The Refuge contains a variety of wetland habitats, both tidal and nontidal, such as pine savannas, salt marshes, salt pannes, bays and bayous, as well as terrestrial habitats that are unique to the coastal zone, such as maritime forests. Restoration activities will include mulching and removal of woody vegetation, prescribed fire to replenish ecosystems, removal of non-native invasive plants and animals, hydrologic restoration through plugging ditches, and erosion control measures.

Restoration projects at Mississippi Sandhill Crane and Grand Bay NWRs will follow the conservation strategies outlined in the USFWS *Vision for a Healthy Gulf of Mexico Watershed*. These strategies will guide collaborative conservation planning and implementation for landscape scale Gulf restoration projects in cooperation with the states, local communities, other federal agencies and the regional conservation network. These projects will achieve the greatest and most immediate benefit to the public's fish and wildlife resources and focus on restoration of grasslands, forests, wetlands, and coastal longleaf pine habitat. These projects will provide and maintain healthy habitats for wildlife dependent on Gulf ecosystems.

Proposed habitat restoration also supports objectives outlined in the Comprehensive Conservation Plans for Mississippi Sandhill Crane and Grand Bay NWRs, the Mississippi Sandhill Crane Recovery Plan, the North American Waterfowl Management Plan, the Western Hemisphere Shorebird Reserve Network, the National Wetlands Priority Conservation Plan, the Partners in Flight initiative, and Partners in Amphibian and Reptile Conservation.

### Non-Native Invasive Species

Non-native invasive species (NNIS) are among the greatest threats to global biodiversity and economic resiliency (Pimentel et al., 2005). Invasive species pose one of the biggest biosecurity threats to ecosystem and economic resiliency in the Gulf coast region. NNIS in the MS coastal

plain negatively impact valuable ecosystem services that healthy forests provide such as bank stabilization, water quality enhancement, runoff control, carbon sequestration, wildlife habitat, and biodiversity maintenance. Also, forest products are one of the major agricultural commodities within the region, generating \$1.17 billion in economic activity from 19.7 million acres of forested lands in Mississippi during 2013 alone. The Gulf coast region is dealing with the expansion of a number of invasive plants; one of the most significant is cogongrass (*Imperata cylindrica*). Cogongrass is a non-native grass that forms dense mats of rhizomes and displaces native plant and animal species, including many listed as threatened or endangered, such as: the gopher tortoise, black pine snake, Mississippi redbelly turtle, eastern indigo snake, Mississippi sandhill crane, red-cockaded woodpecker, yellow-blotched map turtle, pondberry, and Louisiana quillwort. Ungulates, such as whitetail deer, find a number of invasive species, including cogongrass, unpalatable and will disproportionately feed on native plants. Cogongrass also severely inhibits the restoration of longleaf pine throughout its native range. It spreads rapidly after disturbances such as wildfire, burns hotter than native fuels, and contributes to atypically high fuel loads across the landscape.

The Mississippi Invasive Plant Control Program (MIPCP), administered by the Mississippi Forestry Commission (MFC), is tasked with suppressing the northern and western spread of cogongrass. MIPCP began operations in six north central counties of Mississippi in 2010, following the leading edge of cogongrass infestation. The program moved south and east and has operated in twenty-two cogongrass infested counties (Fig. 3). The MIPCP is presented to all landowners in eligible counties as a cost-free program. Program outreach occurs through media outlets and public presentations, in conjunction with NRCS Service Centers, the Mississippi State University Extension Service, Cattlemen's Associations, and local County Forestry Associations among others.

Using the existing infrastructure of the MIPCP, the MFC would use funding to treat infestations in the coastal counties of Hancock, Harrison, and Jackson. The program would continue to offer no cost treatments to the landowners and communities in these counties affected by the Deepwater Horizon oil spill. The local economy of the coastal plain counties would benefit through seasonal job creation and contracting opportunities.

In addition to invasive plants, non-native insects and pathogens have been or are currently decimating numerous tree species throughout the nation. Examples of these insects and pathogens include the emerald ash borer, chestnut blight (caused by the fungus *Cryphonectria parasitica*), and the redbay ambrosia beetle (*Xyleborus glabratus*) which carries the fungus that causes laurel wilt disease (*Raffaelea lauricola*). International ports of entry, interstate highways, rail yards, and outdoor recreation areas, such as state and federal parks, are considered hotspots for introduction, spread, and establishment of non-native forest insects and pathogens. Non-native forest pests are spread globally in solid wood packing materials aboard large cargo ships and further spread through movement of firewood after they become established (GAO 2006, Muirhead et al. 2006). Because only 2-6% of more than 15 million cargo containers entering the U.S. are inspected each year, this trend is projected to continue. Early detection is paramount for any quarantine and eradication attempt. However, these efforts do

not exist on a large scale and many forest pest populations, such as the emerald ash borer in Michigan and redbay ambrosia beetle in Mississippi, establish themselves years prior to their discovery. When non-native pests and insects are allowed to establish themselves, eradication attempts become nearly impossible.

Current tactics for monitoring and detection of non-native forest pests are ineffective and reactionary, and proactive methods of monitoring for newly introduced forest pests are necessary for the long-term ecosystem health and economic stability of the Gulf coastal plain. Monitoring programs are critical because once pests become established in the forests of the Gulf coastal plain, they will likely continue to move inland causing ecological and economic consequences that often become continental in scale (Formby et al, 2013). The subtropical climate, multiple aeronautical and oceanic international ports of entry, and large, publicly owned parks and forests make Mississippi's Gulf coast region a hotspot for potential introductions of new forest pests. Establishing a monitoring and early detection system would benefit residents within the MS coastal plain and, potentially, the nation if pests with a high probability of spread were eradicated before establishing themselves.

Common gardens, such as arboreta and botanic gardens, can play an important role in monitoring for invasive species by serving as sentinel plantings and have been proven effective (Fagan et al, 2008 and Fagan et al, 2008). According to Kramer and Hird (2014), "botanic gardens [and arboreta] play an important leadership role in protecting the world's plant diversity and minimizing the impact of invasive species. Many botanic gardens and arboreta work individually and collaboratively to address invasive species issues by: 1) educating visitors about invasive plants, pathogens, and insect species; 2) monitoring collections to evaluate the invasive potential of introduced plant species in new climates and sharing information with relevant stakeholders; 3) monitoring collections to identify potential new invasive pests or pathogens; 4) working with relevant stakeholders to contain, control, and raise awareness about invasive species; and 5) helping public and private partners identify alternative non-invasive plant species." To be effective, sentinel plantings require high native plant diversity to provide host material for invasive species interception and detection. In addition to their monitoring and detection functions, sentinel arboreta would help restore local ecosystems through replanting of native tree species.

The establishment of a sentinel arboretum along the Mississippi Gulf Coast would have numerous positive impacts on regional stability and resilience. Opportunities for citizen science projects and public education related to forest conservation, invasive species, and firewood movement will enrich local communities and guard against future anthropogenic threats to regional biosecurity. Additionally, creating sentinel arboreta would strengthen ecosystem resilience via the removal of previously established non-native species, such as cogongrass and Chinese tallow tree, and subsequent maintenance and restoration of a diversity of native plants. Finally, regional economic stability would be restored, enhanced, and protected by the presence of sentinel arboreta. In addition to protecting forest economies, these arboreta have the potential to increase tourism and create jobs associated with this increased tourism revenue.

The initial arboretum would be established in Ocean Springs, MS, near a major port of entry, several state parks, and Interstate 10. Training for city personnel, citizen science groups, and cooperators conducted during the first 5 years will enable local groups to carry forward invasive species monitoring after the initial award period has ended. As future funding becomes available, additional sentinel gardens can be established in coastal Mississippi and around the Gulf Coast region.

### **Preparing for the Future: Outreach and Education**

#### **Piney Woods Project**

Ownership of forestland within the coastal plain of MS is a mosaic of federal, state, municipal, conservation organization, and privately owned woodlands. Public land management is generally driven by policy and conservation lands are usually managed for specific, well-defined goals and objectives. Decision makers are usually trained professionals with easy access to current, reliable information.

The woodland owner audience presents unique challenges. Recent national data indicates only 15% have ever consulted a resource professional, as few as 5% have forest management plans, and only 1% are certified to any standards of sustainability. The vast majority are not engaged in any type of active land management. The American Forest Foundation, in cooperation with State Foresters, the U.S. Forest Service, NRCS and others, has developed a unique landowner engagement strategy utilizing modern marketing techniques. The Foundation reaches landowners with strategic messaging that resonates with them based on publicly available consumer data. They nurture these new relationships, by evaluating the level of engagement the landowner desires, to craft and share relevant information and remove barriers to action.

Results from a pilot project in the Driftless region of Wisconsin have been positive. Following the methodology discussed, response rates for landowners were 12.5% of those contacted compared to the traditional marketing results of 1-3%. Of the initial respondents, 30% have taken additional steps toward land stewardship. Results from our other place-based projects are showing similar trends in landowner engagement.

Work in the Piney Woods region in MS during 2013 and 2014, under a grant from the U.S. Forest Service and the Mississippi Forestry Commission, has delivered forest management information to 571 landowners and has resulted in site visits and management recommendations from registered foresters and wildlife professionals on 252 landowner's properties. While work putting professionals on the ground with landowners is ongoing, the next steps in the Piney Woods project include promoting membership in state and county forestry associations and surveying participant's attitudes towards fire and smoke and their willingness to add prescribed fire to their management practices.

In cooperation with the project implementation team, the Foundation will use its micro-targeting data analysis and social marketing strategies to reach and engage landowners in

sustainable forest management. These strategies will be used to make landowners aware of the NRCS private lands initiative and MFC NNIS program throughout the Initiative area. As landowners respond to marketing, they will increase their knowledge of stewardship through informational materials, consistent electronic communications, peer led events, technical education programs, and personal visits from natural resource professionals. Foundation foresters will work with landowners and provide management and ecosystem restoration advice, increasing the health, sustainability, and productivity of their forestland. The Foundation's foresters will also be able to provide written stewardship management plans, enabling landowner access to technical assistance and cost-share programs and funding. Finally, the Foundation's volunteer network of foresters can provide third party forest certification to credible and globally recognized standards of sustainability, ensuring access to more competitive forest product markets for the residents in the MS coastal plain.

#### *De Soto National Forest, De Soto Ranger District*

The installation of interpretive signage and significant trail improvements within the focus areas on the De Soto NF will help educate the public about the principles and practices of ecosystem restoration in addition to increasing recreation opportunities. These interpretive displays will also educate the public about plant and animal species and threats to habitat and ecosystem services. This program has the possibility of engaging a large number of recreational users on the Forest.

#### **Monitoring and Measures of Success**

All restoration projects will be monitored for 5 years by the Initiative partner responsible for implementation. Baseline conditions will be collected according to standard protocol.

The Mississippi Sandhill Crane and Grand Bay NWRs have monitored fuel management effectiveness since 1996. This data will serve as a baseline for future treatments under the Mississippi Gulf Coast Forest Restoration and Conservation Initiative. The monitoring plan is designed to track both implementation and effectiveness of treatments. Data is collected annually under the following protocols: First order fire effects, photo points, long term vegetation plots, and Composite Burn Index (measures intensity of prescribed burns).

The U.S. Forest Service will collect baseline information on the abundance and distribution of ecosystems occurring on National Forests lands, along with acres of longleaf pine-dominated forests. Mississippi Best Management Practices will be monitored. Spatial dimension, species composition, density/abundance, and any drivers of change (critical data element) for each ecosystem will be considered (Table 2).

NRCS will record and monitor its project success by entering conservation practice performance in a software program known as the Performance Reporting System upon completion of planned treatment measures and/or restoration activities. Annual status reviews will be conducted to ensure functionality of intent and maintenance for long-term benefits. These conservation physical effects (before and after) will also be documented in case files. All

planning will follow the NRCS nine step conservation planning process and the required Environmental Evaluation Worksheet will be completed. All NRCS restoration and implementation activities will follow Field Office Technical Guides (FOTG) (<http://efotg.sc.egov.usda.gov/treemenuFS.aspx>) and the National Engineering Field Manual (NEFM) ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs144p2\\_064805.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_064805.pdf)).

<b>System/Target</b>	<b>Spatial Dimension</b>	<b>Species Composition</b>	<b>Density/Abundance</b>	<b>Drivers</b>
Pitcher Plant Bogs	mapped acres	Inventory/Monitoring	Inventory/Monitoring	Fire/Water/Soils
Coastal Savanna	mapped acres	Inventory/Monitoring	Inventory/Monitoring	Fire/Water/Soils
Longleaf Pine Forest	mapped acres	Inventory/Monitoring	Inventory/Monitoring	Fire/Light/Soils
Bottomland Hardwoods	mapped acres	Inventory/Monitoring	Inventory/Monitoring	Water/Light/Soils
Mesic Slopes	mapped acres	Inventory/Monitoring	Inventory/Monitoring	Water/Light/Soils
NNIS Plants	mapped acres	Inventory/Monitoring	Inventory/Monitoring	Herbicide/Fire/ Disturbance
NNIS Animals	measured population	Inventory/Monitoring	Inventory/Monitoring	Removal/ Non-removal

**Table 2. Critical data elements.**

### **Leveraging of Resources and Partnerships**

The diverse groups of partners submitting this proposal have been working to achieve conservation and restoration goals in south Mississippi for many years. Post Hurricane Katrina, the De Soto National Forest took the necessary steps to ensure NEPA compliance forest-wide in preparation for an unprecedented timber salvage operation and longleaf ecosystem restoration. Since then, the De Soto National Forest has been actively involved in restoration of pitcher plant bogs, most notably Buttercup Flats, a natural area that attracts visitors from all over the country. Additionally, the De Soto was awarded a Collaborative Forest Landscape Restoration Project (CFLRP), resulting in significant progress towards their longleaf ecosystem restoration goals. Over the 5 year life of the projects included in this proposal, a mix of in-kind contributions as well as appropriated and CFLRP funding equal to approximately \$1.4 Million will leverage funds awarded by the RESTORE Council for work on the De Soto National Forest. Additionally, in partnership with Camp Shelby, the De Soto is currently conducting stewardship contracting as an innovative way to accomplish ecosystem restoration goals. Camp Shelby will implement a \$1.1 Million erosion rehabilitation project in the near future on 1,800 acres and six ranges to improve water quality and reduce sedimentation.

The Nature Conservancy provides threatened and endangered species monitoring and research services in collaboration with Camp Shelby. Five Nature Conservancy personnel at the installation monitor threatened and endangered species, such as the Black Pine snake, and

conduct research on the gopher tortoise, Louisiana quillwort, and the Camp Shelby burrowing crayfish. The Nature Conservancy also monitors and controls infestations of cogongrass on the military installation and evaluates control treatment effects. TNC owns approximately 12,000 acres within the Initiative project area and manages this land for rare species habitat and biodiversity. Portions of this land serve as wetland and stream mitigation banks and have been restored with innovative techniques through assistance from agencies such as the Mississippi Department of Transportation.

The NRCS, with a long history of proven private lands restoration success in south Mississippi, is currently implementing the Black Creek Initiative. This is a private lands/public lands (USFS) restoration project targeting the Black Creek watershed. Environmental Quality Incentive Program (EQIP) funds are utilized on lands within the watershed as a way to compliment U.S. Forest Service restoration work. Technical service providers, such as Wildlife Mississippi, use NRCS programs to assist private landowners with forest and wildlife management plans in addition to helping initiate restoration activities.

The Mississippi Forestry Commission (MFC) has implemented an aggressive cogongrass eradication campaign and is making significant progress along the northern and western edges of the infestation areas. They are also working collaboratively with the Mississippi State Extension Service to combat other forest pests. Also, the Forestry Commission and the Nature Conservancy have been very competitive applying for Forest Legacy protection grants. Their combined efforts have resulted in the acquisition of a 2,100 acre tract for the program in the Pascagoula river basin that is in the final stages of closing. The MFC is also leading the state Longleaf Implementation Team, exchanging information and coordinating restoration efforts as needed with government and non-government land managers. A majority of the partners contributing to this proposal are also involved with the De Soto-Camp Shelby Local Longleaf Implementation Team.

The Land Trust for the Mississippi Coastal Plain manages land preserves and conducts community-based restoration, planning for watersheds, and improves outdoor recreation opportunities in the six southern-most counties in Mississippi. The organization was responsible for developing the initial Red Creek watershed restoration plan and has been instrumental in implementing plan strategies. The LTMCP has completed and opened the Pascagoula River Blueway, the latest of several kayak/canoe trails within the Initiative project areas. The LTMCP has worked with the Turkey Creek community for several years to implement restoration activities and assist with the protection of this watershed. The LTMCP will provide a \$50,000 in-kind contribution for the projects identified in this proposal. The American Forest Foundation has seen success in their marketing strategies through the Piney Woods Project. Their goal of linking forest landowners with professionals for technical advice has the potential to significantly increase restoration activities and managed forest on private lands. The American Forest Foundation will provide a 50% funding match for projects identified in this proposal.

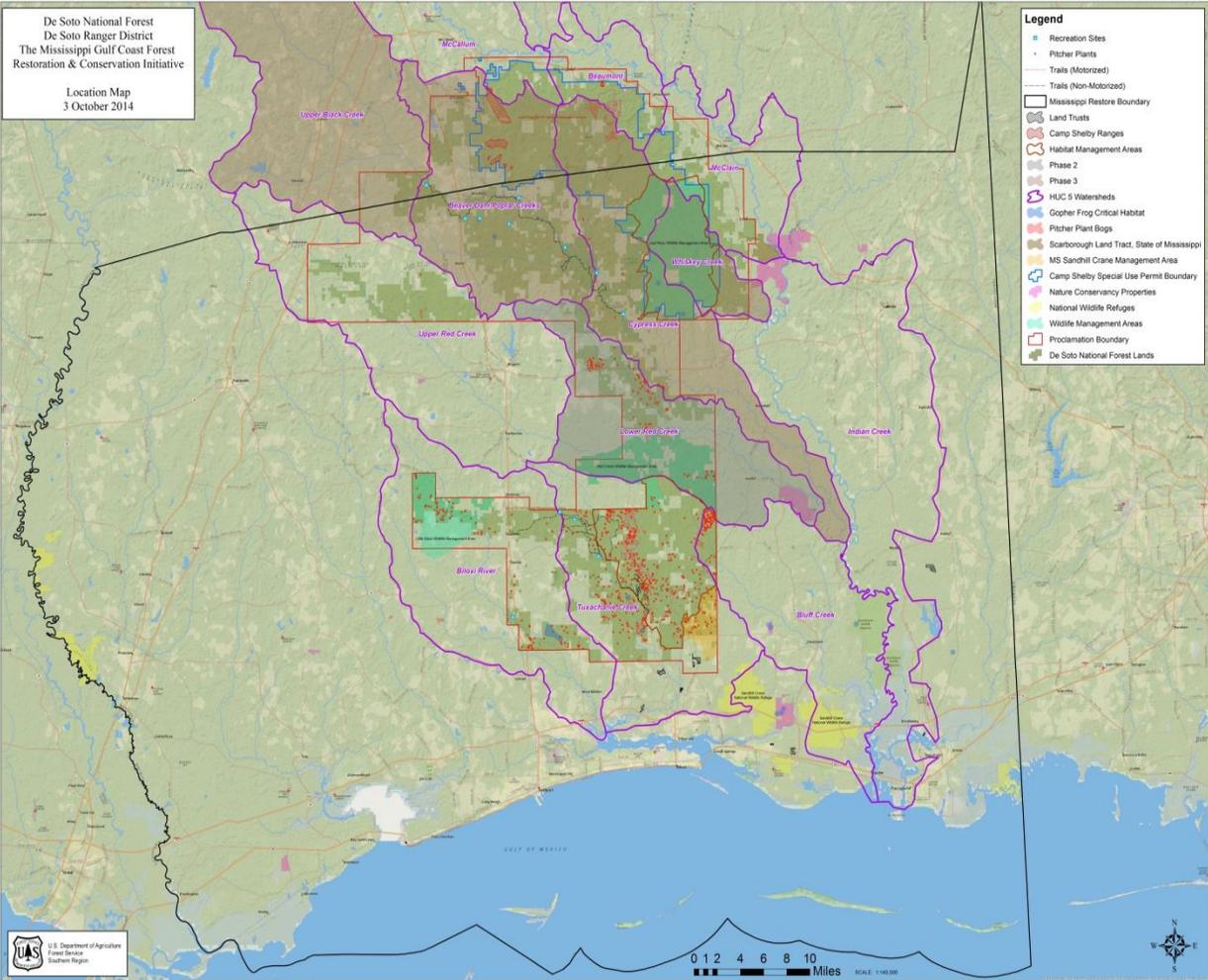
The LTMCP recently received \$2 million in funding that will be used for dusky gopher frog habitat restoration. The natural breeding ponds occur on National Forest land and the U.S.

Forest Service has created several additional ponds. TNC has been raising frogs from eggs collected from Forest Service ponds and translocating them to new ponds on TNC preserves with assistance from the Mississippi Department of Wildlife, Fisheries and Parks. The Sandhill Crane NWR has also recently completed construction of gopher frog ponds to increase available suitable habitat. All of these agencies are actively restoring lands for the gopher frog within the Initiative project areas.

The Mississippi Band of Choctaw Indians and the Vancleave Live Oak Choctaws will be engaged in Initiative projects: 1) through the watershed planning efforts led by LTMCP, 2) through technical assistance with the implementation of restoration projects, 3) through consultation on interpretive displays, and 4) as volunteers for the sentinel arboretum project. There may also be training opportunities for tribal members related to proposed restoration techniques, such as prescribed fire and treating invasive species.

Working together on projects with compatible goals and needs, such as prescribed fire and invasive species control, will allow everyone to benefit from shared knowledge, staff, and equipment. TNC and the Sandhill Crane NWR have a reciprocal agreement allowing shared staff during burning operations as needed. Other natural sharing opportunities exist and will be utilized to complete funded projects.

# LOCATION INFORMATION



**Figure 1.** Initiative vicinity map.

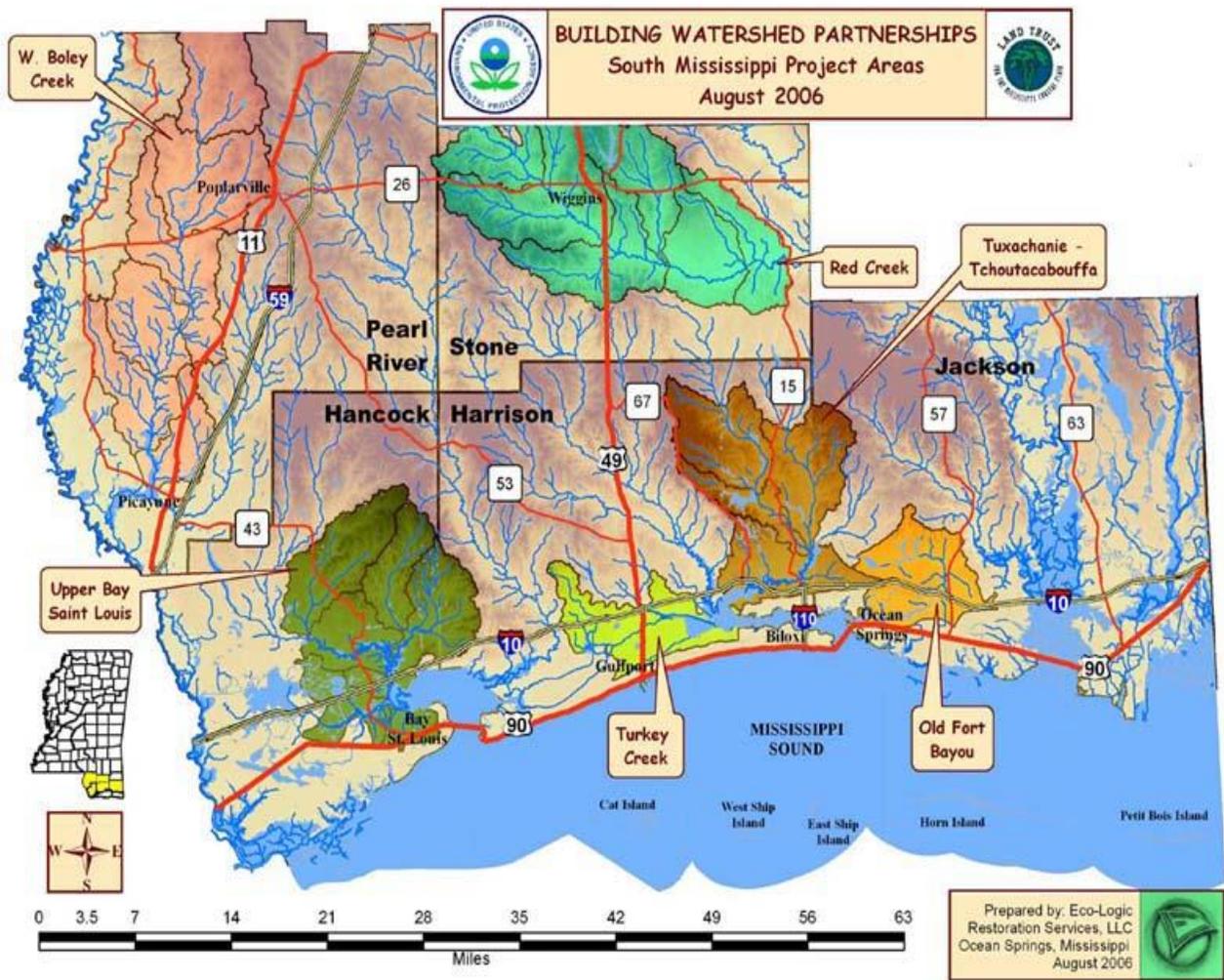


Figure 2. Initiative watershed areas.

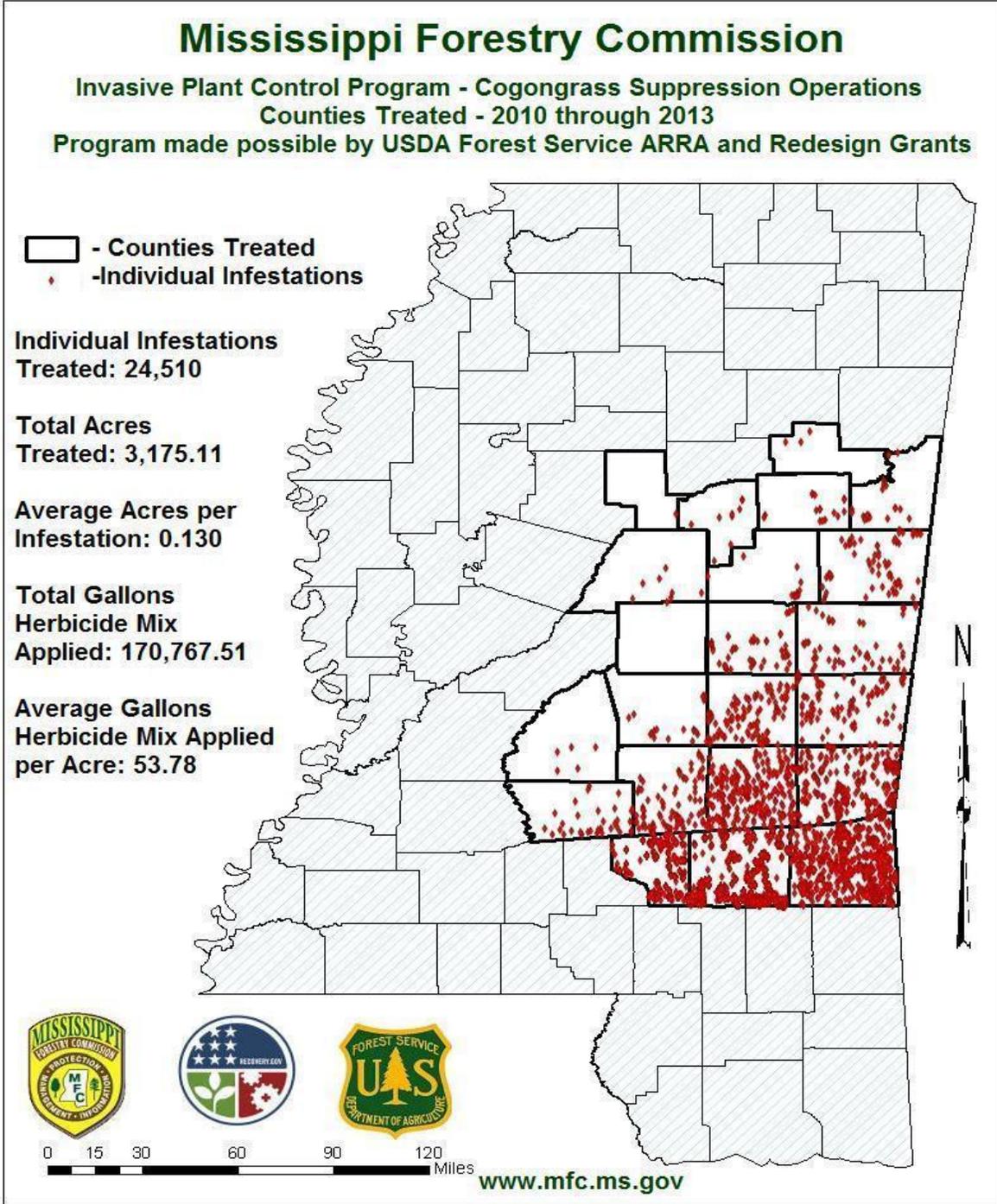
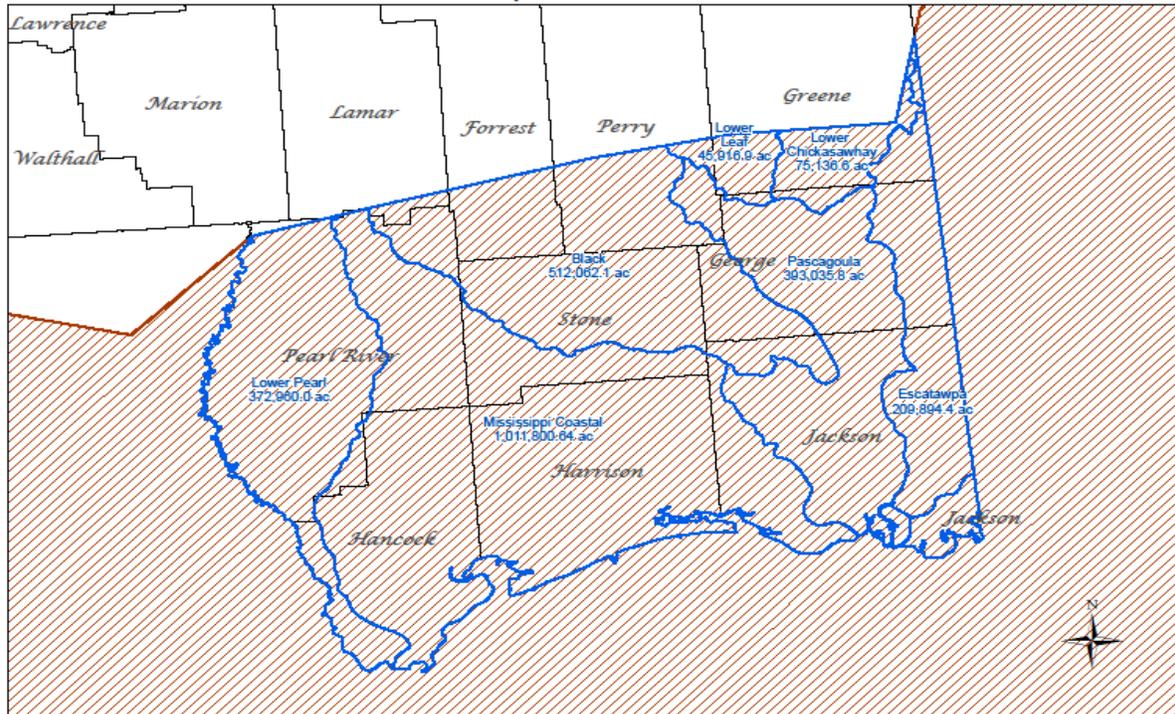


Figure 3. MIPCP treated counties.

MS Gulf Coast Partnership Restoration Initiative HUC 8 Watersheds



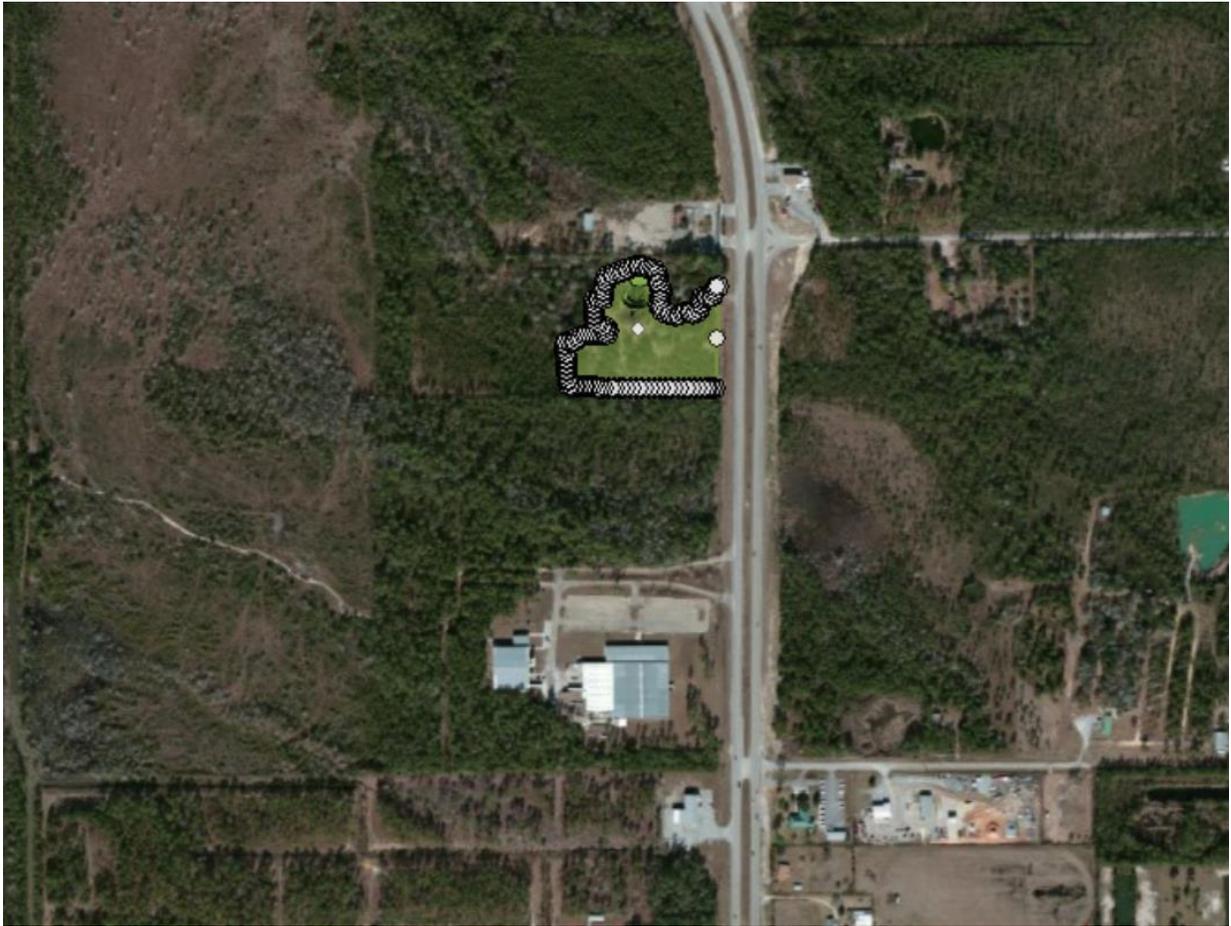
SUBBASIN	HUC_8	TOTAL ACRES	HU_8_STATE	ACRES IN MS
Escatawpa	03170008	659,956	AL MS	209,894.41
Lower Pearl	03180004	1,136,198	LA MS	372,960.00
Pascagoula	03170006	396,224	MS	393,035.80
Lower Leaf	03170005	1,166,145	MS	45,916.92
Black	03170007	809,520	MS	512,062.10
Lower Chickasawhay	03170003	423,172	AL MS	75,136.60
Mississippi Coastal	03170009	1,561,396	AL MS	1,011,800.64

**HUC 8 Watersheds in the Coastal Zone Boundary – Private lands acres**

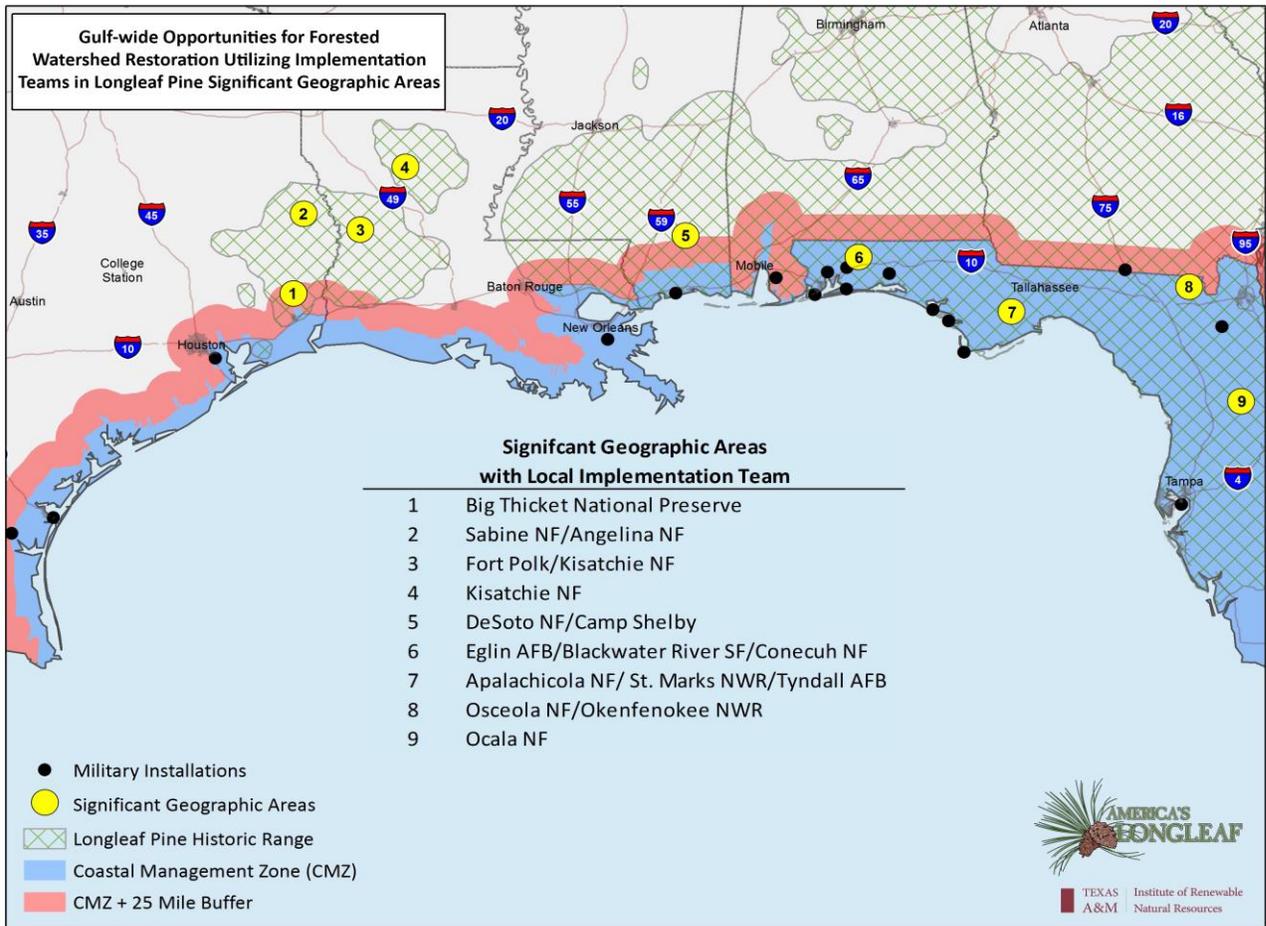
**Acres by Land Use**

*Associated Ag Lands	890,484.98
Crop	39,432.64
Forest	753,065.17
Pasture	655,588.52
Urban	225,816.74
Water	43,065.25

\* Woody Wetlands; Palustrine Forested Wetland; Palustrine Scrub/Shrub Wetland; Estuarine Forested Wetland; Estuarine Scrub/Shrub Wetland; Emergent Herbaceous Wetlands; Palustrine Emergent Wetlands (Persistent); Estuarine Emergent Wetland; Palustrine Aquatic Bed



**Figure 4.** An aerial photo (highway 57) of the Mississippi Band of Choctaw Indians lands in Jackson County which are located within the RESTORE Zone. The properties are in need of native vegetation restoration, longleaf planting, and habitat improvements for T & E species.



**Figure 5.** Locations available for forested watershed restoration in longleaf pine significant geographic areas.

## BUDGET NARRATIVE

The project leads for implementation and funding requested are identified below. The lifespan for the proposed projects is 5 years. Total funding requested is \$20,936,000.

### U.S. Forest Service (\$3,038,000)

1. Biloxi Flats – Bayou Billie Ecosystem Restoration and Interpretation (\$1,255,000)
2. Tchouttachbouffa River – Tuxachanie Creek Watershed Ecosystem Restoration and Interpretation (\$1,605,000)
3. Ecological Systems Mapping (\$178,000)

### NRCS (\$7,500,000)

1. Private Lands Ecosystem Restoration (\$5,500,000)
2. Turkey Creek Debris and Sedimentation Removal (\$2,000,000)

### Mississippi Forestry Commission (\$3,200,000)

1. Cogongrass Invasive Plant Eradication Program (\$1,000,000)
2. Sentinel Arboreta Biosecurity Enhancement and Restoration Projects (\$1,000,000)
3. Ecosystem Restoration on Forest Legacy Program Scarborough Tract (\$300,000)
4. 16<sup>th</sup> Section Lands Native Ecosystem Restoration (\$900,000)

### American Forest Foundation (\$428,000)

1. Piney Woods Project Expansion

### The Nature Conservancy (\$500,000)

1. Erosion Control at Red Creek Preserve (\$75,000)
2. Prescribed Burning and Invasive Species Control on TNC Preserves (\$425,000)

### The Land Trust for the Mississippi Coastal Plain (\$595,000)

1. Watershed Restoration Plan Updates (\$95,000)
2. Bayhead Reforestation at Mt Pleasant/Audubon Site (\$250,000)
3. 5 year Maintenance and monitoring of the Turkey Creek Greenway (\$250,000)

### U.S. Fish and Wildlife Service (\$5,500,000)

1. Mississippi Sandhill Crane and Grand Bay NWRs
  - a. Sandhill crane habitat restoration.
  - b. Water quality improvement projects.

- c. Wet pine savanna restoration, including prescribed fire, mechanical treatments, invasive species control and hydrological restoration to include erosion control.

Wildlife Mississippi (\$175,000)

1. Private Lands Ecosystem Restoration
2. Outreach & Education

## ENVIRONMENTAL COMPLIANCE CHECKLIST

<u>Environmental Compliance Type</u>	Yes	No	Applied For	N/A
<b>Federal</b>				
National Marine Sanctuaries Act (NMSA)				X
Coastal Zone Management Act (CZMA)				X
Fish and Wildlife Coordination Act				X
Farmland Protection Policy Act (FPPA)	X			
NEPA – Categorical Exclusion	X			
NEPA – Environmental Assessment	X			
NEPA – Environmental Impact Statement	X			
Clean Water Act – 404 – Individual Permit (USACOE)				X
Clean Water Act – 404 – General Permit(USACOE)	X			
Clean Water Act – 404 – Letters of Permission(USACOE)				X
Clean Water Act – 401 – WQ certification				X
Clean Water Act – 402 – NPDES				X
Rivers and Harbors Act – Section 10 (USACOE)				X
Endangered Species Act – Section 7 – Informal and Formal Consultation (NMFS, USFWS)	X			
Endangered Species Act – Section 7 - Biological Assessment (BOEM,USACOE)	X			
Endangered Species Act – Section 7 – Biological Opinion (NMFS, USFWS)	X			
Endangered Species Act – Section 7 – Permit for Take (NMFS, USFWS)				X
Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat (EFH) – Consultation (NMFS)				X
Marine Mammal Protection Act – Incidental Take Permit (106) (NMFS, USFWS)				X
Migratory Bird Treaty Act (USFWS)	X			
Bald and Golden Eagle Protection Act – Consultation and Planning (USFWS)	X			
Marine Protection, Research and Sanctuaries Act – Section 103 permit (NMFS)				X
BOEM Outer Continental Shelf Lands Act – Section 8 OCS Lands Sand permit				X
NHPA Section 106 – Consultation and Planning ACHP, SHPO(s), and/or THPO(s)	X			
NHPA Section 106 – Memorandum of Agreement/Programmatic Agreement	X			
Tribal Consultation (Government to Government)	X			
Coastal Barriers Resource Act – CBRS (Consultation)				X
<b>State</b>				
As Applicable per State	X			

The FWS completed Environmental Assessments (EAs) during the development of the 15-year Comprehensive Conservation Plans for Mississippi Sandhill Crane and Grand Bay National Wildlife Refuges. Specific projects will be further evaluated as necessary to ensure compliance

with the National Environmental Policy Act, the Endangered Species Act, the National Historic Preservation Act, state laws, and other applicable environmental and cultural resources laws and policies.

Landscape level National Environmental Policy Act (NEPA) decisions have been completed and cover the major components of proposed habitat restoration on National Forest lands. Categorical exclusions for smaller project work will also be utilized. Current Environmental Assessments (EAs) that will be used for restoration work on the De Soto National Forest include: Ecosystem Restoration for Gopher Tortoise and Red-cockaded Woodpecker Habitat, Control of Cogongrass through Integrated Pest Management, and Ecosystem Restoration for Pitcher Plant Bogs, Mississippi Sandhill Crane (coastal) Savanna, Bottomland Hardwood Forest, and Mesic Slope Forest.

The private lands component will comply with all federal, state, and tribal regulations and will be addressed through existing policies and procedures such as the NRCS Field Office Technical Guide (<http://efotg.sc.egov.usda.gov/treemenuFS.aspx>).

## DATA AND INFORMATION SHARING PLAN

The landowner outreach database will be comprised of publically available landowner records from county tax rolls and commercially available consumer data. The database is developed in partnership with the American Forest Foundation, Mississippi Forestry Commission and Mississippi Forestry Association. The database is housed and maintained at the Mississippi Forestry Association and information on records is available upon request.

The data created and information available from the implementation of the NRCS Private Lands and Community Based Assisted Conservation Programs will consist of:

1. Acres planned by Resource Concerns.
2. Conservation practices planned and applied to protect the resource base.
3. Soil losses before and after treatments.
4. Acres restored to longleaf pines.
5. Acres restored to bottomland hardwoods.
6. All applied measures will have a pre-determined practice code designed to measure levels of treatments before and after.

NRCS has a responsibility to ensure data meets the highest quality standards. Regular review of performance data by users and oversight staff will occur throughout the year and help ensure the accuracy of the agency's performance data. Identifying and correcting data anomalies on a regular basis minimizes the end-of-year data quality review and attestation task, resulting in higher quality data throughout the year. Early detection and correction improves the utility of agency performance data for a variety of users and uses. OMB and USDA Quality of Information Guidelines provide general guidance to all USDA agencies on quality of information delivered to users within and outside the agency and these guidelines will be followed.

The residents of the Turkey Creek Watershed will be provided an opportunity to participate in updating the assessment and restoration goals of the Watershed Implementation Plan. The final report will be available to the public through community meetings and on the Land Trust for the Mississippi Coastal Plain website.

A database tracking all applications by the Mississippi Forestry Commission for treatment of cogongrass will be created. Shapefiles of each individual infestation and ownership class will be compiled using GPS data recorders and ArcMap GIS. These files will be used to track the application of herbicide and for monitoring follow-up, to ensure successful control. The database will always be available for review and/or audit and any results generated will be shared with other environmental agencies. An annual report will be made available to the MFC Board of Commissions, USDA, and the MS CWMA as well as to any interested parties. The report will be in the public domain and posted at [www.mfc.ms.gov/annual-reports.php](http://www.mfc.ms.gov/annual-reports.php).

The MFC will inventory existing native trees prior to sentinel arboretum installation in Ocean Springs, MS and data will be generated throughout the life of the project regarding the interception of new pests. The use of citizen scientists will also enable the collection and submission of potential tree health problems in the arboretum through the use of pictureposts (<http://picturepost.unh.edu>). Potential new interceptions by partner agencies and pictures submitted by citizen scientists will be uploaded into a database managed by Mississippi State University, along with diagnostic reports. Findings will be disseminated via peer-reviewed and popular brochures, arboretum signs, brochures, and kiosks, invasive species training sessions for professional and public groups along the Gulf Coast of Mississippi, and at local, regional, national, and international scientific conferences.

The Scarborough Forest Legacy Tract will be developed into a State Forest. Improvements to the forest will be available to the public through tours, trail access, and special presentations. The tract may also serve as an outdoor lab for interested partners such as TNC or the Audubon Society. An annual report will be made available to the MFC Board of Commissions and the USDA, as well as to any interested parties. The report will be in the public domain posted at [www.mfc.ms.gov/annual-reports.php](http://www.mfc.ms.gov/annual-reports.php).

Detailed reports of management activities on 16<sup>th</sup> Section Lands are approved, and reviewed, by individual School Boards and the Mississippi Secretary of State. An annual report is made available to the MFC Board of Commissions and the Mississippi Secretary of State, as well as to any interested parties. The report will be in the public domain posted at [www.mfc.ms.gov/annual-reports.php](http://www.mfc.ms.gov/annual-reports.php).

## REFERENCES

- America's Longleaf. 2009. Range-wide conservation plan for longleaf pine. Report prepared for the Steering Committee of the Regional Working Group for America's Longleaf. 52 pp.
- Brockway, D.G., K.W. Outcalt, D.J. Tomczak, and E.E. Johnson. 2002. Restoring longleaf pine forest ecosystems in the southern United States. In Gardiner, E.S. and Breland, L.J., Compilers. Proceedings of the IUFRO Conference on Restoration of Boreal and Temperate Forests-- Documenting forest restoration knowledge and practices in boreal and temperate ecosystems. Report No.11. Hørsholm, Denmark: Danish Center for Forest, Landscape and Planning: 52-53.
- Brooks, M.E. and P.C. Stouffer. 2011. Interspecific Variation in Habitat Preferences of Grassland Birds Wintering in Southern Pine Savanna. *The Wilson Journal of Ornithology*, 123(1): 65-75.
- Cleland, D.T., P.E. Avers, W.H. McNab, M.E. Jensen, R.G. Bailey, T. King, W.E. Russell. 1997. National Hierarchical Framework of Ecological Units. Published in, Boyce, M. S.; Haney, A., ed. 1997. *Ecosystem Management Applications for Sustainable Forest and Wildlife Resources*. Yale University Press, New Haven, CT. pp. 181-200.
- Edwards, P. J. and C. A. Troendle. 2012. Chapter 11 Water Yield and Hydrology. *Cumulative Watershed Effects of Fuel Management in the Eastern U. S.* 229-281.
- Fagan, L., S. Bithell, and M. Dick. (2008). Systems for identifying invasive threats to New Zealand flora by using overseas plantings of New Zealand plants. In: K.J. Foud, A.I. Popay and S.M. Zydenbos (eds.), *Surveillance for biosecurity: pre-border to pest management*. New Zealand Plant Protection Society, pp. 51-62.
- Fagan, L., S. Bithell, F. Fletcher, M. Cromey, S. Elder, N. Martin, N. Bell, L. Aalders, K. Cousins, B. Barratt, C. Ferguson, J.Kean, C. Phillips, M. McNeil, M. Barron, M. Dick, N. Kay, S. Alcaraz and D. Kriticos. 2008. Evaluating the expatriate plants concept: Can we predict invasive threats to New Zealand natural ecosystems by focusing our efforts overseas? *Better Border Biosecurity (B3) report to governance council*, Lincoln, 14 May 2008.
- Formby, J. P., N. Krishnan, and J. J. Riggins. 2013. Supercooling in the redbay ambrosia beetle (Curculionidae: Scolytinae). *Florida Entomologist* 96: 1530-1540.
- Frost, C.C. 1993. Four Centuries of Changing Landscape Patterns in the Longleaf Pine. pp. 17-43 In S. Hermann (ed.) *Proceedings of the Tall Timbers Fire Ecology Conference*, No. 18, *The longleaf Pine Ecosystem; Ecology, Restoration, and Management*. Tallahassee, FL: Tall Timbers Research Station.

- [GAO] Government Accountability Office. 2006. Invasive forest pests. Lessons learned from three recent infestations may aid in managing future efforts. Report to the Chairman, Committee on Resources, House of Representatives, GAO-06-353. Kramer and Hird. (<http://www.bgci.org/resources/article/0697/>)
- Glitzenstein, J., D.R. Streng, and D.D. Wade. 2003. Fire Frequency Effects on Longleaf Pine (*Pinus palustris* P.Miller) Vegetation in South Carolina and Northeast Florida, USA. *Natural Areas Journal* 23: 22-37.
- Handley, L., K.A. Spear, A. Leggett, and C. Thatcher. 2012. "Statewide Summary for Mississippi" chapter of Emergent Wetlands Status and Trends in the Northern Gulf of Mexico, 1950-2010: USGS Scientific Investigations Report.
- Johnsen, K.H., J.R. Butnor, J.S. Kush, R.C. Schmidting, and C.D. Nelson. 2009. Hurricane Katrina Winds Damaged Longleaf Pine Less Than Loblolly Pine. *South. J. Appl. For.* 33(4): 178-181.
- Kramer and Hird. (<http://www.bgci.org/resources/article/0697/>).
- Mendelssohn, I. A., G. L. Andersen, D. M. Baltz, R. H. Caffey, K. R. Carman, J. W. Fleeger, S. B. Joye, Q. Lin, E. Maltby, E. B. Overton, and L. P. Rozas, 2012, Oil Impacts on Coastal Wetlands: Implications for the Mississippi River Delta Ecosystem after the Deepwater Horizon Oil Spill: *Bioscience*, v. 62, p. 562-574.
- McLaughlin, D., A. Kaplan and Matthew J. Cohen. 2013. Managing Forests for Increased Regional Water Yield in the Southeast U. S. Coastal Plain. *American Water Resources Association*. Vol. 49. No. 4. 953-965.
- Mississippi Dept. of Environmental Quality. 2013. Initial Comprehensive Plan: Restoring the Gulf Coast's Ecosystems and Economy.
- Mississippi Dept. of Wildlife, Fisheries and Parks. 2005. Mississippi's Comprehensive Wildlife Conservation Strategy: 2005-2015.
- Muirhead J. R., B. Leung, C. Overdijk, D.W. Kelly, K. Nandakumar, K. Marchant, and H..J Maclsaac. 2006. Modelling local and long-distance dispersal of invasive emerald ash borer *Agilus planipennis* (Coleoptera) in North America. *Divers. Distrib.* 12: 71–79.
- NatureServe. 2013. Terrestrial Ecosystems of location: MS or Ecological Province 232: Terrestrial Ecological Classifications. NatureServe Central Databases. Arlington, VA. U.S.A.

- Pimentel, D., R. Zuniga, and D. Morrison. 2005. Update on the environmental and economic costs associated with alien-invasive species in the United States: *Ecological Economics*, v. 52, p. 273-288.
- Stanturf, J.A., S.L. Goodrick, and K.W. Outcault. 2007. Disturbance and coastal forests: A strategic approach to forest management in coastal impact zones. *Forest Ecology and Management*. 250: 119-135.
- U.S. Fish and Wildlife Service. 2003. Recovery Plan for the Red-cockaded Woepecker (*Picoides borealis*) Second Revision. Southeast Region, Atlanta, Georgia.
- U.S. Fish and Wildlife Service. 2007. Mississippi Sandhill Crane National Wildlife Refuge, Comprehensive Conservation Plan. Retrieved from <http://www.fws.gov/southeast/planning>.
- U.S. Fish and Wildlife Service. 2008. Grand Bay National Wildlife Refuge, Comprehensive Conservation Plan. Retrieved from <http://www.fws.gov/southeast/planning>.
- U.S. Fish and Wildlife Service. 2013. Vision for a Healthy Gulf of Mexico Watershed. Retrieved from <http://www.fws.gov/gulfrestoration/PDF/VisionDocument.pdf>.
- U.S. Forest Service, Southern Region. 2014. Land and Resource Management Plan, National Forests in Mississippi. Atlanta, Georgia.
- Walker, S., Dausman, A., and Lavoie, D., eds., 2012. Gulf of Mexico Ecosystem Science Assessment and Needs—A Product of the Gulf Coast Ecosystem Restoration Task Force Science Coordination Team, 72 p.
- Wear, D. N., and J. Greis, eds., 2013. The Southern Forest Futures Project: technical report., Gen. Tech. Rep. SRS-178., Asheville, NC, U.S. Department of Agriculture Forest Service, Southern Research Station, p. 542

OTHER

THAD COCHRAN  
MISSISSIPPI

COMMITTEE ON  
AGRICULTURE, NUTRITION,  
AND FORESTRY  
RANKING MEMBER  
COMMITTEE ON  
APPROPRIATIONS  
COMMITTEE ON  
RULES AND  
ADMINISTRATION

United States Senate

WASHINGTON, DC 20510-2402

October 15, 2014

RESTORE Council Members  
c/o Secretary Penny Pritzker  
United States Department of Commerce  
1401 Constitution Avenue, NW  
Washington, D. C. 20230

Dear Restore Council Members:

It is encouraging to learn that the Land Trust for the Mississippi Coastal Plan is seeking funding to establish a Mississippi Gulf Coast Restoration and Conservation Initiative Grant.

Partnering with the Land Trust in this endeavor are multiple federal, state and nonprofit agencies. These agencies and organizations include: the United States Department of Agriculture (Forest Service and Natural Resources Conservation Service), the US Geological Survey, the Mississippi Army National Guard, the Mississippi Department of Wildlife, Fisheries and Parks, the Mississippi Forestry Commission, the Nature Conservancy, American Forests Foundation and Wildlife Mississippi. Under the Initiative Grant, this group would form a framework for planning and prioritizing restoration opportunities, implementing restoration projects and plan for future projects.

Restoration projects would be focused along the Pascagoula River and Mississippi Coastal Watersheds, where numerous threatened and endangered plants and animals make their home. Enhancing the habitat of their ecosystems would be achieved through longleaf pine, coastal savanna, bottomland hardwood forest and mesic slope forest restoration. Grant funding would also be utilized to educate and engage private forest landowners.

The potential for creating valuable coastal restoration and conservation enhancements through this project are very promising and I am proud to extend my support. Your consideration for funding the Mississippi Gulf Coast Restoration and Conservation Initiative Grant proposal is greatly appreciated.

Sincerely,



THAD COCHRAN  
United States Senator

ROGER F. WICKER  
MISSISSIPPI  
ARMED SERVICES  
BUDGET  
COMMERCE, SCIENCE AND TRANSPORTATION  
ENVIRONMENT AND PUBLIC WORKS

## United States Senate

WASHINGTON, DC 20510  
November 6, 2014

SUITE 555  
DIRKSEN SENATE OFFICE BUILDING  
WASHINGTON, DC 20510  
(202) 224-6253  
[www.wicker.senate.gov](http://www.wicker.senate.gov)

The Honorable Penny Pritzker  
Secretary  
U.S. Department of Commerce  
RESTORE Council Members  
1401 Constitution Avenue NW  
Washington, D.C. 20230-0001

Dear Penny,

I would like to express my support for Land Trust for the Mississippi Coastal Plain's (LTMCP) application for a RESTORE grant.

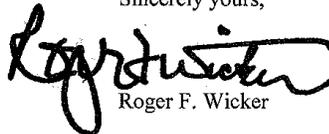
The LTMCP serves as the lead organization for the collaborative Mississippi Gulf Coast Forest Restoration and Conservation Initiative. Partners for this collaborative include USDA Forest Service, The Nature Conservancy, Mississippi Forestry Commission, USDA Natural Resources Conservation Service, American Forests Foundation, The Land Trust for Mississippi Coastal Plain, U.S. Endowment for Forestry and Communities, U.S. Geological Survey, Mississippi Department of Wildlife, Fisheries and Parks, Wildlife Mississippi, U.S. Department of Defense and the Mississippi Army National Guard. This broad coalition of federal, state, and municipal government agencies and private conservation organizations have developed a strategy to restore and conserve habitat and water quality while providing economic opportunity in the Mississippi coastal plain.

Funding from RESTORE in the amount of \$ 20,936,000 would enable the LTMCP and partners to restore the health and resiliency of ecosystems within the coastal plain and rehabilitate coastal wetlands affected by the BP spill. This project will create local employment opportunities and protect community infrastructure while reducing risk to human health, primarily through fuels treatments, flood mitigation, and improve water quality along the Mississippi Gulf Coast.

I hope that you will give Land Trust for the Mississippi Coastal Plain's application every consideration. Should additional information be required from my office, please contact Camille Peno of my staff at (228) 871-7017.

With best wishes, I am

Sincerely yours,



Roger F. Wicker

RFW/cp

2000 M Street, N.W.  
Suite 550  
Washington, D.C. 20036  
Phone 202-765-3660  
Fax 202-827-7924  
[www.forestfoundation.org](http://www.forestfoundation.org)  
[info@forestfoundation.org](mailto:info@forestfoundation.org)



October 14, 2014

RESTORE Council Members  
c/o Secretary Penny Pritzker  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

Council Members:

The American Forest Foundation (AFF) supports the Mississippi Gulf Coast Restoration and Conservation Initiative proposal. There are many respected and dedicated public and private partners committing their skills and assets to this effort. As 70% of the forestland in Mississippi is owned by families, any landscape scale conservation endeavor in the region should work to identify and engage family forest owners.

AFF has been working with family forest owners across the country since 1941, providing education for landowners and improving forest management on the ground. It recognizes the hard work of landowners and shares their rewarding experiences motivating their neighbors. Finally, AFF provides globally recognized third party certification to sustainable forest management standards providing market access for landowners and credible verification to customers and stakeholders that the landowners are following all laws and regulations, working to protect water quality and biodiversity while providing renewable forest products for generations. AFF provides services for Mississippi family forest owners managing over one million acres of forestland.

The American Forest Foundation is committed to stem the loss of working forests and has developed a landowner engagement strategy using modern marketing techniques and progressive levels of interaction with landowners. The Foundation has achieved considerable success in many landscapes across the U.S. using this strategy. This proposal will allow us to work hand in hand with the project partners to reach landowners in the Pascagoula watershed and engage them in sustainable forest management protecting water quality and wildlife habitat.

Sincerely,



Tom Martin  
Chief Executive Officer



DEPARTMENT OF THE ARMY  
CAMP SHELBY JOINT FORCES TRAINING CENTER  
1001 LEE AVENUE  
CAMP SHELBY, MS 39407-5000

October 16, 2014

RESTORE Council Members  
c/o Secretary Penny Pritzker  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

RE: The Mississippi Gulf Coast Forest Restoration and Conservation Initiative

Dear RESTORE Council Members:

Camp Shelby Joint Forces Training Center recognizes that sustainable use of lands and natural resources is necessary to provide the training that military forces require to deter war and to protect the security of our country. Through participation in the Southeast Regional Partnership for Planning and Sustainability and a Memorandum of Understanding to achieve goals described in the conservation plan of the America's Longleaf Initiative, the Department of Defense supports partnerships that protect our natural resources while promoting economic development and military readiness. Goals are to balance and optimize the health and safety of the environment and communities. As such, Camp Shelby currently partners with the US Forest Service, De Soto Ranger District and other entities for the Collaborative Forest Landscape Restoration Program and the Camp Shelby Stewardship Project.

The Mississippi Gulf Coast Forest Restoration and Conservation Initiative will complement these efforts to restore and maintain healthy ecosystems while providing economic opportunity in the Mississippi coastal plain. Camp Shelby supports the goals of this proposal and will contribute through our erosion rehabilitation project on our ranges, as well as continued collaboration and information-sharing.

Sincerely,

A handwritten signature in black ink, appearing to read "W. B. Smith, Jr.", written over a faint, illegible printed name.

Colonel William B. (Brad) Smith, Jr.  
Camp Shelby Joint Forces Training Center  
Commander



P.O. Box 1800  
Ocean Springs, MS  
39566-1800

1018 Porter Avenue  
Ocean Springs, MS 39564

PH 228.875.4236  
FX 228.875.7249

**Connie Moran**  
Mayor

**Bobby Cox**  
Alderman at Large

**John Gill**  
Alderman Ward 1

**Matt McDonnell**  
Alderman Ward 2

**Chic Cody**  
Alderman Ward 3

**Greg Denyer**  
Alderman Ward 4

**Jerry Dalgo**  
Alderman Ward 5

**Michael (Mike) Impey, II**  
Alderman Ward 6

City Clerk  
228.875.4236

Police Chief  
228.875.2211

Fire Chief  
228.872.4407

Public Works  
228.875.3955

Community  
Development and  
Planning  
228.875.4415

Human Resources  
and Risk Management  
228.872.3338

Parks and  
Leisure Services  
228.875.8665



**City of Ocean Springs**

October 13, 2014

RESTORE Council Members  
c/o Secretary Penny Pritzker  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

Subject: Support of the *USDA 2014 Mississippi Gulf Coast Forest Restoration and Conservation Initiative*

Dear Secretary Pritzker,

My office fully supports the USDA in its effort to restore the Gulf of Mexico. The USDA, under the aforementioned proposal, has amalgamated the goals, energies, and resources of a broad coalition of federal, state, and municipal government agencies, and private conservation organizations to developed a strategy to restore and conserve Gulf habitat and water quality while providing economic opportunity in the Mississippi coastal plain.

Restoring the health and resiliency of ecosystems within the coastal plain will help rehabilitate coastal wetlands and economies affected by the tragic oil spill of 2010.

The USDA proposal complements those included in the state of Mississippi's comprehensive plan for restoration. Our State recognizes the value of ecosystem restoration efforts which include habitat conservation, restoration activities, enhancement, and improved coastal freshwater input and hydrology. Therefore, it is my pleasure to offer my fullest measure of support for the *USDA 2014 Mississippi Gulf Coast Forest Restoration and Conservation Initiative*.

Sincerely,

CITY OF OCEAN SPRINGS

CONNIE MORAN  
MAYOR

♻️ Printed on Recycled Paper

[www.OceanSprings-MS.gov](http://www.OceanSprings-MS.gov)



RESTORE Council Members  
Secretary Penny Pritzker  
Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

**OFFICERS**

Jon Bond  
President

Melanie Allen  
Vice President

Flowers White  
Treasurer

Alice Duckett  
Secretary

**BOARD OF DIRECTORS**

Melanie Allen

Beth Ashley

Jennifer Tyler Baker

Jon Bond

Russell Evans

Lisa Eveleigh

Peggy Hoover

Gale Singley Laird

Steve Lawler

Johnny Marquez

Allen Reed

Flowers White

**RE: The Mississippi Gulf Coast Forest Restoration and Conservation Initiative**

Secretary Pritzker:

The Land Trust for the Mississippi Coastal Plain (LTMCP) is supporting the private-public conservation partnership funding application entitled "The Mississippi Gulf Coast Forest Restoration and Conservation Initiative" and encourages continued efforts to utilize various federal, state, local and private funding opportunities to restore the health and resiliency of ecosystems within the coastal plain that were negatively impacted by the Deepwater Horizon Spill in April 2010.

These coastal wetlands represent nearly 40% of all coastal wetlands in the conterminous US and are responsible for approximately 30% of the country's fisheries production. The economic implications are far reaching and include higher food prices, higher unemployment as well as decreased tax and tourism revenue.

LTMCP is proud to be a part of the broad coalition of federal, state, and municipal government agencies and private conservation organizations who have developed a strategy to restore and conserve habitat and water quality while providing economic opportunity in the Mississippi coastal plain. Restoring the health and resiliency of ecosystems within the coastal plain will help rehabilitate coastal wetlands affected by the spill. These projects complement those included in the state of Mississippi's comprehensive plan for restoration.

Since the primary goal of this proposal is habitat restoration and conservation with a secondary goal of restoring water quality it meets LTMCP's goals of protecting the land and using best management plans to restore the habitats while promoting grassroots conservation through education and community partnerships. LTMCP was responsible for developing the initial Red Creek Watershed restoration plan and has worked for many years within the Turkey Creek community to implement restoration activities and assist with protection of this watershed. LTMCP is proposing a complimentary project with National Resource Conservation Service within this historically significant watershed to involve coastal stream restoration, non-native invasive species control and detection, and updates to existing watershed restoration plan projects.

LTMCP commends the efforts of the overall proposal as it will create local employment opportunities and protect community infrastructure while reducing risk to human health, primarily through fuel treatments, flood mitigation, and improved water quality. LTMCP feels that the success of this initiative is likely and sustainable because all land classes are represented and the participating organizations and agencies have a long and successful history of collaborative restoration experience and shared restoration goals.

The Land Trust for the Mississippi Coastal Plain is proud to support the efforts of the Partnership.

Sincerely,

Judy Steckler  
Executive Director  
Land Trust for the Mississippi Coastal Plain

P.O. Box 245 BILOXI, MISSISSIPPI 39533 PH: 228-435-9191 WWW.LTMCP.ORG  
JUDY STECKLER, EXECUTIVE DIRECTOR



## MISSISSIPPI FORESTRY COMMISSION

---

660 North Street, Suite 300 • Jackson, Mississippi 39202  
Phone: (601) 359-1386 • FAX: (601) 359-1349 • [www.mfc.state.ms.us](http://www.mfc.state.ms.us)

October 16, 2014

RESTORE Council Members  
c/o Secretary Penny Pritzker  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

Subject: Support of the *USDA 2014 Mississippi Gulf Coast Forest Restoration and Conservation Initiative*

The Mississippi Forestry Commission fully supports the USDA in its effort to restore the Gulf of Mexico. The USDA, under the aforementioned proposal, has amalgamated the goals, energies, and resources of a broad coalition of federal, state, and municipal government agencies, and private conservation organizations to develop a strategy to restore and conserve Gulf habitat and water quality while providing economic opportunity in the Mississippi coastal plain.

Restoring the health and resiliency of forest ecosystems within the coastal plain will help rehabilitate coastal wetlands and economies affected by the tragic oil spill of 2010.

The USDA proposal complements the strategies of the MFC for restoration and environmental enhancement as defined by *Mississippi's Assessment of Forest Resources & Forest Resource Strategy* which may be viewed here:  
[http://www.mfc.ms.gov/pdf/Forest\\_Assessment/MS\\_Assessment\\_Resource\\_Strategy\\_2010.pdf](http://www.mfc.ms.gov/pdf/Forest_Assessment/MS_Assessment_Resource_Strategy_2010.pdf).

Therefore, it is my pleasure to offer The Mississippi Forestry Commission's fullest measure of support for the *USDA 2014 Mississippi Gulf Coast Forest Restoration and Conservation Initiative*.

Sincerely,

A handwritten signature in cursive script that reads "Charlie Morgan".

Charlie Morgan – State Forester-Mississippi

October 15, 2014

RESTORE Council Members  
c/o Secretary Penny Pritzker  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

RE: The Mississippi Gulf Coast Forest Restoration and Conservation Initiative

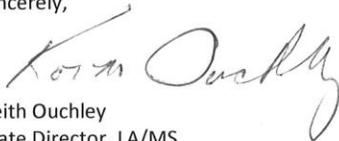
Dear Secretary Pritzker:

On behalf of the Mississippi Chapter of The Nature Conservancy, I am writing to express our strong support for the proposal to create the Mississippi Gulf Coast Forest Restoration and Conservation Initiative. The proposal for funding through the RESTORE Act has been developed by the Gulf of Mexico Ecosystem Restoration Team. This important partnership project seeks to accelerate conservation of coastal forests and streams on public and private lands within the Mississippi Coastal Plain, predominantly within the Pascagoula and Mississippi Coastal watersheds.

The primary strategies for the proposed project are a) restoration and conservation planning and prioritization, b) restoration and conservation project implementation, c) outreach and education, d) monitoring and measures of success and e) leveraging resources and partnerships. Primary objectives of this proposal are a) restoration, enhancement, and protection of habitat, b) restoration, improvement and protection of water resources, c) improving science-based decision-making processes, d) promoting community resilience and e) promoting natural resource stewardship. This landscape scale project meets RESTORE Act and Comprehensive Plan priority criteria by substantially contributing to the restoration and protection of the natural resources and wildlife habitats of Gulf Coast ecosystems. If implemented, this proposal will contribute significantly to the conservation goals established by the partners as well as other conservation planning efforts, such as the *Range-wide Conservation Plan for Longleaf Pine*.

One of the most exciting aspects of the proposal is the focus on a broad-based collaborative partnership. The partnership includes federal agencies (US Forest Service, US Fish and Wildlife Service, Natural Resources Conservation Service), the Mississippi Forestry Commission, non-governmental organizations (The Nature Conservancy, Land Trust for the Mississippi Coastal Plain) and private landowner representatives (American Forestry foundation, Wildlife Mississippi). The Nature Conservancy is committed to working with other members of the partnership to implement this important project.

Sincerely,



Keith Ouchley  
State Director, LA/MS

## **TURKEY CREEK COMMUNITY INITIATIVES**

14439 RIPPY ROAD GULFPORT, MISSISSIPPI 39503 (228) 806-4224

---

October 17, 2014

RESTORE Council Members  
c/o Secretary Penny Pritzker  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

### **RE: The Mississippi Gulf Coast Forest Restoration and Conservation Initiative**

Dear Secretary Pritzker:

As the Executive Director of Turkey Creek Community Initiatives (TCCI), I am writing you in support of the private-public conservation partnership funding application entitled "The Mississippi Gulf Coast Forest Restoration and Conservation Initiative". TCCI strongly encourages you to support the continued efforts to utilize various federal, state, local and private funding opportunities to restore the health and resiliency of ecosystems within the coastal plain that were negatively impacted by the Deepwater Horizon Spill in April 2010.

It is good to see that the State of Mississippi has recognized the value of previous ecosystem restoration efforts, which includes habitat conservation and restoration activities.

It is TCCI's understanding that a broad coalition of federal, state, and municipal government agencies and private conservation organizations have developed a strategy to restore and conserve habitat and water quality while providing economic opportunity in the Mississippi coastal plain. Restoring the health and resiliency of ecosystems within the coastal plain will help rehabilitate coastal wetlands affected by the spill.

Through TCCI's longstanding partnership with the Land Trust for the Mississippi Coastal Plain (LTMCP) and other diverse partners, much work has been done on Turkey Creek to implement restoration activities and to protect the Turkey Creek watershed. The proposed complimentary projects by LTMCP and National Resource Conservation Service (NRCS) will make it possible to continue restoring the habitat, restore the watershed and help to reduce the risk of flooding in the South Forest Heights, North Gulfport, and Turkey Creek Communities.

TCCI commends the efforts of the overall proposal as it will protect community infrastructure while reducing risk to human health, primarily through flood mitigation, and improved water quality.

Sincerely,

A handwritten signature in black ink, appearing to read "Derrick C. Evans", with a long horizontal flourish extending to the right.

Derrick C. Evans  
Executive Director  
Turkey Creek Community Initiatives



October 16, 2014

RESTORE Council Members, c/o Secretary Penny Pritzker  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

Dear Council Members:

The U.S. Endowment for Forestry and Communities (the Endowment) offers our enthusiastic endorsement for the proposal, "Mississippi Gulf Coast Forest Restoration and Conservation Initiative," developed by the USDA Forest Service, Natural Resource Conservation Service, Mississippi Forestry Commission, Department of Defense, Mississippi Band of Choctaw Indians, American Forest Foundation, The Nature Conservancy, US Fish and Wildlife Service, and many other partners.

The Endowment is a not-for-profit public charity working collaboratively with partners in the public and private sectors to advance systemic, transformative, and sustainable change for the health and vitality of the nation's working forests and forest-reliant communities. Our mission is to ensure that America's forests are sustainably managed to meet broad societal objectives such as marketable products, clean waters, wildlife habitats and other ecological services, while ensuring healthy and vibrant forest-reliant communities. We were involved with and encouraged development of this proposal.

This project focuses on watershed restoration to ensure clean water flows into the Gulf. We know that forests provide the cleanest and most stable water supply of any other land use in the South. In addition to ensuring clean water flows into the Gulf, the proposed work will also significantly increase the landscapes' resiliency to pressures from development, climate change, tropical storms, and wildfires. It will lead to economic opportunities for rural workers and economies.

This project sets the stage for comprehensive, Gulf-wide restoration. The measureable successes for water, climate resiliency, wildlife and other benefits that will result from this partnership can be scaled to include all of the Gulf States. We believe that this project demonstrates the benefits of public/private partnerships for sustainable solutions to Gulf restoration and resiliency. We encourage you to fund this proposal.

Thank you for the opportunity to provide input to the Restore Act funding process. Please contact me with any questions regarding our endorsement of this proposal.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carlton N. Owen".

Carlton N. Owen  
President & CEO

---

908 East North Street  
Greenville, SC 29601

(864) 233-7646 (phone)  
(864) 235-3842 (fax)  
[www.usendowment.org](http://www.usendowment.org)



PO Box 1374  
Biloxi, MS 39533  
PH (288) 990-0559  
[www.wildlifemiss.org](http://www.wildlifemiss.org)  
16 October 2014

RESTORE Council Members  
c/o Secretary Penny Pritzker  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

Dear RESTORE Council Members:

Wildlife Mississippi is pleased to support The Mississippi Gulf Coast Forest Restoration and Conservation Initiative. Watching a very diverse group of federal agencies, state agencies, non-governmental organizations, and private partners work in tandem to develop the vision this initiative describes has been inspirational. We are supportive of this initiative being implemented in the Mississippi Gulf Coast area in order to restore and conserve habitat while improving water quality, enhancing community resilience and strengthening the Gulf economy.

This project is consistent with Wildlife Mississippi's state-wide mission and more specifically with our vision for the Mississippi Gulf Coast. We believe implementing the activities outlined in this program will help make the Mississippi Gulf Coast more healthy and resilient while enhancing the habitats that are the economic base of the region.

If you have any questions, please contact me at (228) 990-0559 or by email to [rsmith@wildlifemiss.org](mailto:rsmith@wildlifemiss.org).

Sincerely yours,

A handwritten signature in black ink that reads "Robert M. Smith".

Robert Smith  
Coastal Program Coordinator



# ELIGIBILITY REVIEW

Bucket 2 – Council Selected Restoration Component

**PROPOSAL TITLE**

The Mississippi Gulf Coast Forest Restoration and Conservation Initiative

**PROPOSAL NUMBER**

USDA-3

**LOCATION**

MS Gulf Coastal Plain

**SPONSOR(S)**

Department of Agriculture

**TYPE OF FUNDING REQUESTED (Planning, Technical Assistance, Implementation)**

Planning, Technical Assistance

**REVIEWED BY:**

Bethany Carl Kraft/ Ben Scaggs

**DATE:**

11-18-14

**1. Does the project aim to restore and/or protect natural resources, ecosystems, fisheries, marine and wildlife habitat, beaches, coastal wetlands and economy of the Gulf Coast Region?**

YES     NO

Notes:

This project focuses on restoring forests and streams on public and private lands throughout the Mississippi Coastal Plain, predominantly within the Pascagoula and Mississippi Coastal Watersheds.

**2. Is the proposal a project?**

YES     NO

**If yes, is the proposed activity a discrete project or group of projects where the full scope of the restoration or protection activity has been defined?**

YES     NO

Notes:

**3. Is the proposal a program?**

YES  NO

**If yes, does the proposed activity establish a program where the program manager will solicit, evaluate, select, and carry out discrete projects that best meet the program's restoration objectives and evaluation criteria?**

YES  NO

Notes:

**4. Is the project within the Gulf Coast Region of the respective Gulf States?**

YES  NO

**If no, do project benefits accrue in the Gulf Coast Region?**

YES  NO

Notes:



## Eligibility Determination

ELIGIBLE

## Additional Information

---

## Proposal Submission Requirements

1. Is the project submission overall layout complete? *Check if included and formatted correctly.*

- |                                |                                     |                                       |                                     |
|--------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|
| A. Summary sheet               | <input checked="" type="checkbox"/> | F. Environmental compliance checklist | <input checked="" type="checkbox"/> |
| B. Executive summary           | <input checked="" type="checkbox"/> | G. Data/Information sharing plan      | <input checked="" type="checkbox"/> |
| C. Proposal narrative          | <input checked="" type="checkbox"/> | H. Reference list                     | <input checked="" type="checkbox"/> |
| D. Location information        | <input checked="" type="checkbox"/> | I. Other                              | <input checked="" type="checkbox"/> |
| E. High level budget narrative | <input checked="" type="checkbox"/> |                                       |                                     |

If any items are NOT included - please list and provide details

2. Are all proposal components presented within the specified page limits (if applicable)?

YES     NO

Notes: