2019 Habitat Conservation and Restoration Plan for Coastal Alabama





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PHOTO CREDITS

Mobile Bay National Estuary

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Introduction

Importance of Ecosystem Conservation and Restoration

Impacts on the coastal environment will increase over the coming decades as Americans continue to move toward the shore and use the coastal environment more intensively. To ensure there are abundant fish and wildlife, clean water, and healthy coastal ecosystems, habitat conservation will be a vital component at watershed and regional scales. Habitat conservation practices seek to protect habitats that remain undegraded by the impacts of anthropogenic stress to prevent species extinction, habitat fragmentation, or reduction in wildlife ranges. Conservation of habitats serves the role of protecting the food, water, and habitat resources fish and wildlife need to survive. Sufficient amounts of these three resources must be available to maintain healthy populations of living resources.

Ecosystem restoration refers to returning a damaged ecological system to a stable, healthy, and sustainable state. Although it may be impossible to return an ecosystem feature to the exact same condition as prior to disturbance, restoration to improve ecosystem function and services will contribute to community health and well-being, protect against sea level rise and other climate change impacts, provide recreational opportunities, and ensure economic sustainability and community quality of life (MBNEP, 2012).

The Purpose of This Plan

The 2006 publication of *Conserving Alabama's Coastal Habitats: Acquisition and Restoration Priorities for Mobile and Baldwin Counties* (the Habitat Atlas) set targets for the acquisition or restoration of priority parcels across coastal Alabama (MBNEP, 2006). Since the establishment of the Habitat Mapper in 2009 and publication of *Respect the Connect: Comprehensive Conservation and Management Plan for Alabama's Estuaries and Coast 2013-2018*, a substantial number of the acquisition targets identified in the Habitat Atlas have been secured and many restoration projects have been completed.

The purpose of the 2019 Habitat Conservation and Restoration Plan for Coastal Alabama (the Habitat Plan) is to streamline restoration planning in coastal Alabama by consolidating available data sources. These include the latest available data on habitat species coverage, the products of ongoing and recently completed watershed management plans, and research from many organizations and agencies, given the unprecedented influx of funds from the *Deepwater Horizon* oil spill. The Habitat Plan will use these sources to direct appropriate focus on habitat acquisition, conservation, restoration, and management activities along the Alabama coast. Conservation and restoration efforts can be better streamlined and complemented by having a common plan and tool to help identify and prioritize projects at different scales (e.g. entire coast, county, municipality, individual watershed, individual habitat, etc.). Ongoing conservation and management efforts, existing and planned projects, and recommendations from completed watershed management plans are coordinated in the Habitat Plan and through the Coastal Alabama Restoration Tool (CART) to maximize conservation and restoration outcomes.

Geographic Scope of the Plan

While Mobile Bay drains over 43,600 square miles, including most of Alabama and portions of Mississippi, Georgia, and Tennessee, the primary focus area of the Habitat Plan is limited to Alabama's two coastal counties, Mobile and Baldwin. The study area stretches from the Florida border in the Perdido Watershed to the east, westward to the Mississippi border in the Escatawpa Watershed. Major waterways include the Tombigbee, Tensaw, Apalachee, Blakeley, Escatawpa, Mobile, Alabama, Dog, Fowl, Fish, Magnolia, Bon Secour and Perdido rivers; Chickasaw, Norton, Three Mile, and Eight Mile creeks; the Intracoastal Waterway, Wolf and Perdido Bays, and Little Lagoon.

These two coastal counties comprise many sub-watersheds classified numerically by the U.S. Geological Survey (USGS) into Hydrologic Unit Codes, or HUCs. For planning purposes, the EPA prefers a scale of 12-digit HUCs, the smallest geographical area classified in the USGS schema. Alabama's two coastal counties include ninety-eight 12-digit HUCs, some combined into complexes for planning purposes (Figure 1), which drain into receiving waters like Fowl River (HUCO31602050205), Magnolia River (HUCO31602050308), and other familiar coastal rivers and bays.

Background

In April 2002, the MBNEP established an objective in its Comprehensive Conservation Management Plan to "provide optimum fish and wildlife habitat in the Mobile Bay system by effectively preserving, restoring, and managing resources to maintain adequate extent, diversity, distribution, connectivity, and natural functions of all habitat types." The CCMP highlighted many high-quality coastal habitats within the Mobile Bay estuary that were not under protective management. Threats to these habitats are associated with human population growth and include habitat destruction, degradation, and fragmentation; water quantity and quality impacts; invasion by non-native species; and suppression of natural ecological processes, like periodic fires. Habitat destruction and change have also resulted from the impacts of two of the most destructive hurricanes to strike the United States, Ivan in 2004 and Katrina in 2005. Direct effects of these storms on sensitive habitats and secondary impacts resulting from recovery and rebuilding efforts have also created challenges when seeking to maintain and preserve sensitive coastal ecological processes.

The First Restoration Planning Effort

In 2006, the MBNEP joined with The Nature Conservancy to assess habitats for conservation based on quality of or contributions to ecosystems, stresses to those systems, sources of the stresses, strategies to abate those sources, and successful measurement of biodiversity health and threat abatement. This effort resulted in the creation of *Conserving Alabama's Coastal Habitats: Acquisition and Restoration Priorities for Mobile and Baldwin Counties (MBNEP, 2006)*, commonly called the "Habitat Atlas." The Habitat Atlas identified 17 priority acquisition sites (or other conservation options) and more than 30 other sites and habitat types where restoration or enhancement were considered viable and necessary. The Habitat Atlas was produced for use by governments and other community organizations to more effectively guide resource management activities in coastal Alabama.

One of the major drawbacks of the original Habitat Atlas was the lack of a mechanism for objectively evaluating habitats across both counties. It was largely based on participants' knowledge of parcels containing priority habitats which might be available for conservation or whose owners might be willing to consider restoration or conservation actions. A second challenge was an inability to compare restoration and conservation projects being implemented within the identified priority conservation and restoration areas.

The Second Restoration Planning Effort

In 2009, the online geospatial *Mississippi Alabama Habitats Tool and The Prioritization Guide for Coastal Habitat Protection in Mobile and Baldwin Counties*, Alabama (the Habitat Mapper) was developed as part of a collaborative project between the MBNEP, TNC, and the Coastal Services Center and Office of Habitat Conservation of the National Oceanic and Atmospheric Administration (NOAA). The primary goal of this effort was to provide new information and mapping tools to support conservation planning and implementation of the habitat management goals of the CCMP. The development of a Habitat Mapper was achieved by bringing federal, state, and local entities together to update and improve the Habitat Atlas through a scientifically based methodology involving use of geospatial datasets to identify priority habitat "patches," irrespective of property boundaries. The Habitat Mapper used a revised analysis and prioritization process incorporating updated and additional habitat data that were not previously available, as well as consideration of potential habitat stressors.

The Habitat Mapper provided a more robust and dynamic tool for identifying priority habitats across the two coastal counties and established focus areas for concentrating conservation and restoration activities. In addition, it provided the viewer with a geospatial visualization of all projects in the Mississippi-Alabama Conservation and Restoration Projects Database, an inventory of all restoration and conservation projects planned, initiated, in progress, or completed between 2000 and 2010. However, because habitat patches typically cross several parcel boundaries, its value was based on validating potential projects based on their location within a priority habitat patch as opposed to the prior effort which targeted specific parcels for acquisition or restoration because they were located within a priority patch.

Impacts of Deepwater Horizon

In 2010, the *Deepwater Horizon* incident, the largest marine oil spill in the history of the petroleum industry, spilled oil into the Gulf of Mexico over the course of 87 days. This event not only threatened the sensitive habitats, along the Alabama coast, most notably beaches and salt marshes, it shed a spotlight on the connection between the environment and Alabama's coastal economy.

The *Deepwater Horizon* settlement agreement, accepted by the Federal District Court in 2016, made more than \$20 billion available for Gulf Restoration over 15 years. In addition to the civil penalties, there were also criminal penalties (\$4.4 billion) and natural resource damage claims (\$8.1 billion) divided amongst the states based on formulas for damages.

From the \$32.5 billion in total penalties, Alabama specifically will receive a minimum of \$1.377 billion as follows:

- > \$296 million Natural Resources Damage Assessment
- > \$356 million National Fish and Wildlife Foundation Gulf Environmental Benefit Fund
- > \$373 million Tourist Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) Act Direct Component (Bucket 1)
- > \$TBD million RESTORE Act Comprehensive Plan Component (Bucket 2) competitive
- > \$326 million Restore Act Spill Impact Component (Bucket 3)
- > \$TBD million NOAA RESTORE Act Science Program (Bucket 4) competitive
- > \$26 million NOAA RESTORE Act Center of Excellence (Bucket 5)

This unprecedented influx of funds to support protection, restoration, and conservation of habitats and coastal communities constitutes the foundation of the Habitat Conservation and Restoration Plan for Coastal Alabama.

The Comprehensive Conservation and Management Plan (CCMP)

In 2013, the MBNEP published Respect the Connect: A Comprehensive Conservation and Management Plan for Alabama's Estuaries and Coast (CCMP), which was recently updated for years 2019-2023. This Plan set forth the following vision: Alabama's estuaries, where the rivers meet the sea, are healthy and support ecological function and human uses.

To ensure the CCMP was based on sound science, a Science Advisory Committee determined what areas of our coastal environment are most stressed and from what cause(s). The results of this assessment revealed freshwater wetlands; streams, rivers and riparian buffers; and intertidal marshes and flats were most stressed due to a combination including, but not limited to, land-use changes, sediment transport, fragmentation, sea level rise, and dredging and filling.

To ensure the strategies in the CCMP maintain a connection to what contributes to residents' quality of lives, extensive citizen input was collected and compiled to determine what mattered most to those living on the Alabama coast. The results of this data gathering revealed six common values:

- > Access (to the water and open spaces for recreation and vistas)
- > Beaches and Shorelines (protection, economy, beauty)
- > Fish & Wildlife (habitats, abundance, livelihood)
- > Heritage/Culture (protecting the legacy of the coast)
- > **Resilience** (protecting the capacity of human and natural physical systems to rebound from unforeseen events), and
- > **Water Quality** (whether drinkable, fishable or swimmable, the public places high value on quality rivers, creeks, and bays)

The CCMP's Ecosystem Restoration and Protection Strategy

One of the purposes of this plan is to ensure **Conservation**, **Restoration**, **and Protection of Critical Habitats**. The Ecosystem Restoration and Protection strategy of the CCMP includes the following goals:

- > **ERP-1**: Improve trends in water quality in priority watersheds.
- > ERP-2: Focus watershed management activities on priority habitats.
- ERP-3: Restore and expand human connections to nature as a mechanism for improving environmental protection by protecting and conserving priority habitats for public benefit and access by acquisition and easement.

The CCMP Watershed Approach Guiding Restoration

The methodology followed for implementing the Ecosystem Restoration Strategy of the CCMP is through the development of watershed management plans (WMP) for the smallest drainage areas classified by the U. S. Geological Survey, also known as 12-Digit Hydrologic Unit Codes (or HUCs), usually named for the water body to which the land drains without regard for geopolitical boundaries. Watershed planning represents a collaborative shift from traditional city planning, where geopolitical borders limit actions to improve the condition of receiving waters. These plans depend upon public involvement and "stakeholders" who know the area, recognize its problems, and are invested in its health and resilience.

A key component of these plans is the identification of restoration and conservation projects, based on a scientific assessment of the watershed, an analysis of condition of priority habitats, the extent to which the project addresses at least one of the common values, and the degree to which the stressor causing the degrading habitat can be abated. These plans ensure restoration efforts are not only based in science but respond to community desires and fit into an overall management program, including improvements to the regulatory environment as well as enhanced community involvement.

Target Watersheds and Status of Planning

To achieve tangible and lasting environmental management success, municipalities need to work together to improve ecosystem service delivery in their watersheds. Planning at the watershed level is necessary to reach the scale of conservation and restoration needed to achieve real improvements to the habitats that will benefit both people and nature. It is the only way to reach those communities whose actions have an impact on a given freshwater system and to inform the citizens about the health of their watershed and the water upon which they rely to provide specific ecosystem services, like recreational opportunities. Like habitats, WMPs cross municipal boundaries and allow for all stakeholders within or dependent upon each watershed to have input into the management plan.

The Ecosystem Restoration and Protection strategy of the CCMP included a prioritization of watersheds for undertaking comprehensive watershed planning. With a combination of National Fish and Wildlife Foundation (NFWF) grants and RESTORE Bucket 2 funding through the State of Alabama, the MBNEP has secured funds to develop comprehensive watershed management plans for all tidally influenced watersheds from the Florida to the Mississippi borders. The status of this watershed plan development process, including component watersheds, funding sources, and completion status is provided in Table 1, along with a map showing watersheds identified for plan development either slated, in progress, or completed in Figure 1.

Table 1. Funding source and status of watershed management plan development.

FUNDING SOURCE AND STATUS OF WATERSHED MANAGEMENT PLAN DEVELOPMENT				
Watershed Plans	HUC 12 Watersheds	Funding Source	Completion Status	
D'Olive	Sub Basin of Tensaw Apalachee	ADEM, EPA, MBNEP, MASGC, APCO, Baldwin County, Daphne, Spanish Fort	2010	
Eight M ile	Eight Mile Creek	MBNEP/MASGC/CWP	2011	
Three Mile Creek	Three Mile Creek	ADCNR, MAWSS, ADEM, Mobile County, MBNEP, EPA	2014	
Fowl River	Fowl River	NFWF-GEBF	2016	
Dog River	Upper Dog River, Lower Dog River, Halls Mill Creek	NFWF-GEBF	2017	
Bon Secour	Bon Secour River, Oyster Bay, Skunk Bayou	NFWF-GEBF	2017	
Weeks Bay	Upper Fish River, Middle Fish River, Lower Fish River, Magnolia River	NFWF-GEBF	2017	
Bayou La Batre	Bayou La Batre	NFWF-GEBF	2018	
West Fowl River	West Fowl River	NFWF-GEBF	2019	
Wolf Bay	Sandy Creek, Mifflin Creek, Graham Bayou	NFWF-GEBF/RESTORE	2019	
Western Shore	Garrows Bend, Deer River, Delchamps Bayou	RESTORE	In progress	
Little Lagoon/Gulf Frontal	Little Lagoon/Perdido Pass-Gulf Frontal	RESTORE	In progress	
Mobile Tensaw Apalachee	Tensaw-Apalachee, Grand Bay, the Basin, Mittlin Lake, Big Chippewa Lake, Farris Creek/Barrow Creek	NFWF-GEBF/RESTORE	In progress	
Fly Creek/Eastern Shore	Fly Creek/Easter Shore	RESTORE	In progress	
Eastern Delta	Whitehouse Creek, Upper Bay Minette Creek, Lower Bay Minette Creek	RESTORE	Planned	
Western Delta	Cold Creek, Gunnison Creek, Bayou Sara, Lower Chasaw Creek	RESTORE	Planned	
Dauphin Island	Dauphin Island	RESTORE	Planned	
Grand Bay Swamp	Grand Bay Swamp	RESTORE	Planned	
Bridge Creek/ Palmetto Creek	Bridge Creek/Palmetto Creek	RESTORE	Planned	

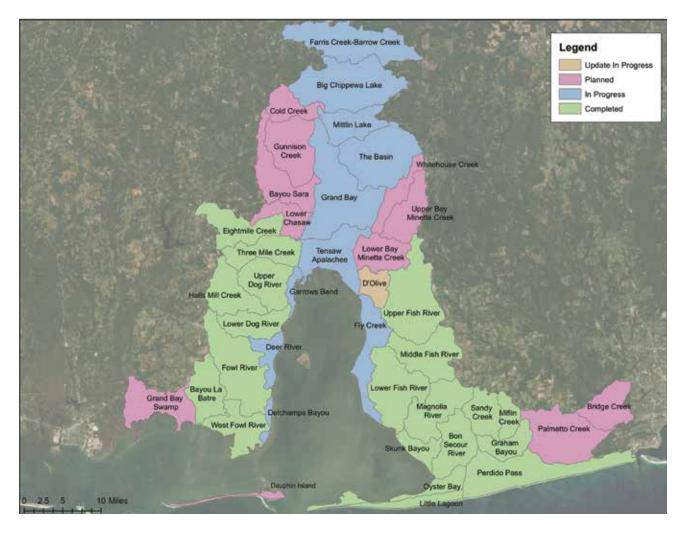


Figure 1. Map shows watersheds identified for plan development, including plan update in progress (brown), planned (pink), in progress (blue), or completed (green).



Current Status of Coastal Habitats

The Different Types of Coastal Habitats

Alabama's extraordinary species diversity is a product of the mosaic of distinct coastal habitats characterizing our region, including the remnants of vast longleaf pine forests once dominating our landscape to the seagrass beds and oyster reefs fringing our coastlines. The mixture of habitats found in Alabama provides ecosystem services which support more species than found in any state east of the Mississippi River (MBNEP, 2012).

Beaches and Dunes

The sandy coastlines fronting the Gulf of Mexico support herbaceous plants, such as sea oats and other salt-spray tolerant grasses and herbs, and provide habitat or nesting areas for the Alabama beach mouse, sea turtles, and a variety of resident and migratory shorebirds. Beaches and dunes provide the first line of defense against tropical storm surge and wave action (MBNEP, 2012).

Freshwater Wetlands

In areas flooded by rivers and streams or groundwater seepage or containing topographic depressions holding water, these vegetated habitats serve to slow and store floodwater, recharge groundwater supplies, and trap excess sediments and nutrients to enhance water quality. Freshwater wetlands support highly diverse biological communities and are among the most highly stressed and historically altered habitats in coastal Alabama (MBNEP, 2012).

Intertidal Marsh and Flats

These habitats are tidally inundated with salt or brackish water, may support a dense herbaceous plant layer with few shrubs, and represent one of the most biologically productive natural communities known. Tidal marshes and flats act as storm buffers, reduce shoreline erosion, absorb excess nutrients from runoff, and support numerous important fishery populations. Much of the early development of the City of Mobile was built on land created by filling marshes along the Mobile River (MBNEP, 2012).

Longleaf Pine Habitat

Although longleaf pine was the most prevalent landscape in the southeastern U.S. when Europeans first arrived, most had disappeared by the early 20th century, due primarily to harvest and development. Today, restoration of longleaf pine forests is a conservation priority. Longleaf pine provides exceptional wildlife habitat and is relatively tolerant to both fire and strong winds and resistant to many insects and fungal diseases which attack other pine species (MBNEP, 2012).

Maritime Forest

Once a more prevalent habitat along the northern Gulf coastline, these natural areas now occur in discontinuous, narrow bands, covering the more stable portions of barrier islands and coastal dune ridges. Maritime forests stabilize soils and provide storage capacity for groundwater and wildlife habitat favored by many migratory bird populations (MBNEP, 2012).

Pine Savanna Forest

These non-riverine lowlands are poorly drained or seasonally wet and principally dominated by loblolly and slash pines with hardwoods occurring in wetter areas. Pine savanna systems are coastal buffers with widely scattered trees and a predominantly grass/herb understory of high species diversity. Decreases in their area and distribution are blamed largely on human development (MBNEP, 2012).

Streams, Rivers, and Riparian Buffers

These are natural, flowing watercourses bounded by channel banks, progressing from their sources downstream to the estuary and tidal influence. They may be perennial or intermittent and often have beds comprising unconsolidated sandy or muddy sediments. Riparian buffers are vegetated lands directly adjacent to rivers and streams. Riparian buffers help stabilize stream channel structure and protect streams from upland sources of pollution by filtering and trapping sediments, nutrients, and chemicals (MBNEP, 2012).

Marine Habitats

Marine habitats, including oyster reefs, submerged aquatic vegetation, and subtidal habitats are not addressed in this habitat restoration plan. While they are essential habitats of Mobile Bay, this plan focuses on the upland and freshwater habitats of Mobile Bay and its watersheds.

Oyster Reefs

Oysters attach to one another to form dense reefs in brackish to salty waters in middle and lower Mobile Bay. In addition to being commercially valuable, oyster reefs provide important habitat for many species; filter impurities from the water, improving its quality; and stabilize shorelines and water bottoms by buffering wave action. In recent years, local oyster production has suffered from oyster drill predation stimulated by high salinities related to drought and incursion of saltwater into Mississippi Sound through the breach in western Dauphin Island caused by Hurricane Katrina in 2005.

Submerged Aquatic Vegetation (SAV)

These habitats comprise expansive subtidal or intertidal areas occupied by rooted plants, with freshwater species in areas where riverine flow predominates and brackish to marine species occurring in the lower reaches of watersheds nearer the influence of Gulf waters. SAV beds filter polluted runoff, reduce erosion, and provide food for waterfowl and manatees and habitat for blue crabs, fish, and other aquatic animals. The extent of this habitat in Alabama has been greatly reduced since the mid-20th century, due in part to land-use conversion and associated degradation of water quality.

Subtidal Habitats

These are the submerged areas below mean low tide, including open waters and the Gulf of Mexico. They are an important feature of commercial and recreational fishing activities along the Alabama coast. Subtidal areas can include different types of bottom habitat, including unconsolidated sediments, hard bottoms, and SAV beds.

For more detailed information on habitats, please refer to the Alabama Wildlife series (ADCNR, 2004) and Alabama's Wildlife Action Plan (ADCNR, 2015).

The Ecosystem Services Provided by Coastal Habitats

Ecosystem services are the processes by which the environment produces resources we value. The most obvious examples are the services provided by plants. They use the energy of the sun to convert carbon dioxide to the food we eat and the oxygen we breathe. They stabilize soil, prevent erosion, and provide habitat for the fish, birds, and wildlife we value. Other examples are less obvious. Wetlands reduce excess nutrients, buffer shorelines from the erosive energy of storms, promote species diversity, and contribute to groundwater replenishment. While we often take these natural processes for granted, ecosystem services have monetary value which would become more apparent if it became necessary to replace them (MBNEP, 2012).

Biodiversity

Alabama boasts the greatest biodiversity, or number of different species of plants and animals, of any state east of the Mississippi River. Nationwide, Alabama ranks fifth in biodiversity, enjoyed and valued by hunters; anglers; birders; anyone who enjoys a day on the water, in the woods, or in a field; and the State of Alabama, which depends upon tax revenue to provide human services upon which we depend (MBNEP, 2012).

Carbon Sequestration

All the organic molecules upon which life depends have complex "skeletons" made of carbon. Carbon sequestration is the process by which the complex molecules created by plants are stored or sequestered to later provide energy and fuel to drive our automobiles, trains, planes, and economies (MBNEP, 2012).

Fisheries Habitat

The healthy stocks of commercially and recreationally important fish and shellfish that we like to catch and eat are a huge component of the economic engine that powers the State's economy and supports our coastal quality of life. The health of these stocks depends upon habitats providing them the food, shelter, and breeding and nursery areas that they need (MBNEP, 2012).

Flood Control

This is an essential service to people who live in a climate that receives over five and a half feet of rain annually, along with periodic tropical weather events. Wetlands, floodplains, and water bodies slow and store floodwaters, retaining and detaining them, preventing damage to development and infrastructure, and providing opportunities for infiltration and recharge of groundwater supplies (MBNEP, 2012).

Groundwater Replenishment

With natural landscapes increasingly converted to impervious cover, areas promoting infiltration of surface water from rain and storms into the ground are necessary to sustain and replenish the aquifers from which we draw water for drinking, industry, and agriculture (MBNEP, 2012).

Nesting Habitat for Birds and Turtles

Birds and turtles, especially valued by coastal residents and tourists, depend upon very specific habitats to lay eggs and raise young to ensure healthy populations can be enjoyed by current and future generations along the coast (MBNEP, 2012).

Oyster Production

More than just particularly valued seafood supporting coastal heritage and culture, oysters build complex reefs providing optimal habitat for a gamut of aquatic organisms and reduce the wave energy that degrades shoreline habitats (MBNEP, 2012).

Primary Production

Plants use the light energy of the sun to convert simple, inorganic carbon dioxide molecules into a complex organic compound called glucose, the primary energy source for living things and the building block for other more complex organic molecules, and the oxygen necessary for aerobic metabolism. Glucose forms the base of the food pyramid (MBNEP, 2012).

Sediment and Nutrient Retention and Export

Sediments and nutrients cloud the water, blocking the light necessary for primary production and subsequently depleting our waters of the dissolved oxygen necessary for aquatic life. Plants found in wetlands, riparian areas, and SAV beds capture these sediments and nutrients and reduce their impacts elsewhere in the estuarine and marine ecosystems (MBNEP, 2012).

Storm Buffer/Hazard Protection

The dune systems lining the Gulf of Mexico and wetlands fringing coastal water bodies are the first line of defense for human interests from the effects of tropical weather-related waves and storm surge. Both attenuate and dissipate waves and slow the onslaught of rising water levels, which accompany storms on the Gulf Coast (MBNEP, 2012).

Water Quality Enhancement

Coastal habitats enhance water quality by sequestering contaminants in plant tissues and sediments, capturing and entraining the suspended sediments which block light transmission and incorporating nutrients that would otherwise promote growth of harmful algal blooms and deplete critical dissolved oxygen supplies (MBNEP, 2012).

Wildlife Habitat

Wildlife habitat is critically important to supporting the exceptional species diversity in the State of Alabama. As natural landscapes are converted to developed lands, remaining wildlife habitat becomes increasingly important in providing this broad range of species places to live, eat, breed, and raise young (MBNEP, 2012).

The Most Stressed Coastal Habitats

Over thirty scientists and resource managers from various disciplines evaluated ecosystem services provided by different coastal habitats to determine levels of impact from a suite of stressors. The expert panel evaluated 10 habitats for 14 of the ecosystem services they provide and the 13 anthropogenic stressors that negatively impact those habitats. For each of the 10 coastal habitat types (streams and rivers were combined with riparian buffers, effectively resulting in nine types), 13 stressors were rated numerically between zero, for those having no negative impact on the ecosystem service, and three for those having the most direct negative impact on each of the 14 recognized ecosystem services. Using this rating system, any ecosystem service that scored 2.2 or higher was identified as highly impacted from anthropogenic stressors (MBNEP, 2012). The cumulative scores of the stresses on the ecosystem services for each habitat were used to determine the most stressed habitats. The results of the analysis for all 10 habitats is provided in Table 2.

Table 2. Most stressed habitat types and their impact scores from anthropogenic stressors.

HABITAT TYPES AND THEIR IMPACT SCORE FROM ANTHROPOGENIC STRESSORS				
Habitat Type	Impact Score	Major Stressors	Ecosystem Services	
Streams, Rivers, and Riparian Buffers	211.0	Freshwater Discharge Land-use Change Sediment	Fish Biodiversity Water Quality Sediment	
Freshwater Wetlands	248.9	Land-use Change Fragmentation Dredging and Filling	Nesting for Birds and Turtles Biodiversity Wildlife Fisheries	
Intertidal marshes and flats	230.4	Sediment Sea Level Rise Fragmentation	Biodiversity Fisheries Wildlife Water Quality	
Longleaf Pine	180.7	Land-use Change Fragmentation	Wildlife Nesting for Birds and Turtles Biodiversity	
Pine Savanna	169.2	Fragmentation Resource Extraction Fire Suppression	Wildlife Biodiversity Nesting for Birds and Turtles	
Maritime Forest	162.3	Land-use Change	Nesting for Birds and Turtles Wildlife	
Beaches and Dunes	139.3	Land-use Change Fragmentation	Wildlife Biodiversity Nesting for Birds and Turtles Hazard Protection	
Submerged Aquatic Vegetation	149.0	Sedimentation Dredging and Filling Nutrient Enrichment	Biodiversity Fish Water Quality	
Oyster Reefs	171.3	Dredging and Filling Freshwater Discharge	Oyster Production Water Quality Biodiversity Fish	

From this effort, three habitat types – streams, rivers, and riparian buffers; freshwater wetlands; and intertidal marshes and flats - were identified as most stressed from dredging and filling, fragmentation, and sedimentation, all related to land-use change.

Past Efforts to Restore Coastal Habitats

From 2006 to 2014, monies including, but not limited to, EPA Section 320 funding, competitive grant programs, opportunistic funding, and Alabama's Forever Wild Land Trust were used to fund watershed planning, acquisition, and restoration activities occurring on the coast. After 2014, funds from the *Deepwater Horizon* settlement agreements began contributing toward these efforts. MBNEP surveys the Management Conference each year on acquisition and restoration projects conducted by the partners and compiles this information into an annual Government Performance and Results Act (GPRA) report for EPA. The information on conservation and restoration efforts reflects all projects completed since 2006, as well as the projects completed as part of the Habitat Atlas (See Appendix A).

Although long-term success will be judged on the degree to which identified sites are conserved or restored, short-term results are promising. Approximately 56% of the lands (almost 32,200 acres) targeted for acquisition in the Habitat Atlas (2006) was acquired between 2006 and 2018, as shown in Table 3.

Table 3. Area (acres) identified and acquired by watershed/watershed complex since 2006.

MBNEP 2006 HABITAT ATLAS ACQUISITION SUCCESS				
Watershed/Watershed Complex	Area (acres) Identified	Acres (acres) Acquired	% Success	
Grand Bay Swamp	2,836	2,640	93%	
Mississippi Sound Complex	7,093	917	13%	
Western Delta Complex	3,233	2,580	80%	
Mobile-Tensaw-Apalachee Delta Complex	2,558	1,269	50%	
Weeks Bay Complex	5,223	1,131	22%	
Bon Secour Complex	50	251	502%	
Gulf Frontal Complex	115	132	115%	
Perdido River Complex	30,000	18,000	60%	
Perdido Bay Complex	5,259	4,711	90%	
Total	56,367	31,631	56%	

Relative to the restoration projects identified in the Habitat Atlas and indicated in Table 4, all but one project had some level of restoration initiated. Approximately 17 of the 34 restoration / management actions (50%) identified in the Habitat Atlas were addressed in whole or part.

Table 4. MBNEP 2006 Habitat Atlas Restoration Success

MBNEP 2006 HABITAT ATLAS RESTORATION SUCCESS				
Watershed	2006 Projects	Progress	S tatus	CCMP Value
Grand Bay Swamp	 prescribed fire management inuasive species control longleaf pine restoration hydrologic restoration shoreline restoration 	 prescribed fire lane construction underway boundary posting underway shoreline restoration planning underway 		Access Fish/ Wildlife Resiliency
Mississippi Sound Complex	 habitat restoration, esp. for birds and terrapins seagrass restoration prescribed fire management invasive species control Alonzo Landing breakwater/marsh Sand Island stabilization 	Marsh Island project complete, including birds Lightning Point project underway, including birds and terrapins Dauphin Island feasibility plan underway Alonzo Landing complete		Beaches/Shorelines Fish/ Wildlife Resiliency
Western Shore Complex	· shoreline restoration with breakwaters and marsh	- small projects completed - larger projects currently being planned		Fish/ Wildlife Resiliency
Mobile-Tensaw- Apalachee Delta Complex	 marsh restoration north and south of Causeway invasive species control hydrologic restoration, including ditch filling 	marsh restoration planning initiated some invasive species control underway		Fish/ Wildlife Heritage/ Culture Resiliency Water Quality
D'Olive Bay	- stream and streambank restoration	· 4 stretches on stream and streambank restoration complete		Resiliency Water Quality
Weeks Bay Complex	prescribed fire management Williams Reef restoration	prescribed fire management implementation		Fish/ Wildlife
Gulf Frontal Complex	sea turtle nest protectionPerdido Islands restoration and planting	· Share the Beach - Perdido Islands projects through City of Orange Beach, TNC, IOPF, and NOAA		Access Beaches/ Shoreline Water Quality
Perdido River Complex	longleaf pine restoration prescribed fire management invasive species control hydrologic restoration, including dirt roads	IP Timber associated longleaf pine restoration complete prescribed fire management underway invasive species control underway		Access Resiliency Water Quality
Perdido Bay Complex	prescribed fire managementinvasive species controlhydrologic restorationSAV restoration	-prescribed fire management -invasive species control -SAV restoration		Access Fish/ Wildlife Water Quality
Wolf Bay Complex	- living shoreline restoration - wetlands restoration			Fish/ Wildlife Resiliency Water Quality



Habitat Restoration Planning Methodology

Process and Stakeholder Engagement

Stakeholder engagement in the development of the 2019 Habitat Conservation and Restoration Plan for Coastal Alabama began with input from each of the MBNEP Management Conference committees: Project Implementation Committee, Science Advisory Committee, Community Action Committee, Community Resource Committee, Business Resource Committee, and Government Networks Committee to refine habitat planning goals for this next 10-year period. Each committee was asked to vet and validate the coastal habitat restoration planning vision developed by the project team and to rank the priority of a series of habitat restoration and conservation goals on a scale of High, Medium, or Low. The results, presented in Table 5, show three high priority goals and three medium priority goals.

Table 5. Goals developed by the Technical Advisory Committee for the 2019 Habitat Conservation and Restoration Plan for Coastal Alabama.

HABITAT RESTORATION PLAN GOAL SETTING	Priority
Goal	Priority
Restore chemical, biological, and physical integrity of coastal habitats to support an abundance of fish , shellfish , wildlife , and recreation	High
Restore, conserve, or enhance habitats in the headwaters of tidally influenced watersheds or drainage basins	High
Protect uplands adjacent to coastal habitats to accommodate landward migration of marshes	High
Ensure adequate open space through habitat protection and restoration for storm protection/flood prevention	Medium
Ensure adequate open space through habitat protection and restoration for greater access and recreation	Medium
Restore and protect habitats which play a key role in coastal Alabama's heritage and culture	Medium

In addition to the input received by each of the Management Conference committees, a Technical Advisory Committee (TAC) participated in a series of meetings to guide plan development. This committee was made up of local, state, and federal resource managers, environmental professionals, and scientists involved in restoration research. These members were invited based on their expertise related to marine, freshwater, or upland habitats.

Participants in the TAC (shown in Table 6) covered a wide spectrum of public and private interests including: U.S. Army Corps of Engineers; U.S Fish and Wildlife Service; U.S. Department of Agriculture's Natural Resources and Conservation Service; National Oceanic and Atmospheric Administration; Poarch Band of Creek Indians; Northern Gulf Institute; Mississippi-Alabama Sea Grant Consortium; Alabama Department of Conservation and Natural Resources, State Lands Division, Wildlife and Freshwater Fisheries Division, and Marine Resources Division; Alabama Department of Environmental Management; Geological Survey of Alabama; Alabama Forestry Commission; Alabama Forest Resources Council; Alabama Forestry Association; Weeks Bay National Estuarine Research Reserve; Grand Bay National Estuarine Research Reserve; Mobile County; Baldwin County; City of Orange Beach; City of Gulf Shores; City of Daphne; City of Mobile; Dauphin Island Sea Lab; Auburn University; University of South Alabama; The Nature Conservancy; Alabama Wildlife Federation; Longleaf Alliance; Coastal Land Trust; aquaculture interests (Point aux Pins Oysters); and, engineering firms (Thompson Engineering. Moffatt & Nichol, Jade Consulting, Vittor and Associates).

Table 6. Technical Advisory Committee participants grouped by area specialty.

SALTY (Intertidal, Oyster, SAV, Salt Marsh, Beach)	ORG	FRESH (Wetland, Streams, Rivers, Riparian Buffers)	ORG	UPLAND (Longleaf Pine, Pine Sauanna, Maritime)	ORG
SUBTEAM CATEGORIES					
Judy Haner	TNC	Jason Throneberry	TNC	Keith Tassin	TNC
GIS SUPPORT					
Sarah Johnston	WBNERR	Cynthia Feirman	MC	Lynn Ford	ADEM
SCIENTISTS					
Keuin Anson	ADCNR-MRD	Amy Hunter	ADCNR	John Gunter	AFC
Stephanie Smallegan	USA	Alex Beebe	USA	Scott Phipps	ADCNR-WBNERR
Bill Walton/Glenn/Scott	Auburn	Judy Stout	USA-ret	Mark Woodrey	GBNERR
LaDon Swann	MASGC	Dennis DeVries	Auburn		DISL
Dottie Byron	DISL	Steue Ashby	NGI		
RESOURCE MANAGERS					
Scott Bannon	ADCNR-MRD	Dave Armstrong	ADCNR-FWFD	Jo Lewis	ADCNR-SLD
Carl Ferraro	ADCNR-SLD	Keith Gauldin	ADCNR-FWFD	Roger Clay	ADCNR-SLD
Eric Brunden	ADCNR-WBNERR	Hank Burch	ADCNR-SLD	Doug Deaton	ADCNR-FW
Steue Jones	GSA	Jeff Powell	USFWS	John Hughes	USDA-NRCS
Dan Van Nostrand	NOAA	Lisa Huff	ADEM	Ken Leslie	AFC
Eric Sparks	MASGC	Mike Shelton	ADCNR-WBNERR	Dan Dumont	AFRC
Patric Harper	USFWS	Shannon Weaver	USDA-NRCS	Eric Spadjenske	USFWS
Sherry Zettles	USACE	Todd Boatman	UASCE	Art Dyas	CLT
LOCAL					
Phillip West	ОВ	Ashley Campbell	Daphne	Tina Sanchez	MC
Dan Bond	GS	Janic Terry	Mobile	Joey Nunley	BC
PROFESSIONAL					
Scott Johnson	Thompson	Tim Thibaut	Vittor	Tyler Sibley	AFA
Kari Servold	GMC	Drew Arnold	AWF		

The TAC met three times over the course of plan development. The first meeting focused on reviewing the results of the MBNEP Management Conference committees' goal-ranking exercise, refining the habitat restoration planning goals, and determining whether the preparation of a habitat change analysis between 2001/2002 and 2015/2016 was necessary prior to undertaking the habitat planning exercise.

While the project team continued to evaluate the best way to proceed relative to developing a habitat trend analysis, the second TAC meeting divided the group into three sections based on the ten habitat types delineated in the CCMP: Salty habitats (Intertidal, Oyster, SAV, Salt Marsh, Beach and Dunes); Freshwater habitats (Wetlands, Streams, Rivers, Riparian Buffers); and Upland habitats (Longleaf Pine, Pine Savanna, and Maritime Forests). Each group was provided with several different geospatial maps and asked to review previous planning efforts' prioritization criteria and make any changes deemed important.

In addition, the TAC was asked to develop a list of anthropogenic prioritization criteria to guide conservation and restoration-relative factors beyond habitat coverages and proximities.

The third TAC meeting focused on the development of target areas. During this meeting, an alternate process for classifying habitats was proposed which did not require ground-level habitat data, but instead used the broader Cowardin (Cowardin et al.,1979) and Anderson (Anderson et al., 1976) classifications based on the location of the habitat relative to topographic features, rather than the specific type of habitat present. This alternative classified habitats into four target types: Non-Restorable, Preservation/Conservation, Restoration, Reservation.

During discussion about target areas, the TAC decided to focus this phase of planning on the habitats within or draining to intertidal areas. This decision was made because these habitats are impacted differently and will require different stakeholder input and different conservation, restoration, and management strategies.

Data Gathering

During initial stages of the project, staff from The Nature Conservancy and the MBNEP worked to compile geospatial data from local, state and federal sources. A list of all data compiled and reviewed in the creation of this plan can be found in Appendix B. As a result of this effort, several data gaps were identified. Some desired data sets simply do not exist, while other data sets are outdated or need improvement.

Main data gaps included information related to:

- > Threatened and endangered species, including State species of concern.
- > High-resolution salinity regimes.
- > Landscape changes in habitat types over time.

Data updates or improvements are needed for:

- > Protected lands and acquisition boundaries.
- Construction control lines that do not extend to the edge of the two county boundaries.
- > Inshore and offshore sediment transport.
- > Bay oysters (only data on commercial or public reefs are available).
- > Two county habitat classification reconciliation.

Preliminary analysis was predicated on having a solid understanding of habitat losses from 2001-2015 across each habitat type. Unfortunately, due to different application of Cowardin (1979) and Anderson (1976) habitat classification codes by the different contractors classifying habitats in 2001/2002 and 2015/2016, a comparison of the datasets could not be completed without further reconciliation of habitat classification. For example, the classification PF04C – Palustrine Forested Needle-Leaved Evergreen Seasonally Flooded – was grouped into pine Savanna in 2001 and into freshwater wetlands in 2016. Both are correct, but they are not comparable, as this makes it seem that large expanses of pine Savanna were lost when, in fact, they were just classified differently.

Guiding Principles, Vision, Purpose, Goals, Objectives

Protecting and restoring Alabama's natural resources is necessary both for the benefit of the wildlife that depends on these healthy habitats and for the people who derive goods and services from these ecosystems. Successful conservation and restoration ensure that ecosystem functions and services will be available for future generations. This habitat restoration plan is guided by the following six key concepts obtained from the International Standards for the Practice of Ecological Restoration (https://www.ser.org/page/SERStandards/International-Standards-for-the-Practice-of-Ecological-Restoration.htm):

- > Ecological restoration practice is based on an appropriate local native reference ecosystem, taking environmental change into account.
- > Identifying the target ecosystem's key attributes is required prior to developing longer-term goals and shorter-term objectives.
- > The most reliable way to achieve recovery is to assist natural recovery processes, supplementing them to the extent natural recovery potential is impaired.
- > Restoration seeks "highest and best effort" progression towards full recovery.
- > Successful restoration draws on all relevant knowledge.
- > Early, genuine, and active engagement with all stakeholders underpins long-term restoration success.

Restoration Vision

Alabama's estuaries and coastal waters are healthy and optimize ecological functions while supporting human uses.

Restoration Purpose

Restore the chemical, biological, and physical integrity of coastal habitats to support an abundance of fish, shellfish, wildlife, and recreation in and on the water.

The following goals were vetted by the MBNEP Management Conference and refined by the TAC:

GOAL Restore, conserve, or enhance habitats in the headwaters of tidally influenced watershed or drainage basins. Protect uplands adjacent to coastal habitats to accommodate landward migration of marshes. Ensure adequate open space through habitat protection and restoration for storm protection/flood prevention.

Restore and protect habitats which play a key role in coastal Alabama's heritage and culture.

The measurable objectives are shown in Table 7 for each habitat type related to each goal:

Table 7. Objectives and habitat types listed for each goal

	OBJECTIVES AND HABITAT TYPES LISTED FOR EACH GOAL				
Goal	Objective(s)	Habitat Type			
1. Rest	ore, conserve, or enhance habitats in the headwaters of tidally influence	ed watersheds or drainage basins.			
1.1	Conserve, restore, and enhance 18,922 acres of pine savanna habitat, in the headwaters of tidally influenced watershed or drainage basins.	Pine Savanna			
1.2	Conserve, restore, and enhance 619,574 linear feet of streams, rivers, and 1,463 acres of riparian buffers of tidally influenced watersheds or drainage basins	Streams, Rivers, and Riparian Buffers			
1.3	Conserve, restore, and enhance 42,031 acres of freshwater wetlands in the headwaters of tidally influenced watershed or drainage basins.	Freshwater Wetlands			
1.4	Conserve, restore, and enhance 23,220 acres of longleaf pine habitat in headwater areas of tidally influenced watershed or drainage basins.	Longleaf Pine			
2. Pro	tect uplands adjacent to coastal habitats to accommodate landward	l migration of marshes			
2.1	Protect 3,361 acres of pine savanna habitat adjacent to coastal habitats to accommodate landward migration due to sea level rise.	Pine Savanna			
	ure adequate open space through habitat protection and restoration d prevention.	for storm protection/			
3.1	Stabilize, conserve, and enhance 1,267 acres of beaches, dunes, and shorelines, where appropriate.	Beaches, Dunes, and Shorelines			
3.2	Conserve, restore, and enhance 10,093 acres of nearshore and intertidal marshes and flats.	Intertidal Marshes and Flats			
3.3	Conserve, restore, and enhance 1,995 acres of maritime forest.	Maritime Forest			
4. Res	tore and protect habitats which play a key role in coastal Alabama's	heritage and culture.			
4.1	Conserve, restore, and enhance 47,084 acres of longleaf pine habitat.	Longleaf Pine			
4.2	Develop a Marine Habitat Restoration Plan.	Submerged Aquatic Vegetation, Subtidal Habitats, Oyster Reefs			

Methodology for Development of Habitat Plan Objectives

As part of the 2009 Habitat Tool development, selection criteria for each habitat type was developed to distinguish priority habitats from the overall universe of each habitat type. Participants were provided with a set of standardized metrics that could be analyzed for locating the most critical habitat patches for protection for each habitat type. Selection criteria included:

- > Size of habitat
- > Core area
- > Perimeter-to-area ratio
- > Proximity to other habitat patches
- > Nearest neighboring habitat patch
- > Distance to areas already protected
- > Coincidence with ecologically important areas
- > Threatened and endangered species
- > Potential migration area

Each habitat type (grouped into marine, freshwater, and upland) was evaluated using these criteria with a resulting landscape scale map of priority habitat patches to be used in prioritizing areas for restoration.

A key part of the methodology for creating the **2019 Habitat Conservation and Restoration Plan for Coastal Alabama** was conducting a review of these habitat prioritization criteria developed in 2009 and making any modifications necessary, based on new knowledge from completed watershed plans or work in the field. Table 8 provides a comparison between the 2009 criteria and any recommended modifications based on 2018 data.

In addition to evaluating and enhancing the prioritization criteria of 2009, the TAC developed a list of other criteria for consideration. This activity stemmed from agreement among TAC members that identifying priority habitats should consider the level of protections currently available to those habitats due to regulatory action at the local level.

Other datasets used in the habitat analysis included:

- > U.S. Army Corps of Engineers Sea Level Rise and Storm Surge Inundation Modeling scenarios,
- > South Alabama Stormwater and Coastal Area Resource Protection Regulatory coverages.
- > NRCS Soil Data, and
- > EPA Healthy Watersheds Assessment (http://www.mobilebaynep.com/images/uploads/library/ALMB_HW_Report_Final_Assessment.pdf).

To delineate priority habitat patches for habitat restoration and conservation, geospatial analyses using the habitat prioritization criteria defined above were performed for the seven habitat types in the plan: pine Savanna; rivers, streams, and their riparian buffers; freshwater wetlands; beaches, dunes, and shorelines; intertidal marshes and flats; maritime forests; and longleaf pine. The analysis was conducted using 2016 habitat maps (Radiance Technologies, revised by Moffat & Nichol) as the basis for assessing priority habitat patches for each of the four goals developed for the plan and for each of the habitats related to each goal. Using the prioritization criteria developed by the TAC and other data sets, a geospatial analysis was conducted for the habitats related to the goal to determine measurable objectives for the plan. The following geospatial analyses represented in Figures 2 through 8 (from the habitat types presented in Table 8, at right) were performed to determine priority habitat patches related to each goal:

Table 8. Criteria comparison by habitat type

Habitat Type	2009	2018	
Streams, rivers, riparian buffers (conservation) (See Figure 4)	Buffers (30m long) that contain 500 meter stretches of intact habitat and 50% or more overlap with prioritized watersheds	No change	
Streams, rivers, riparian buffers (restoration) (See Figure 5)	Buffers (30m long) that contain 500 meter stretches of intact or impaired habitat and 50% or more overlap with prioritized watersheds	No change	
Freshwater Wetlands (See Figures 6, 7)	All riverine freshwater wetlands from 2.5 to 25 acres in area and greater than 1,000 meters from medium-to-high intensity developed areas	Include any acreage that is not already protected/restored	
Longleaf Pine (See Figures 8, 13)	Patches 1 mile or less from protected areas of 147 feet or less from a like habitat	Within or adjacent to protected areas (one-mile buffer); greater than or equal to 500-acre patch, outside of protected area; contain soils suitable for gopher tortoise habitat; adjacent to other priority habitats	
Pine Savanna (See Figures 3,9)	Patches 500 acres or more in size and outside protected areas	No change	
Maritime Forest (See Figure 12)	Patches adjacent to beach and dune, ad- jacent to marsh, or one-fourth mile or less from a protected area and 10 acres or larger	Areas greater or equal to two acres; forest that are less than or equal to 100 feet from beach/dune habitat	
Intertidal Marsh and Flats (hazard protection) (See Figure 11)	Patches 30 meters or less from developed areas and 500 feet or less from the 100- year flood zone	For restoration, incorporate	
Intertidal Marsh and Flats (natural resource protection) (See Figure 11)	Patches containing species of concern (Alabama beach mouse, sea turtles, submerged vegetation, and oysters) and that are 500 feet or less from a protected area	areas susceptible to sea level rise and potential beneficial use investment	
Beaches and Dunes (See Figure 10)	Patches containing Alabama beach mouse habitat or sea turtle nesting sites that overlap 50% or less with construction control lines that are 1 mile or less from maritime forest	Areas with 10ft Coastal contour line; adjacent to natural vegetation/ability for beach to migrate	
Submerged Aquatic Vegetation	Patches of brackish and fresh SAV 1 mile or less from boat ramps and marinas and 1 mile or more from dredged locations and 2 miles or less from protected areas	Recommend development of marine restoration plan	
Oyster Reefs	Very little data on oyster habitat is available; therefore, all oyster habitats should be considered priority	Recommend development of marine restoration plan	





Priority Habitat: PINE SAVANNA

Goal 1:

Restore, conserve, or enhance habitats in the headwaters of tidally influenced watersheds or drainage basins

1.1 Pine Savanna for conservation and restoration in Headwaters: With a total coverage of 386,792 acres of pine savanna habitat in Alabama's two coastal counties, priority selection criteria included all pine savanna habitat that:

- > Intersects headwater (first or second order) streams;
- > Is 500 acres in area or larger;
- > Lies outside of protected areas; and
- > Lies within tidally influenced watersheds.

A total of 18,922 acres of pine savanna habitat met all four of the selection criteria and were, therefore, designated as priority pine savanna habitat (blue). Of all projects recommended in WMPs for intertidal watersheds to conserve, restore, or protect pine savanna habitat, 82 projects were recommended in which points, lines, or polygons used to represent project sites intersected priority habitat patches. Project types identified in priority pine savanna habitat include:

- > 80 habitat protection projects (Bayou La Batre, Fowl River, West Fowl River)
- > Two habitat restoration projects (Fowl River)

Goal 2:

Protect uplands adjacent to coastal habitats to accommodate landward migration of marshes in response to sea level rise.

2.1 Pine Savanna Protection for Landward Migration: Goal 2 prioritizes pine savanna habitat to provide opportunities for landward migration of critical coastal edge habitats in response to rising sea level. With a total coverage of 386,792 acres of pine savanna habitat in Alabama's two coastal counties, shown in green, the priority selection criteria include all pine savanna habitat that:

- > Lies within undeveloped areas
- > Intersect upland marsh habitat;
- > Lies outside protected areas; and
- > Lies within 500 feet of sea level rise inundation areas.

Of total coastal pine savanna habitat, 3,361 acres (indicated in blue) met both criteria for selection as priority habitat for migration. WMP-recommended projects of various types fell within or intersected with priority patches of pine savanna habitat for migration. Recommended WMP projects of various types that fell within or intersected with patches of priority pine savanna habitat include:

- > 20 habitat protection projects (Graham Bayou, West Fowl River, Upper Dog River, Halls Mill Creek, Lower Dog River)
- > Three habitat restoration projects (Lower Fish River, Upper Dog River, Halls Mill Creek)
- > Four other projects (West Fowl River, Magnolia River, Lower Fish River, Upper Dog River)

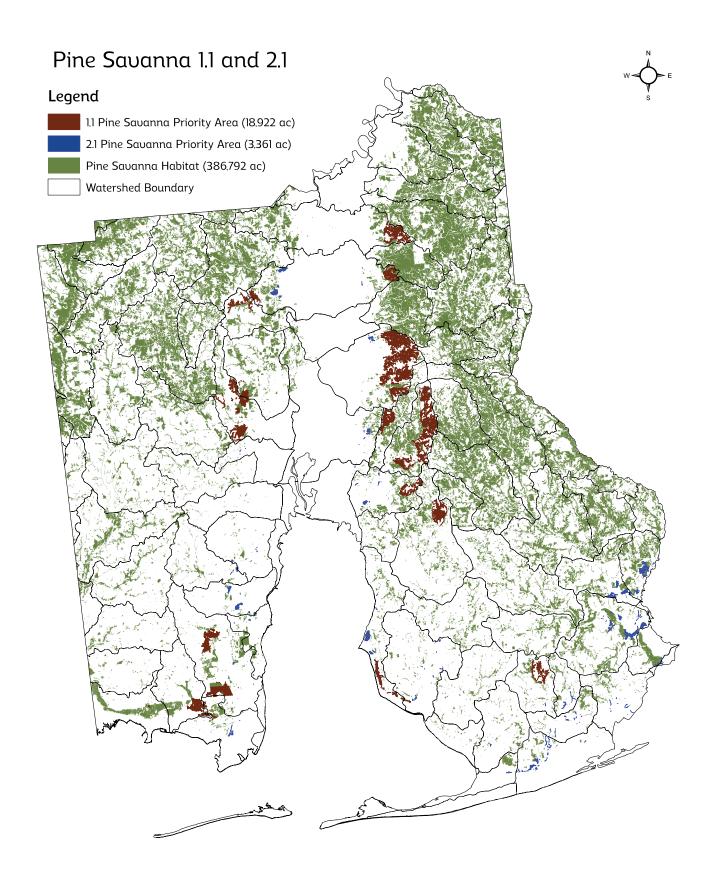


Figure 2. Map shows all pine savanna habitat (green) and identified priority areas for goal 1 (brown) and goal 2 (blue).





Priority Habitat: STREAMS AND RIVERS

Goal 1:

Restore, conserve, or enhance habitats in the headwaters of tidally influenced watersheds or drainage basins

1.2 Streams, Rivers, and Riparian Buffers Conservation in Headwaters: There are almost 8 million total linear feet of headwater *rivers and streams* and 18,959 acres of *associated riparian buffers* (of 50-foot breadth on both sides of the stream) in Alabama's two coastal counties (indicated in blue). Priority selection criteria *for conservation* includes all headwater (first or second order) rivers, streams, and buffers that:

- > Lie outside of protected areas;
- > Lie within high-health catchment basins (derived from the 2014 Alabama and Mobile Bay Healthy Watersheds Assessment as catchments with watershed health rating of 70% or greater);
- > Are 500 linear feet in length or longer;
- > Lie within tidally influenced watersheds; and
- > Exclude impaired 303(d) list waters.

A total of 567,970 linear feet of headwater streams and 1,340 acres of associated riparian buffer met all five criteria for priority habitat designation for conservation (brown). Recommended WMP project types identified are:

- > 44 habitat protection projects (West Fowl River, Bayou La Batre, Halls Mill Creek)
- > Two water quality projects (Fowl River)

1.2a. Streams, Rivers, and Riparian Buffers Restoration in Headwaters: Also, under Goal 1 and Objective 1.2, priority selection criteria were developed *for restoration*, including all headwater rivers, streams and buffers that:

- > Lie outside of protected areas
- > Lie within low-health catchment basins (derived from the 2014 Alabama and Mobile Bay Healthy Watersheds Assessment as catchments with watershed health rating of 30% or greater);
- > Are 500 linear feet in length or longer;
- > Lie within tidally influenced watersheds; and
- > Intersect impaired 303(d) list waters.

From the same distribution of coastal headwater streams, rivers, and buffers (indicated in green), a total of 51,601 linear feet of headwater streams and rivers and 123 acres of associated riparian buffer (indicated in blue) met all five criteria for designation as priority headwater streams, rivers, and riparian buffer habitat for restoration. The number of projects of each type and watersheds in which they fall are listed below:

- > One habitat protection project (Halls Mill Creek)
- > Two habitat restoration projects (D'Olive, Bon Secour River)
- > Three water quality projects (Bon Secour, Three Mile Creek)
- > Three other projects (Middle Fish River, Halls Mill Creek)

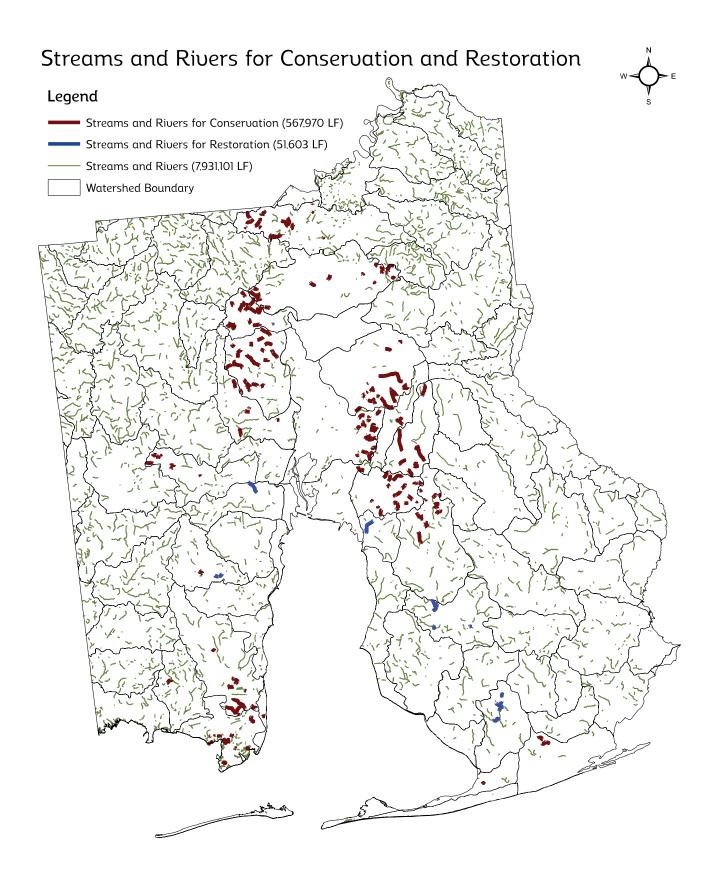


Figure 3. Map shows all headwater streams/rivers (green) and identified priority areas for conservation (brown) and for restoration (blue).





Priority Habitat: FRESHWATER WETLANDS

Goal 1:

Restore, conserve, or enhance habitats in the headwaters of tidally influenced watersheds or drainage basins

1.3 Freshwater Wetlands Conservation in Headwaters: There are 317,834 total acres of freshwater wetlands across Alabama's two coastal counties (indicated in blue). Priority selection criteria *for conservation* include all freshwater wetlands that:

- > Intersect headwater streams:
- > Lie outside of protected areas;
- > Lie within high-health catchment basins (Healthy Watersheds Assessment watershed health ratings at least 70%); and
- > Lie within tidally influenced watersheds.

Of total coastal freshwater wetland coverage, 39.599 acres (indicated in brown) met all four criteria for priority designation for conservation. WMP recommended projects by type fell within or intersected with patches of priority freshwater wetlands designated for conservation.

> 39 habitat protection projects (Lower Fish River, Bayou La Batre, Halls Mill Creek, and West Fowl River)

1.3a. Freshwater Wetlands for Restoration in Headwaters: Priority selection criteria for restoration include all freshwater wetlands that:

- > Intersect headwater streams;
- > Lie outside of protected areas;
- > Lie within low-health catchment basins. (Healthy Watersheds Assessment watershed health ratings of 30% or greater);
- > Fall within jurisdictional boundaries of municipalities that have current wetland/stream buffer regulations; and
- > Lie within tidally influence watersheds.

With green areas indicating total coastal coverage of freshwater wetlands, areas indicated in blue show patches meeting all five criteria for priority designation and encompassing a total of 2,432 acres. WMP-recommended projects of various types fell within or intersected with patches of priority freshwater wetlands designated for restoration. The number of projects of each type and watersheds in which they fall are listed below:

- > 48 habitat protection projects (Upper Dog River, Halls Mill Creek, Oyster Bay, Lower Dog River, West Fowl River, and Bayou La Batre)
- > Eight habitat restoration projects (Bon Secour River, Fowl River, Sandy Creek, Halls Mill Creek & Upper Dog River)
- > Two water quality projects (Bon Secour River)
- > 19 other projects (Halls Mill Creek, Three Mile Creek)

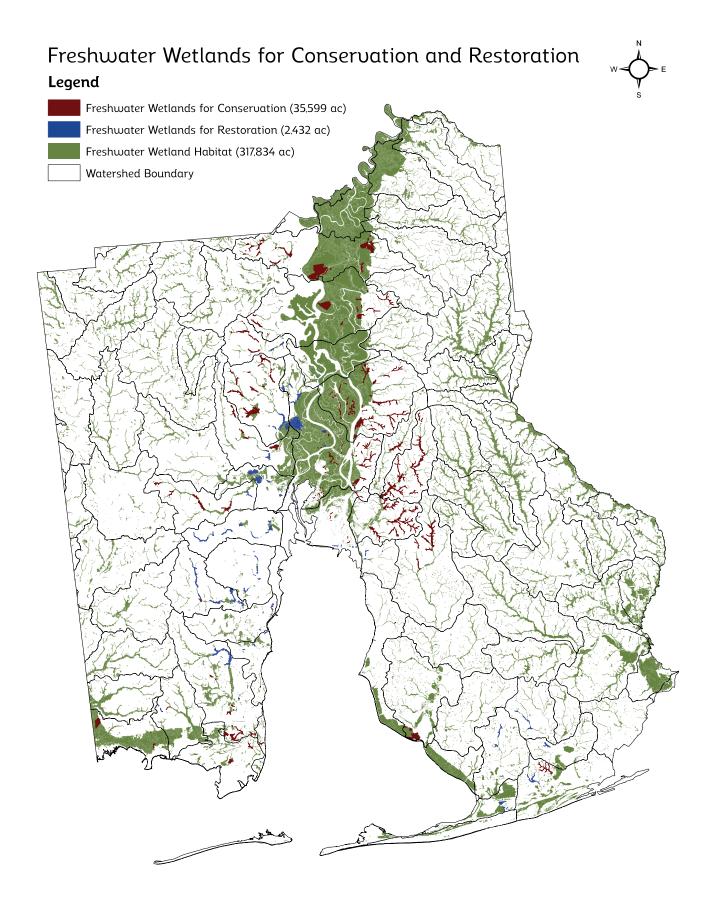
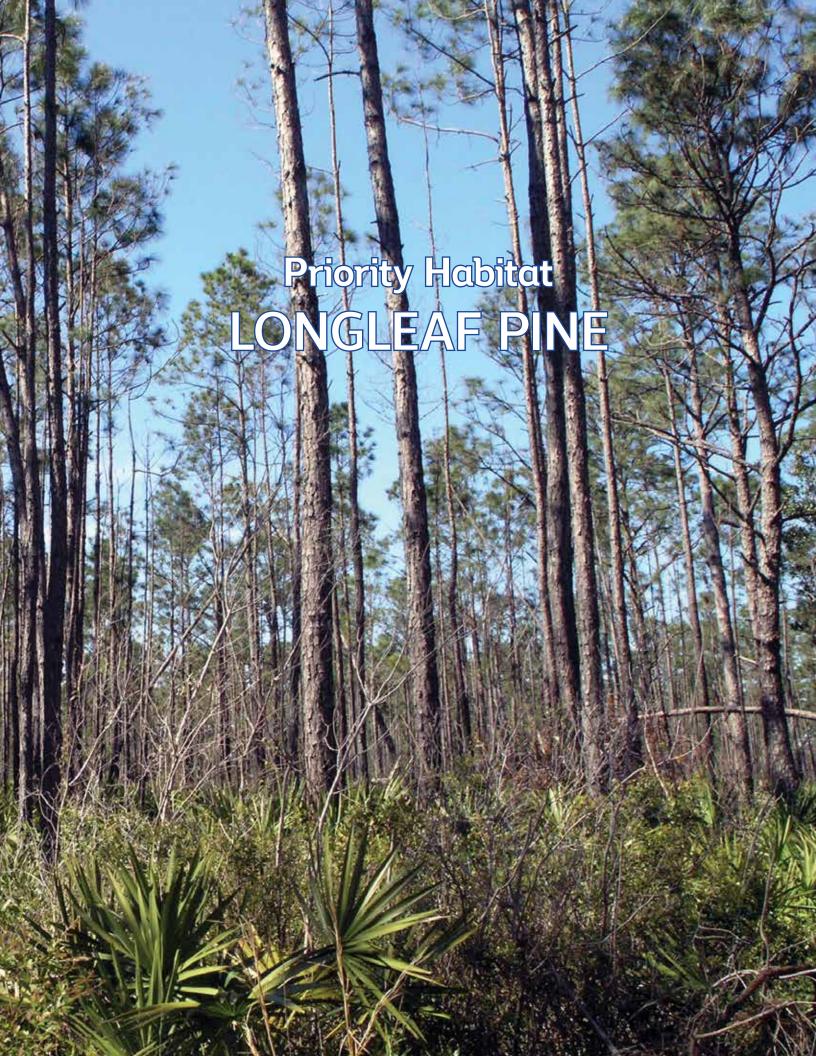


Figure 4. Map shows all freshwater wetland habitat (green) and identified areas for conservation (brown) and for restoration (blue).





Priority Habitat: LONGLEAF PINE

Goal 1:

Restore, conserve, or enhance habitats in the headwaters of tidally influenced watersheds or drainage basins

1.4 Longleaf Pine Conservation in Headwaters: Total coverage of longleaf pine habitat in the two coastal counties, is indicated in green and accounts for 575,220 acres. Priority designation is attributed to headwater longleaf pine habitat that:

- > Intersect headwater streams;
- > Lie within undeveloped areas;
- Contain soils that are moderately and highly suitable for gopher tortoise habitat;
- > Lie outside of protected areas; and
- > Lie within tidally influenced watersheds.

With green areas indicating total coastal coverage of longleaf pine habitat, areas indicated in brown show patches meeting all five criteria for priority designation and encompassing a total of 23,220 acres. Recommended WMP projects of various types that fell within or intersected with patches of priority longleaf habitat include

- > 17 habitat protection projects (Halls Mill Creek)
- > Three habitat restoration projects (Upper Fish River, Middle Fish River)
- > Eight other projects (Upper Fish River, Middle Fish River)

Goal 4:

Restore and protect habitats which play a key role in coastal Alabama's heritage and culture.

4.1 Longleaf Pine: Total coverage of longleaf pine habitat in the State's two coastal counties, is indicated in green and accounts for 575,220 acres. Priority designation is attributed to longleaf pine habitat that:

- > Lies within undeveloped areas:
- > Lies within areas containing soils that are highly or moderately suitable for gopher tortoise habitats; and
- > Lie outside of and at least 0.5 miles from protected areas.

Of the total acreage of longleaf pine forest in the two coastal counties, less than eight percent, or 47,084 acres (indicated in blue) met all three selection criteria for designation as priority habitat. Recommended WMP projects by type that fell within or intersected with priority patches of longleaf pine habitat are listed below.

- > 34 habitat protection projects (Bayou La Batre, Lower Fish River)
- Six habitat restoration projects (Upper Fish River, Sandy Creek, Lower Fish River, Middle Fish River, Magnolia River)
- > Ten other projects (Upper Fish River, Middle Fish River, Magnolia River, Lower Fish River)

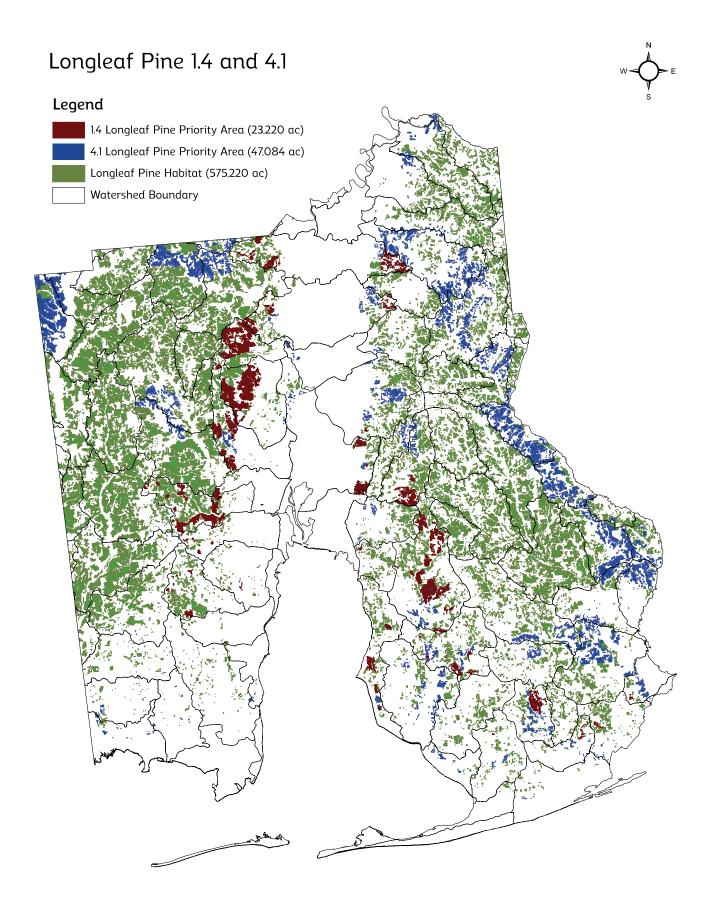


Figure 5. Map shows all longleaf pine habitat (green) and identified priority areas for goal 1 (brown) and goal 2 (blue).





Priority Habitat: BEACHES, DUNES AND SHORELINES

Goal 3:

Ensure adequate open space through habitat protection and restoration for storm protection and flood prevention.

3.1 Beaches, dunes, and shorelines for storm protection and flood prevention: Beaches, dunes and shoreline habitat account for 2,074 (indicated in green) acres in Alabama's two coastal counties. Priority designation is attributed to beaches, dunes, and shorelines that:

- > Lie within areas under current one-meter sea level rise inundation scenarios;
- > Lie outside of protected areas; and
- > Within the Alabama Department of Environmental Management's (ADEM) "Coastal Area".*

Of total beach, dune and shoreline habitat, 1,267 acres (indicated in blue), met both criteria for selection as priority habitat for storm protection and flood prevention. WMP-recommended projects of various types fell within or intersected with priority patches of beach, dune and shoreline habitat. The number of projects of each type and watershed in which they fell are listed below:

One habitat protection project (Graham Bayou)

*ADEM Admin. Code r. 335-8-1-.02(k)

(k) "Coastal Area" means the waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder) lying seaward of the continuous 10-foot contour (as defined below) extending seaward to the outer limit of the United States territorial sea. The inland boundaries of the coastal area are described as follows: begin at the southernmost point of the Mississippi-Alabama state line where the land surface elevation reaches 10 feet above mean sea level and continue in a general easterly direction along the 10-foot contour to the proximity of Mobile Bay; continue in a northerly direction on the 10-foot contour along the western shore of Mobile Bay and the Mobile River delta to the north line of Mobile County; thence southeastward along the north line of Mobile County to the intersection with the Baldwin County line in the Mobile River; thence along the west and north lines of Baldwin County in the Mobile and Alabama Rivers to the intersection of the westernmost point of Baldwin County where the land surface altitude reaches 10 feet above mean sea level; thence along the 10-foot contour in a southwesterly and southern direction along the Alabama River, the Mobile River delta and the east shore of Mobile Bay to the proximity of Bon Secour; thence continue along the 10-foot contour in an easterly and northeasterly direction to the Alabama-Florida state line.

For our purposes, the "Coastal Area" was included to define upland and coastal habitat types. ADEM describes the "Coastal Areas" as areas between sea-level and the continuous 10-foot contour boundary described. This boundary represents a line that is defined as being at a continuous 10-foot elevation level. However, it is possible that higher elevation levels can exist within this boundary due to human-induced or natural reasons, such as lands having been filled or the natural accretion of dunes.

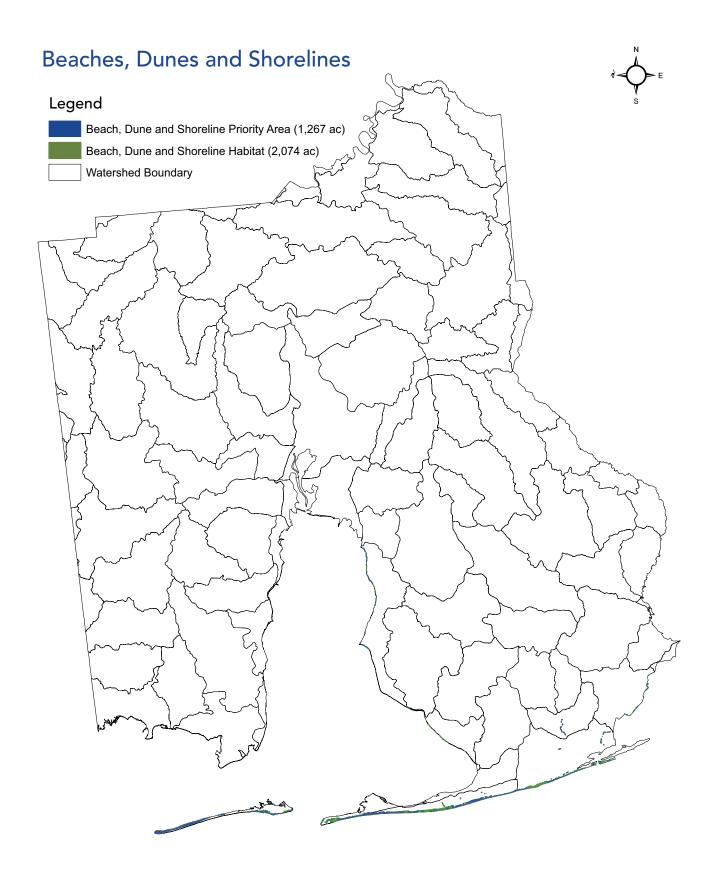
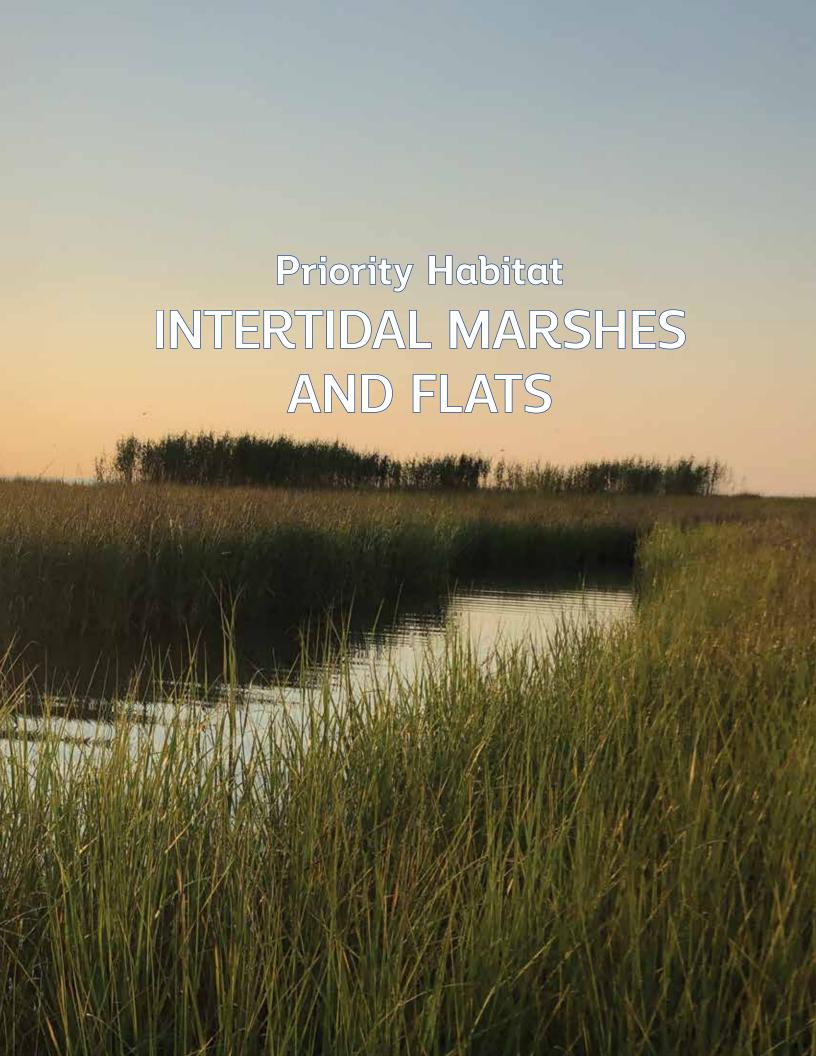


Figure 6. Map shows all beach, dune and shoreline habitat (green) and identified priority areas (blue) for storm protection/flood prevention.





Priority Habitat: INTERTIDAL MARSHES AND FLATS

3.2 Intertidal marshes and flats for storm protection and flood prevention:

Intertidal marshes and flats account for 21,511 acres within the two coastal counties. Priority designation is attributed to intertidal marshes and flats that:

- > Lie within areas under current one-meter sea level rise inundation scenarios:
- > Lie outside of protected areas; and
- > Within the Alabama Department of Environmental Management's (ADEM) "Coastal Area".

Approximately half of the total coverage of intertidal marshes and flats, 10.093 acres (indicated in blue) met both criteria for designation as priority habitat. WMP-recommended projects of various types fell within or intersected with priority patches of intertidal marshes and flats. The number of projects of each type and watersheds in which they fall are listed below:

- > 285 habitat protection projects (Magnolia River, Lower Fish River, Halls Mill Creek, Lower Dog River, Upper Dog River, Oyster Bay, Skunk Bayou, West Fowl River, Graham Bayou, Bon Secour River, and Bayou La Batre)
- > Seven habitat restoration Projects (Fowl River, Oyster Bay, Lower Fish River)
- > Six other projects (Lower Fish River, Magnolia River, West Fowl River, and Lower Dog River)

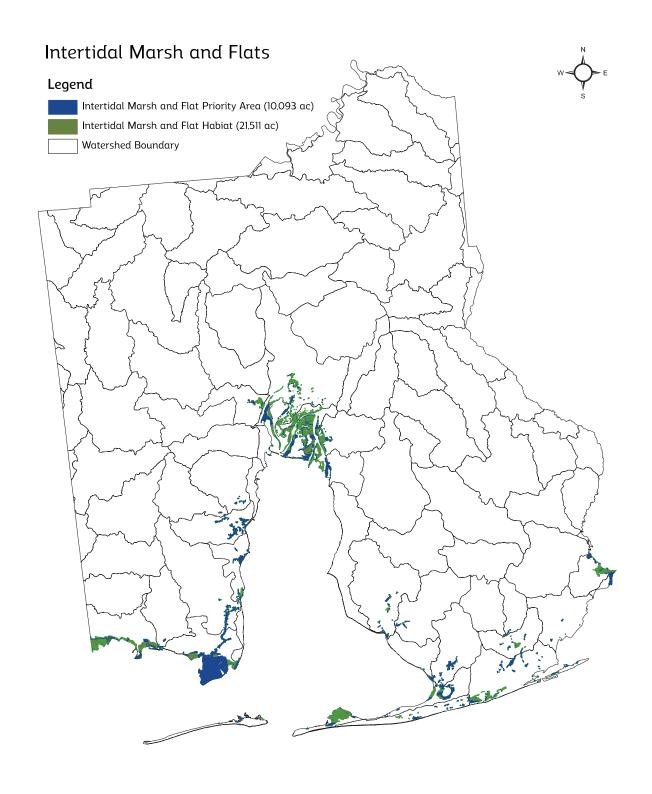


Figure 7. Map shows all intertidal marshes and flats habitat (green) and identified priority areas (blue) for storm protection/flood prevention.





Priority Habitat: MARITIME FOREST

3.3 Maritime Forest for storm protection and flood prevention: Maritime forests account for 47,277 acres within the two coastal counties. The selection criteria for priority habitat includes maritime forest that:

- > Lie outside of protected areas;
- > Within 100 feet of shoreline, beach or dune habitat; and
- > Within the Alabama Department of Environmental Management's (ADEM) "Coastal Area".

Most extant maritime forest habitat, 1,995 acres of total coverage, occurs outside of protected areas and within 100 feet of shoreline, beach, or dune habitat, and are, therefore, considered priority habitat. With coastal WMPs yet to be developed for the Dauphin Island and Perdido Pass/Gulf Frontal watersheds, only one WMP-recommended projects by type were identified.

> One habitat protection project (Lower Fish River)

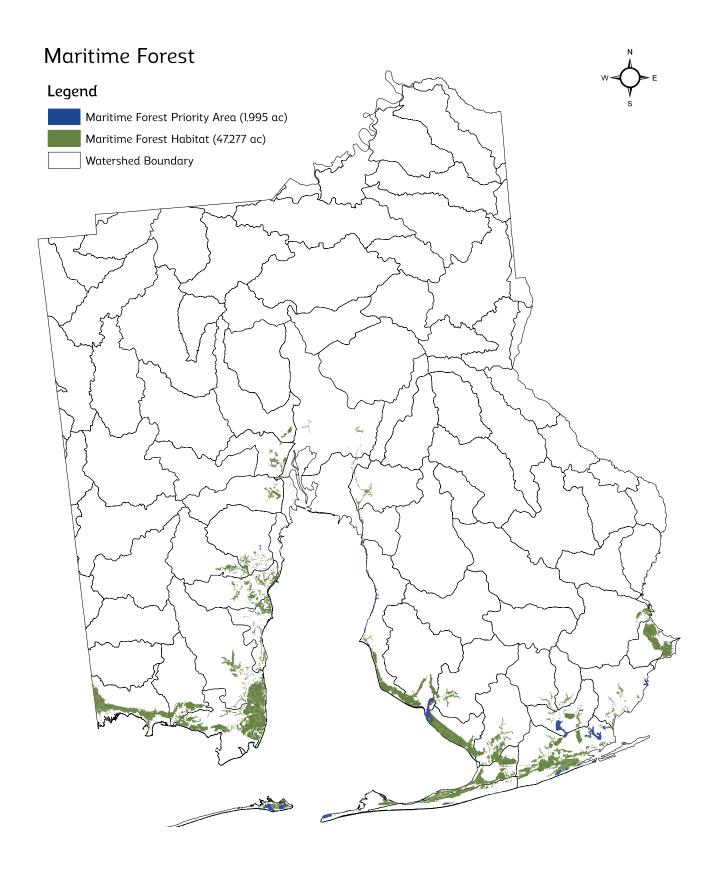


Figure 8. Map shows all maritime forest habitat (green) and identified priority areas (blue) for storm protection/flood prevention.



Implementing the Plan

Overview of Conservation Methods

Habitat conservation is driven by the acquisition or protection of land. There are many methods for conserving land and, in most cases, the property owner is incentivized to conserve the property for its habitat value. Often incentives are financial and include tax benefits. Land is frequently purchased for inclusion in a program that will protect and manage the property for long-term public benefit, such as Alabama's Forever Wild Land Trust program. In cases with landowners preferring to maintain control of their property, a conservation easement can be executed to maintain the landowner's rights, while restricting development detrimental to priority habitat ecosystem service provision.

Guiding Principles for Conservation Activities

Overall guiding principles have been developed to help focus conservation efforts, including:

- > Prioritizing those parcels most vulnerable to environmental pressures.
- > Prioritizing those parcels that meet the greatest ecological need.
- > Leveraging public and private funds.
- > Coordinating activities among public and private entities to accomplish objectives.
- > Seizing opportunities as they arise.

Properties identified for habitat conservation and restoration will require long-term site protection measures to ensure their conservation into perpetuity. Efforts for long-term protection of restoration sites will require cooperation between landowners, governments, and non-profit organizations committed to the protection of these resources. Among the many ways to protect conservation and restoration areas are land acquisition, conservation easements, and other land-use controls. Several of these techniques are defined below:

Land Donation - Land that is donated outright to a land trust or agency for conservation purposes. In Alabama, State agencies, counties or municipalities, or non-governmental organizations, like The Nature Conservancy, Forever Wild Land Trust, or Alabama Land Trust, may serve as recipient entities. Tax benefits may be available to donors.

Fee Simple Acquisition - The landowner sells all his rights, title, and interest in the property to a land trust or agency at fair market value. The land trust then owns and manages the land. Incentives may include potential income and estate tax benefits.

Discount Acquisition - In a discount acquisition, the buyer pays the difference between the amount of unpaid principal of a mortgage and the price paid for the mortgage in the secondary market. This method provides the buyer a discount on the property and provides debt relief as an incentive to the seller.

Bargain Sale - A bargain sale is where the land is sold at less than its fair market value. It combines the income-producing benefit of a sale with the tax-reducing benefit of a donation. It can also avoid the expenses of a sale on the open market. The difference between the land's appraised fair market value and its sale price is considered a charitable donation to the land trust and can be claimed as an income tax deduction.

Conservation Easements - A conservation easement is a legal agreement between a landowner and a conservation organization or government agency permanently limiting a property's uses in order to protect the property's conservation values. Landowners grant conservation easements to protect their land from inappropriate development while retaining the rights of private ownership. The conservation easement does not necessarily exclude all development but restricts any development that would be harmful to the public benefits the easement seeks to protect.

With a conservation easement, the landowner continues to own the property and may sell it, live on it, use it, or leave it to heirs, but the agreed-upon restrictions remain with the land forever. Granting a conservation easement does not mean that landowners must grant public access to their property.

Other conservation options can be found in the land trust handbook, *Land Conservation in Coastal Alabama – Options for Landowners*, produced by the Partnership for Gulf Coast Land Conservation (PGCLC, 2018).

Defining Restoration in Broad Terms: Restoration Project Principles

Habitat restoration is, by its very nature, a joint venture between scientists and practitioners. As shown in Table 9, Restore America's Estuaries and the Estuarine Research Federation developed a set of principles to guide restoration activities in coastal estuaries (RAE, 2000). A concentrated, year-long process involving scientists and restoration professionals across the nation produced a gold standard for estuarine habitat restoration and guiding principles (RAE, 2000). These principles are intended as a guide for all types of restoration activities, including large-scale and community-based restoration projects, and have been adapted to apply to all restoration, not just estuarine.

Table 9. Principles used to guide restoration activities in coastal estuaries.

PLANNING CONTEXT	Preservation of existing habitat is critical to the success of estuarine restoration.
	Ecosystems can be restored only by using a long-term stewardship approach and by developing the constituencies, policies, and funding needed to support this.
	The size, scale, and amount of restoration activity must increase substantially to have a significant effect on overall estuarine function and health.
	Restoration plans should be developed at the watershed level to set a broad vision, articulate clear goals, and integrate an ecosystem perspective.
	Restoration plans should be developed through open regional processes that incorporate all key stakeholders and the best scientific thinking available.
DESIGN	Project goals should be clearly stated, site specific, measurable, and long-term – in many cases, greater than 20 years.
	Success criteria for projects needs to include both functional and structural elements and be linked to suitable, local reference habitats.
	Site plans need to address off-site considerations, such as potential flooding and saltwater intrusion, to ensure projects do not have negative impacts on nearby people and property.
	Scientifically-based monitoring is essential to the improvement of restoration techniques and overall estuarine restoration.
IMPLEMENTATION	Ecological engineering practices should be applied in implementing restoration projects, using all available ecological knowledge and maximizing the use of natural processes to achieve goals.
	Adaptive management should be employed at as many restored sites as possible, so they continue to move toward desired endpoints and self-sustainability.
	Long-term site protection is essential to effective habitat restoration.
	Public access to restoration sites should be encouraged wherever appropriate but designed to minimize impacts on the ecological functioning of the site.

Monitoring and Adaptive Management

The process of using monitoring information to adjust or correct management actions to achieve desired outcomes is commonly called adaptive management. Monitoring programs are designed to provide accountability to a wide range of stakeholders, including agencies, partners, communities, and land and water resource managers. Incorporating an adaptive management strategy into restoration actions is critical for ensuring long-term success.

The MBNEP Science Advisory Committee published a Monitoring Framework in 2015 with a vision of establishing comprehensive restoration monitoring that enables quantitative assessment of restoration success and assessment of overall ecosystem function. The goals of this framework are to answer three questions:

- 1. What, if any, changes are there in the water quality, sedimentation, flow, biology, and habitat quantity and quality as a result of restoration efforts and management plan implementation?
- 2. How are potential ecosystem health indicators related to stressors and ecosystem functions/services?
- 3. What is the long-term status of the biological condition in the Mobile Bay watershed?

To achieve these goals the framework recommends:

- 1. The adoption of this framework in every restoration request for proposals (RFP) and restoration contracts for Mobile and Baldwin counties;
- 2. Long-term monitoring based on this framework in every watershed management plan for all watersheds in Mobile and Baldwin counties;
- 3. Data synthesis to develop tools and products for assessment of restoration success, adaptive resource management, and baseline establishment; and
- 4. Active engagement with county and municipal planners, resource managers, agencies working within the watershed, and other stakeholders to encourage implementation of monitoring and broad application of tools developed from data synthesis.

Watershed Plan Project Inventory

The suite of projects identified in WMPs spans six project types: habitat protection, habitat restoration, infrastructure, planning, recreational facilities, and water quality. Table 10 provides a summary of the number of projects falling within priority patch areas identified in each of the eight completed WMPs as they relate to each project type. Currently, the projects that have been identified in the eight completed watershed management plans have been compiled and added to CART to showcase needs in each specific watershed. The list of projects will expand and evolve as more WMPs are completed over the next few years. Lack of a WMP limits having a full suite of projects to comprehensively address watershed issues. However, some obvious "no regret" projects have been identified in areas without a formal WMP yet in place, such as the Deer River restoration being planned prior to development of the Western Shore Complex WMP. For a list of all WMP projects, see Appendix C.

Table 10. Number of projects identified by project type within each completed watershed management plan.

Watershed	Project Type					
Water sneu	Habitat Protection	Habitat Restoration	Other			
Bayou La Batre	182	0	0			
Bon Secour, Skunk Bayou, Oyster Bay	10	5	4			
D'Oliue	0	1	0			
Fowl River	0	8	2			
Dog Riuer Complex	129	5	6			
Weeks Bay	32	7	26			
Three Mile Creek	0	1	20			
West Fowl River	201	0	2			
Wolf Bay	5	5	0			
Total	559	32	60			

Other Projects Funded through the Alabama RESTORE

To date, the State of Alabama and Gulf Coast Recovery Council have committed funding to projects totaling almost \$771 million with a range of benefits from public access, habitats and wildlife, economies, transportation, etc. Each funding source has specific guidelines for the types of projects that can be implemented. Table 11 shows the number of projects funded to date by spill-related funding sources relative to the CCMP-identified or other values and how projects are spread across funding sources, given their respective constraints.

Table 11. Number of projects funded to date by spill related funded sources.

SUMMARY OF PROJECTS FUNDED THROUGH OIL SPILL RELATED SOURCES												
CCMP Value Project Type Addresses						Other						
Source	Access	Beaches/Shorelines	Fish/Wildlife	Water Quality	Heritage/Culture	Economic	Transportation	Education	Other			
NRDA	6	6	13	2				1				
RESTORE Bucket 1	3			2	3	4	2	1	1			
RESTORE Bucket 2		5	8	1								
RESTORE Bucket 3	2	1	1	14			2	3	2			

The Coastal Alabama Restoration Tool (CART)

The Coastal Alabama Restoration Tool (CART) has been established as part of TNC's Freshwater Network (https://maps.freshwaternetwork.org/alabama/) to provide a platform for viewing the data layers used to develop priority habitat targets as well as projects identified in all published watershed plans. In addition, it includes data on all projects entered into the Alabama RESTORE project portal. CART provides the user with the ability to visualize proposed projects in the context of priority areas to ensure more strategic and targeted implementation of restoration activities. In addition, it allows the user to compare several attributes across and within a watershed, as shown in Figure 9. Several data layers on the CART site can be used to prioritize projects based upon the goals of a specific funding source. For example, impaired streams are a priority of the ADEM

319 program, and these streams can be highlighted in CART to identify potential project areas. Further, if the highlighted impaired stream is part of a watershed that has a WMP in place, projects identified in that WMP can be overlaid to select specific projects for implementation.

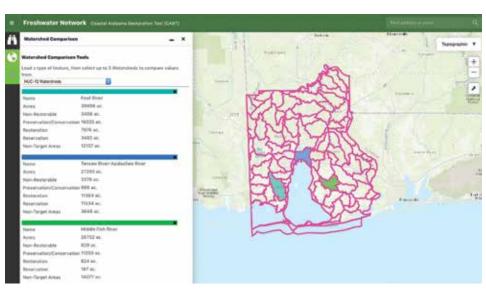


Figure 9. Watershed comparison in CART

Regional Restoration Priorities

Coastal Alabama is poised geographically, structurally, and socially to support regional restoration priorities. Geographically, Alabama's coastal counties are sandwiched between the Escatawpa Watershed to the west and the Perdido Watershed to the east, both of which are in relatively pristine condition. Socially, the MBNEP has worked to bring all levels of government together with local communities, businesses, non-profits, and others to showcase how partnerships can effect change of how our environmental resources are managed and protected long-term. Opportunities to collaborate across geopolitical boundaries on issues and challenges and to strengthen partnerships comes into play regionally with federal agencies (USFWS, NOAA, EPA) and two organizations: The Gulf of Mexico Alliance and the Gulf RESTORE Council.

Gulf of Mexico Alliance (GOMA)

The Gulf of Mexico Alliance (GOMA) serves as a platform for partnerships and regional collaboration opportunities across the five Gulf of Mexico states: Alabama, Florida, Louisiana, Mississippi, and Texas. The goal of the GOMA is to significantly increase regional collaboration to enhance the ecological and economic health of the Gulf of Mexico. Priority issues for this group include water quality, habitat conservation and restoration, ecosystem integration and assessment, nutrients and nutrient impacts, coastal community resilience, and environmental education.

Gulf RESTORE Council

Spurred by the *Deepwater Horizon* oil spill, the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) Act was signed into law by President Obama on July 6, 2012. The RESTORE Act calls for a regional approach to restoring the long-term health of the valuable natural ecosystem and economy of the Gulf Coast region. The RESTORE Act dedicates 80 percent of civil and administrative penalties paid under the Clean Water Act, after the date of enactment, by responsible parties in connection with the *Deepwater Horizon* oil spill to the Gulf Coast Restoration Trust Fund (Trust Fund) for ecosystem restoration, economic recovery, and tourism promotion in the Gulf Coast region. In addition to creating the Trust Fund, the RESTORE Act established the Gulf Coast Ecosystem Restoration Council (Federal Council). The Council includes the Governors of the states of Alabama, Florida, Louisiana, Mississippi and Texas, the Secretaries of the U.S. departments of Agriculture, the Army, Commerce, Homeland Security, and the Interior, and the Administrator of the EPA.



Coordinating Restoration Partnerships, Funding and Decision-Making

The Restoration Community

Conservation and restoration in Alabama are regulated by the Alabama Department of Conservation of Natural Resources (ADCNR). Alabama Department of Environmental Management (ADEM), and the U.S. Army Corps of Engineers (USACE). ADCNR oversees impacts to State submerged lands, as well as consistency with the Alabama Coastal Area Management Program. In addition to their regulatory capacity, ADCNR is an active participant in on-the-ground restoration and land acquisition and manages the properties in Alabama's Forever Wild Land Trust Program. ADEM ensures projects will not have negative impacts on the environment and water quality. USACE is the federal agency that reviews restoration projects and issues permits to allow organizations to implement restoration projects, coordinating with other federal agencies, including USFWS and NOAA, as well as State cultural resource agencies like the State Historical Preservation Office.

The restoration community in Alabama includes federal, state, and local governments, engineers, consultants, non-profit organizations, businesses, and local citizens. These groups comprise the stakeholders that drive restoration projects in coastal Alabama. A project may not include every stakeholder listed, but a suite of stakeholders from the list are involved in nearly every project.

The MBNEP's Project Implementation Committee (PIC) brings together that restoration community of resource managers, scientists, engineers, and agency and organization representatives to undertake environmental projects related to CCMP goals and objectives. Made up of personnel who "put shovels in the ground," the PIC engages in the following:

- 1. Assessing restoration needs and resources and prioritizing watersheds and projects accordingly.
- 2. Using sediment analyses and watershed planning as a basis for informing restoration activities.
- Identifying projects and planning for their implementation (i.e., water quality monitoring; habitat conservation, restoration, and protection; data management; public access, etc.).
- 4. Identifying tasks and citizen input mechanisms to be implemented.
- 5. Conducting periodic project status meetings to track progress.
- 6. Cooperatively identifying tasks/roles for MBNEP in addressing issues or galvanizing action.

Meeting at least quarterly, the PIC shares progress on watershed planning and provides opportunities for vetting new or upcoming projects and a platform to share valuable lessons learned on restoration for continued improvement.

Sources of Restoration Funding

Often the most intricate challenges of a WMP are financing the implementation of recommendations to fulfill its goals and objectives. Because watershed management goals and objectives can vary widely, especially across different geographic and economic regions, sources of funding for watershed projects can also vary widely. The priorities for WMPs will not always align with priorities for funding sources, so it is vital to secure funding opportunistically from a diverse group of sources.

Successful implementation of conservation and restoration activities requires the long-term commitment of significant financial resources and community support. The design, construction, and maintenance of stormwater improvements; purchase of land for offline retention or detention; modification and/or protection of shorelines to reduce erosion; or the purchase and preservation of tracts of land to create greenspace buffers, wetlands, or floodplains to protect stream quality will require significant and reliable funding. Because the jurisdictional areas of political entities do not follow or encompass the watershed or ecological boundaries, a public-private partnership may be the most effective way to accomplish conservation and restoration goals.

Establishment of inter-governmental partnerships may provide additional funding options for conservation and restoration, while clearly illustrating to funders the community's active resolve to serve as vested and committed partners. These partnerships could significantly enhance the viability, competitiveness, and position of watershed and landscape scale-conservation and restoration, incorporating stakeholders across all sectors to ensure efforts are not duplicated. Developing a cooperative approach would allow for nonprofits, governments, businesses, and the public to come together to collaborate on the many serious and complex issues.

To acquire the funding necessary to undertake significant restoration, preservation, and/or management projects, political and private entities will have to consider and compare all available funding options. Many financial assistance opportunities, primarily in the form of federal grants and cooperative agreements, are available to help with conservation and restoration. Some sources could be helpful across entire watersheds and others within limited areas. Many would require public-private partnerships and cooperation among landowners, non-governmental organizations, and governments, rather than being imposed by governmental entities.

The following alternatives for funding and financing projects are listed here and discussed in more detail in Appendix E:

Deepwater Horizon Oil Spill-Related

- > Natural Resources Damage Assessment (NRDA)
- > National Fish & Wildlife Foundation Gulf Environmental Benefit Fund (NFWF GEBF)
- Resources and Ecosystem Sustainability. Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act)

Federal

- > Gulf of Mexico Energy Security Act
- > "Green" Stimulus Funding
- National Oceanic and Atmospheric Administration (NOAA)
- > U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS)
- > U.S. Department of the Interior, Fish and Wildlife Service (USFWS)
- > U.S. Environmental Protection Agency (EPA)

State

- > Alabama Coastal Area Management Program (ACAMP)
- > Clean Water State Revolving Fund
- > Forever Wild Land Trust (FWLT)

Local

- > Capital Improvement Cooperative Districts
- > Environmental Tax Shifting
- > Impact Fees
- > Improvement Districts
- > Property, Sales, or Other Taxes (General Fund)
- > Special Assessments
- > Stormwater Programs
- > System Development Charges
- > Environmental tax shifting
- > Capital improvement cooperative districts

Private

- > Business and Industry
- > Mitigation Banks
- > National Fish and Wildlife Foundation (non GEBF funding opportunities)
- > Non-Governmental Organizations and Other Private Funding
- > Gulf Coast Conservation Grants Program

Conclusion

This plan was developed to assist the State of Alabama, the MBNEP Management Conference, and the National Fish and Wildlife Foundation Gulf Environmental Benefit Fund in targeting restoration efforts across Mobile and Baldwin counties, where investments will have the greatest impact on improving ecosystems and biodiversity along the Alabama coast. It provides guidelines for the decision-making process from project conceptualization to implementation to post-completion monitoring and follow up. It does not provide all the answers nor is it a step-by-step formula that is guaranteed to result in successful restoration. It is meant to guide planners, project sponsors, government agencies, and interested parties through a thoughtful, scientific process. The intended outcome includes well developed, ecosystem-based restoration projects focused on enhancing habitat resilience and biodiversity across Alabama's two coastal counties.

This plan provides a framework for prioritizing watershed scale projects recommended through comprehensive watershed planning as well as others identified through community planning. It focuses efforts in target areas where protection and restoration efforts can build off of one another. It is predicated on community desire to seek the highest and best recovery outcomes across restoration activities. This plan strives not only to reverse past impacts but to cumulatively effect an increase in the extent and healthy functionality of coastal Alabama's ecosystems for the benefit of all.

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Appendix A: Habitat Change Analysis Table

Habitat Type	HPP 2010	Radiance 2016	Change
Total Habitat Acreage (water removed)	1,850,781	1,858,603	7,822
Pine Savanna	201,882	386,792	184,910
Longleaf Pine	616,862	575,220	(41,642)
Maritime Forest	22,598	47,277	24,679
Urban	179,428	216,981	37,553
Freshwater Wetlands	375,101	317,834	(57,267)
Intertidal Marsh Flats	28,635	21,511	(7,124)
Beaches Dunes	5,645	2,074	(3,571)
Other**	420,630	290,914	(129,716)
	pasture/hay row crop east gulf coastal plain southern mesic slope forest evergreen plantations successional shrub/scrub (utility swath) bare soil	marine-tidal estuarine-subtidal riverine-tidal riverine-upper perennial riverine-unknown perennial	
**definition			
Totals	1,850,781	1,858,603	7,822

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2018 Restoration	Baldwin County, Alabama.	buffer	In-Stream	1.6	0.1 490	483706		+	0 Rehabilitation	other wildlife	tion	-	-	30.6464	-87.87 Foundation	Daphne, AL	04:00 10-OCT-	-
	Weeks bay Habitat Restoration in Forest/woodland 12																18 12.34.00.	
	acres site characterized with drainage. Project involved identification, tagging, and removal of	Forested woodlands	Forest/W						Invasives Control/Removal -	Protect/improve/provide habitat for other	Enhancen	n				Weeks Bay	000000 PM -	
2018 Polo Ridge	invasive plant species to improve wildlife habitat.	acreage with drainages	oodland	12 -	-	_	Y Y	+	0 Vegetation	wildlife	ent	-	-	30.4806	-87.9081 N/A	Foundation	04:00	-
2018 Circalittoral Reefs Project	Artificial Reef Habitat Enhancement was completed at a site 600 feet off the coast of Baldwin County, AL beaches. Projects include 166 reef modules constructed with 4.5' concrete and limestone discs anchored into the seabed.	Reef Habitat in the circalittoral zone of Baldwin County, AL beaches.	Soft Bottom/s and	24 -	_	590345			Reef Construction - 0 Artificial Materials	Protect/improve/provide habitat for fish/shellfish	Establish ment	_	-	30.1641	National Fish and Wildlife -87.3246 Foundation	nublic	11-OCT- 18 05.01.00. 000000 PM - 04:00	Three circalittoral reef projects have been completed and each of the 3 reef sites are approximately 600' offshore of Gulf Shores and Orange Beach, Al. Pavilion – 30 15.076"; 87 38.665" Romar – 30 15.611"; 87 36.372" Alabama Point – 30 16.406"; 87 32.460" (10/10/2018 4:37:53 pm)
2010 Circuittorui Necis i roject	unenoted into the seased.	bederies.	unu	24		330343			o / tremelar Macerials	nsiy shemsh	mene			30.1041	07.3240 Foundation	public	02-OCT-	52.400 (10) 10) 2010 4.37.33 pm)
Perdido Wildlife Management 2018 Area -Freise Addition	Acquisition of longleaf/pine savanah forest habitat, and forest woodland, will provide and protect habitat	Pine savanah and forested woodland habitat	Forest/W oodland	47 -	-	875000	l		0 Land Acquisition	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for othe wildlife	er Protection	n -	-	30.6568	Forever Wild Land -87.4227 Trust	Alabama Department of Conservation and Natural Resources	18 01.02.00. 000000 PM - 04:00	This project is located in Alabama. Information on report has been corrected (9/20/2018 9:30:14 am)
2018 Alabama Osprey Restoration	Constructing and placing Osprey Nest Platforms in desired habitat areas to protect species and provide habitat	Dunes and woodland/forest area, open area, mixed habitat	Forest/W	0		45000			0 Other	Protect/improve/provide habitat for other wildlife	Enhancen ent	n		30 3003	Water Horizon- Natural Resources Damage Assessment Early Restoration -88.2144 Plan	Multiple owners of sites	02-OCT- 18 01.19.00. 000000 PM - 04:00	
2020 / Habama esprey nestoration		, nasitat	Coalana			13000			o o une.	- Industry	Cit			50.0555	00.21.1	Sites	10-OCT-	
2018 Tiawasee at Park Drive	Stream channel and riparian buffer restoration of Tiawassee Creek stream segment in wetland habitat to stabilize bank, and restore native vegetation to rehabilitate habitat for wildlife.	Stream and Wetland, Daphne ALabama	Forested Wetland	1 -	500	108961			Stream Bank 0 Stabilization	Erosion control:Protect/improve/provide habite for fish/shellfish:Protect/improve/provide habitat for other wildlife:Restore natural hydrology	Rehabilita	1 _	_	30.6308	-87.8834 ADEM	City of Daphne	18 12.25.00. 000000 PM - 04:00	
2018 Gulf Highlands Acquisition	Acquisition of beach and dunes on Gulf Fronting Parcels in order to provide habitat and protect wildlife	Beach and Dune in Gulf Highlands	Dune	113 -	2700	37957100			0 Land Acquisition	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for othe wildlife	Protection	n -	_	30.2311	NFWF- -87.8826 GEBF	Alabama Dept. of Conservation and Natural Resources	18 01.02.00. 000000 PM - 04:00	
Bon Secour River-Swift School 2018 Tract	Coastal river estuary land acquisition on estuarine river shoreline of the Bone Secour River	River estuary shoreline, Bon Secour River	Estuarine Shoreline	250 -	-	150400			0 Land Acquisition	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for othe wildlife	Protection	n -	-	30.3199	Forever Wild Land -87.7225 Trust	Alabama Department of Conservation and Natural Resources	18 01.01.00. 000000 PM - 04:00	
Marsh Island Portersville Bay 2018 Restoration Project	Habitat Restoration and Protection in tidal wetlands of Portersville Bay in efforts to reestablish Salt Marsh. 50 acres of salt marsh was restored via the construction of a containment berm using in-situ material followed by the dredging and placement of over 480,000 cubic yards of sediment from an open-water borrow site. Once material was placed, over 400,000 plugs of native salt marsh plants were planted. Additionally, a 3,200' segmented breakwater was placed along the south side of Marsh Island.	Salt Marsh/Tidal	Tidal Wetland	50 -	3200	9400000			0 Rehabilitation/Creatio	Protect/improve/provide habitat for other on wildlife	Reestabli: hment	5	_	30.3227		- Alabama Department of Conservation and Natural Resources	10-OCT- 18 12.28.00. 000000 PM - 04:00	

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		18,500 tons of 3" X 6" limestone aggregate deployed at 5 inshore													02-OCT-
		reef sites along the water bottoms of the											National		18 12.13.00.
	Artificial Reef Habitat Enhancement, 5 reef sites along water bottoms of the Mississippi Sound and Mobile	Mississippi Sound and	Hard					Reef Construction -	Protect/improve/provide habitat for	Enhancem			Fish and Wildlife		000000 PM -
2018 Inshore Reef Enhancement	Bay	function of the reef.	Bottom	29.6 -	-	980000	- -	0 Natural Materials	fish/shellfish	ent -	- 30.4	6 -88.0095	5 Foundation	public	04:00
													RESTORE (GulfCorps)		18 11.33.00.
	Removed five acres of invasive species in Pitcher Plant		Forested					Invasives Control/Removal -	Protect/improve/provide habitat for other	Enhancem				Weeks Bay	000000 AM -
2018 Juniper Bog	Bog located in Weeks Bay.	invasive's	Wetland	5 -	-	0	Y	0 Vegetation	wildlife	ent -	- 30.45	-87.804	4 no cost.	Foundation	04:00
															MBNEP confirmed with the lead 02-OCT- implementer that this was a conservation easement charitable
Easement addition to Black	The property is now protected with a perpetual	This parcel is an upland buffer that adjoins the							Erosion control:Improve or protect water						11.34.00. donation. Because it is an easement 000000 and not a land donation, we did not
Bear preserve property in 2018 Saraland, AL	conservation easement and adjoins an existing conservation easement and a developed subdivision.	Black Bear mitigation bank.	Forest/W oodland	37 -	-	-	- Y	0 Easements	quality:Protect/improve/provide habitat for other wildlife	Protection -	- 30.85	.8 -88.1128	8 N/A	Moore Properties,	AM - check the land dontaed box. 04:00 (9/19/2018 9:34:20 am) -
	·												ľ		
		The parcel contains palustrine wetlands and													
		uplands with a mixture of pine and hard woods.													02-OCT-
	A perpetual conservation easement was placed with	The parcel is currently in active silviculture by the													18 01.01.00.
Conservation easement in	the Atlantic Coast Conservancy, INC. The easement contains a riparian buffer and a resource protection	owner and the property is utilized for	Forested	777				0.5	Erosion control:Improve or protect water	Duntantinu	20.77	07.072	2 21/4	Hawthorne	000000 PM -
2018 Whitehouse Creek in Bromley	area Weeks Bay river frontage Habitat Restoration in Rio	recreational purposes.	Wetland	777 -	-	0	- Y	0 Easements	quality:Increase or protect water quantity	Protection -	- 30.77	8 -87.8723	3 N/A	Properties LLC	04:00
	Vista Forest/Woodland, 23 acres. Property was timbered prior to purchase. Project involved removal														
	of nuisance wood left behind, and collected woody debris for trail mulch. Applied herbicide to														10-OCT- 18
	strategically treat invasive plant species and encourage growth of native species. Installed gate to								Improve/Increase educational or recreational				EPA Gulf of		12.33.00. 000000
2018 Rio Vista	keep 4-wheelers off the property to rehabilitate and protect habitat.	Riverine parcel with multiple habitat types	Forest/W oodland	23 -	3000	200000		0 Debris Removal	opportunities:Protect/improve/provide habitat for other wildlife	Rehabilita tion -	- 30.50	6 -87.8107	Mexico 7 program	Weeks Bay Foundation	PM - 04:00
	This project resulted in the acquisition of a 251-acre	scrub/shrub, pine flatwood, saltwater											National		
	property on the Fort Morgan Peninsula that has been identified as a high conservation priority in the state	marsh, and tidal creek habitats, with											Fish and Wildlife		02-OCT- 18
Pon Socour Motional Mildlife	of Alabama. The parcel has been deeded to the U.S. Fish and Wildlife Service for inclusion and	permanent and semi- permanent wetlands	Tidal						Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish (shallfish Protect/improve/provide habitat				Foundation Gulf		01.17.00. 000000
Bon Secour National Wildlife 2018 Refuge Acquisition	management within the Bon Secour National Wildlife Refuge.	scattered across the parcel.	Tidal Wetland	251 -	-	5914900		0 Land Acquisition	fish/shellfish:Protect/improve/provide habitat for other wildlife	Protection -	- 30.23	2 -87.9475	5 ntal Fund	US Fish and Wildlife Service	PM - 04:00 02-OCT-
															18 11.31.00.
	Weeks Bay restored of seventy acres of pitcher plants	Forested acreage with	Forested					Invasives Control/Removal -	Improve/Increase educational or recreational opportunities:Protect/improve/provide habitat	Rehabilita			EPA Gulf of Mexico	Weeks Bay	000000 AM -
2018 Rangeline	by removing invasive plant species	pitcher plants	Wetland	70 -	-	200000	- -	0 Vegetation	for other wildlife	tion -	- 30.50	-88.1209	9 program	Foundation	04:00

Year	Project Name	Habitat Description	Habitat Type	Acres	Miles	Feet	Donated Land	Unavai	EPA Section 320	Project Renefite	Activity Name	Lead Implementer	Partners	Longitude	Main Funding Source	Site Owner	Last Updated Date NEP Comments Total Cost
Laguna Cove Li 2018 Natural Resoui		back dunes, intertidal	Dune	53 -	- 61	100 440000	00		0 Land Acquisition	Improve/Increase educational or recreational opportunities:Protect/improve/provide habitat for other wildlife	Enhancem ent -	-	30.233	2 -87.7922	National Fish and Wildlife Foundation – Natural Resource Damage	City of Gulf Shores	The project involved acquiring two undeveloped tracts of land to protect this habitat from commercial development. In addition to habitat protection, the project also involves recreational access components (boardwalk, kayak launch, parking, and restrooms). Public environmental awareness and stewardship will also be promoted through educational signage. 04:00 (10/16/2018 12:25:22 pm) -
Helen Wood P 2018 Management	Annual monitoring showed that bagged shell reefs ha spread out due to wave energy and ship wakes and lost their vertical relief. The shorter reefs no longer functioned properly to protect the shoreline. In May 2018, The Nature Conservancy constructed new reefs seaward of the bagged shell reefs using Oyster Castles™. The Oyster Castle Reefs™ have a total lengtion of 565 feet and a height of three feet. The new reefs restore provide increased wave attenuation and restore the shoreline protection function of the living shoreline.	Salt marsh, sand beach, sea grass, artificial oyster reef. Helen Wood Park living shoreline was originally constructed in 2011 and included five reefs constructed with Reef Balls™ and eight	d s s	0.06	0.1 5	565 8500	00		Reef Construction - 0 Artificial Materials	Erosion control:Protect/improve/provide habita for fish/shellfish:Protect/improve/provide habitat for other wildlife	t Enhancem ent -	-	30.571	7 -88.0841	. Private	State of Alabama	02-OCT- 18 01.20.00. 000000 PM - 04:00 -
Foley Tract Pro	Removal of invasive plants species on a 4 acre parcel of forested wetlands and uplands in Baldwin County, Alabama.	Forested wetlands and uplands	Forested Wetland	4 -		1696	57		Invasives Control/Removal - 0 Vegetation	Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife	Avalonia Land Enhancem Conserv ent cy		30.41	7 -87.816	Coastal Impact Assistance Program	Weeks Bay Foundation	06-SEP- 17 03.55.19. 632217 PM - 04:00 -
Ogburn Tract F	Property Removal of invasive plants on a 1 acre parcel of forested uplands in Baldwin County, Alabama.	Forested Uplands and Woodlands Habitat.	Forest/W oodland	1 -		467	⁷ 2		Invasives Control/Removal - 0 Vegetation	Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Avalonia Land Enhancem Conserv ent cy		30.40	7 -87.825	Coastal Impact Assistance Program	Weeks Bay Foundation	11-SEP- 17 12.55.39. 757937 PM - 04:00 -
Lightning Point	This project involves the acquisition of 31 acres of coastal habitats and ecosystem restoration as that will include approximately 28 acres of marsh and 1.5 mile of intertidal nearshore breakwater habitats in Bayou Batre, Alabama. Consisting of more than 2 miles of nearly contiguous undeveloped waterfront, these parcels provide a critical interface between land and water.	5	Estuarine Shoreline	31	0 -	60500	00		0 Land Acquisition	Erosion control:Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife	Avalonia Land Conserv Protection cy		30.383	1 -88.2714	National Fish and Wildlife Federation (GEBF: IV): \$605,000.	The Nature Conservancy	11-SEP- 17 03.46.16. Lightning Point Rickard Tract was 019494 purchased for \$605,000 using only PM - NFWF GEBF IV funds. (9/21/2017 04:00 10:40:00 am) -
Stelzenmuller 2017 Acquisition	Acquired 73 acres of pine flatwoods. Project will protect lands that support a diversity of wildlife, including black bear, coastal and wading birds, waterfowl, neotropical migratory birds.	Forested Wooded Uplands Habitat	Forest/W oodland	73	0 -	12052	20		0 Land Acquisition	Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Avalonia Land Conserv Protection cy		30.404	5 -87.8826		State of Alabama	11-SEP- 17 04.01.58. 292153 PM - 04:00
2017 Hiatt Tract Lan	Acquired 28 acres of pine flatwoods and tidal marshlands. Project will protect lands that support a diversity of wildlife, including black bear, coastal and wading birds, waterfowl, neotropical migratory birds.	Wooded Uplands, freshwater marsh, tidal marshlands	Forested Wetland	28	0 -	4624	10		0 Land Acquisition	Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Avalonia Land Conserv Protection cy		30.401	7 -87.8881	NERRS PAC Alabama Forever Wild Land Trust	State of Alabama	17 04.32.25. 219253 PM - 04:00 11-SEP- 17
Claude Lipscon 2017 Road Tract Lan	, , , , , , , , , , , , , , , , , , , ,		Forest/W oodland	64	0 -	29440	00		0 Land Acquisition	Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Avalonia Land Conserv Protection cy		30.361	1 -87.8302	Alabama Forever Wild Land	State of Alabama	17 04.44.19. 299428 PM - 04:00 -

a mark	Description	. Description	t Type			Project Cost	ted Land	Unavailable	Section 320	ation Technique	Benefits	plementer	Ş.	o.	ide unding Source	300	dated Date		mments ost
ear	rojed	abitai	abita	cres	Viles	otalP	Donate	ata U	PA Se	estora	roject	ead In	artne	atitud	ongitu		ast Up		EP Co
Northern Tip of Mon Louis Island Shoreline Stabilization/Habitat 2017 Enhancement	The northern tip of the shoreline of Mon Louis Island is impacted by erosion, due to the wave climate that includes chronic exposure to prevailing winds, longperiod wakes from ship traffic, and occasional tropical weather events. This project constructed 1,538 lineal feet of breakwater to protect, restore, and enhance 4.5 acres of tidal marshland and planted the marshland with native marshland vegetation.	Tidal Creek, Marshland, Estuarine Shoreline	Estuarine Shoreline	4.5		8 2971600			Shoreline Stabilization/Enhance	Erosion control:Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habit for other wildlife	at Reestabli	Avalonia Land s Conservan	- :	30.4486	National Fish and Wildlife -88.1069 Federation	Public	11-SEP- 17 09.00.33. 477653 AM - 04:00	(9/11/2017 9:57:49 am)	-
2017 Ollinger Tract Land Acquisition	Acquired 143 acres of pine flatwoods, freshwater marshlands, and tidal marshlands. Project will protect lands that support a diversity of wildlife, including black bear, coastal and wading birds, waterfowl, neotropical migratory birds.	Pine Flatwoods and Freshwater Marsh	Forested Wetland	143	0 -	22124(0		0 Land Acquisition	Improve or protect water quality:Protect or preserve open space:Protect/improve/provihabitat for birds:Protect/improve/provide habitat for other wildlife	I	Avalonia Land Conservan n cy	-	30.3901	NERRS PAC Alabama Forever Wild Land -87.8573 Trust	State of Alabama	11-SEP- 17 04.39.04. 753636 PM - 04:00	-	-
Fowl River Living Shoreline 2017 Project	Approximately 40-ft of living shoreline was installed to enhance shoreline habitat and restore .1 acres of marsh.	Instream and riparian marshland habitat; Estuarine Shoreline	Estuarine Shoreline	0.1 -	4	0 83966	5		Shoreline Stabilization/Enhance 0 ent	Erosion control:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habit for other wildlife:Restore natural hydrology	at Establish	Avalonia Land Conservan cy	<u>-</u> :	30.4328	Chevron, and the -88.1282 landowner.	Private	08-SEP- 17 05.19.55. 843389 PM - 04:00	-	-
Dauphin Island Whitney Bank 2017 Tract Land Acquisition	endangered sea turtles. Purpose is to acquire and conserve the environmentally sensitive property and control human-based impacts to the habitat and wildlife through strategically placed dune walk-overs,	Beach/dune and salt panne habitats on a primary barrier island that provide critical nesting, loafing and foraging habitats for a variety of coastal birds, shorebirds, neotropical migrants and other species.	Beach	9.4	0 -	2600000) - -		0 Land Acquisition	Improve or protect water quality:Improve/Increase educational or recreational opportunities:Protect or preser open space:Protect/improve/provide habita birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habit for other wildlife	t for	Avalonia Land Conservan n cy	<u>-</u> :	30.2508	National Fish and Wildlife Federation -88.1375 (GEBF: IV)	The Nature Conservancy	11-SEP- 17 03.19.07. 470219 PM - 04:00	-	-
Upper Wolf Bay Savanna and Marsh Acquisition for 2017 Conservation	The Alabama Forest Resources Center acquired a total of 569 acres (458 acres of priority wetlands, and 111 acres of uplands. This acquisition helps protect water quality and protects and provides habitat for birds and other wildlife.	458 acres of wetlands. 111 acres of uplands.	Tidal Wetland	569 -	-	3000000	0		0 Land Acquisition	Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habit for other wildlife:Restore natural hydrology	de	Avalonia Land Conservan n cy	-	30.339		Alabama Forest Resources Center	06-SEP- 17 03.53.20. 109108 PM - 04:00	-	
Invasive Vegetation Species Removal in Three Mile Creek 2017 Watershed	Removal of invasive species from 82 acres along .25 miles of riparian habitat along Three Mile Creek with members of the Gulf Coast Conservation Corps.	Riparian and Field/Meadow Habitat	Riparian	82	0.3 -	10000) - <u>-</u>		Invasives Control/Removal - O Vegetation	Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for o wildlife	l l	Avalonia Land Conservan	- :	30.7261	National Fish and Wildlife -88.0689 Federation	Public and Private	11-SEP- 17 10.28.03. 891208 AM - 04:00		
Solet Tract Land Acquisition: 2017 Grand Bay		habitats including shell mounds, pine flatwood savannas, oak cheniers, coastal marshes and salt pannes that feed into	Other	2035	0 -	3670000	0 - -		0 Land Acquisition	Improve or protect water quality:Protect or preserve open space:Protect/improve/provihabitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habit for other wildlife	de	Avalonia Land Conservan n cy	_	30.4065	National Fish and Wildlife Federation -88.3382 (GEBFIII)	The Nature Conservancy	11-SEP- 17 02.51.34. 247229 PM - 04:00	-	-

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Nam	Desc	Desc	Туре			roject C d Land	Javail	Section	i. Go	9	Della Rella	plem	μ .	e e			datec	mme
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Henderson/Drake Tract Land 2017 Acquisition: Grand Bay	Acquired 315 acres of Grand Bay Savanna for habitat protection. The holding is between Forever Wild Trust tracts and the Grand Bay National Wildlife Refuge.Project will protect lands that support a diversity of wildlife, including black bear, coastal and wading birds, waterfowl, neotropical migratory birds, nursery habitat for coastal finfish and shellfish (speckled trout, redfish, Atlantic croaker, shrimp, blue crabs) and many threatened/endangered species	including shell mounds, pine flatwood savannas, oak cheniers, coastal marshes and salt pannes that feed into the	Estuarine Shoreline	315	0 -	320000 -	-	0 1	Land Acquisition	Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife	Protection	Avalonia Land Conservan cy -	30.406	5 -88.338	l l	The Nature Conservancy	11-SEP- 17 10.24.52. 128268 AM - 04:00	Changes made to report as requested (10/12/2017 8:34:17 am)
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Swift Tract Property 2017 Restoration	1	Tidal Marsh and Shoreline Habitat	Estuarine Shoreline	3 -	-	10000 -	-	0 1	Planting	Erosion control:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Restore natural hydrology	Enhancen ent	Avalonia Land Conservan	30.33	L -87.80		• Weeks Bay	17 03.03.17. 102270 PM - 04:00	_
Lightning Point True World 2017 Foods Tract Land Acquisition	This project involves the acquisition of 37 acres of coastal habitats and ecosystem restoration as part of a larger 136 acre acquisition that will include approximately 28 acres of marsh and 1.5 miles of intertidal nearshore breakwater habitats in Bayou la Batre, Alabama. Consisting of more than 2 miles of nearly contiguous undeveloped waterfront, these parcels provide a critical interface between land and water.	Intertidal marshland habitat and tidal	Estuarine Shoreline	37	0 -	395000 -	-	0 1	Land Acquisition	Erosion control:Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife	Protection	Avalonia Land Conservan cy -	30.383	l -88.271 <i>c</i>	National Fish and Wildlife Federation 4 (GEBF: IV)	The Nature Conservancy	11-SEP- 17 03.34.14. 086856 PM - 04:00	
2017 Oyster Gardening Program	Oyster Gardeners produced approximately 58,500 oysters which were then distributed among historic oyster reefs in Mobile Bay for restoration purposes. The full grown oysters were collected in October and distributed among the oyster reefs at the beginning of November 2016.		Shell Bottom	2.89 -	0	0 -	-	0 (Oyster Gardening	Improve or protect water quality:Protect/improve/provide habitat for fish/shellfish	Enhancen ent	Avalonia Land Conservan cy -	30.254	7 -87.593	Gulf of Mexico Foundation	n Public	11-SEP- 17 05.10.29. 208558 PM - 04:00	
	Restoration of DA3 (~910 linear feet) section of D'Olive Creek due to severe erosion. Stream banks were stabilized restoring natural hydrology, improving									Erosion control:Improve or protect water		City of Daphne Thomps Enginee g, City o Spanish Fort, Westmi er Villag Baldwin County, Avalonia ALDOT,	on rin f nst e,		National Fish and Wildlife Foundation Gulf		06-SEP- 17 03.52.16.	
	water quality and serves to protect, improve, and									quality:Protect/improve/provide habitat for		Land ADEM,			Environme		961462	
Stream restoration in D'Olive	provide habitat for birds, aquatic organisms, and other		Dimon'	2.44	010	1142424		- 1	Stream Bank	birds:Protect/improve/provide habitat for other	1	Conservan Daphne		07.000	ntal Benefi	t	PM -	
2017 Creek (Section DA3)	wildlife.	wetlands	Riparian	2.41 -	910	1142431 -	-	0 9	Stabilization	wildlife:Restore natural hydrology	tion	cy Utilities	30.645	-87.8668	s Fund	Malbis Plantation	04:00	

Year Proiect Name	Project Description	Habitat Description	Habitat Type	Acres	Miles	Total Desiret Cost	Donated Land	EDA Cortion 220	Restoration Technique	Project Benefits	Activity Name	Partners	Latitude	Longitude	Main Funding Source	Last Updated Date	NEP Comments Total Cost
Stream restoration in Joe's Branch Transition (Between Section JB1 (step pool spsc) 2017 and JB2	Adaptive Management Restoration of Joe's Branch Transition area (~200 linear feet of stream) to lengthen stream reach and reduce grade. Project replaced 2 rock ledge step pools with 5 evenly spaced rock ledge step pools and reconstructed the transition area with an unnamed side tributary. Stream banks were stabilized with native vegetation to restore natural hydrology, improve water quality and improve habitat for birds, aquatic organisms, and other wildlife.			1 -	200	0 7705	0	7705	Stream Flow Modification (including stream pool 0 construction)	Erosion control:Flood control:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife:Restore natural hydrology	Avalonia Land Rehabilita Conserval tion cy	City of Daphne, Thompson Engineerin g, City of Spanish Fort, Westminst er Village, Baldwin County, ALDOT, ADEM, Daphne Utilities	30.6697	EPA/A -87.9053 319 Fu	DEM nds Westminster Village	06-SEP- 17 03.52.49. 904275 PM - 04:00 -	_
Stream restoration in unnamed	Stabilization of ephemeral stream (~600 linear feet) of DAE section of unnamed tributary to D'Olive Creek due to severe erosion. Stream banks were stabilized improving water quality and serves to protect,									Erosion control:Improve or protect water quality:Protect/improve/provide habitat for	Avalonia Land	City of Daphne, Thompson Engineerin g, City of Spanish Fort, Westminst er Village, Baldwin County, ALDOT, ADEM,		Nation Fish ar Wildlif Found Gulf Enviro ntal Be Fund: \$331,C Alabar Depari t of Transp ion: \$60,00 USEPA bama Depari t of Enviro ntal Manag nt Seci	al diction me nefit 72 a men ortat O Ala men me eme on me	08-SEP- 17 04.55.28. 373846	
tributary to D'Olive Creek 2017 (Section DAE)	improve habitat for birds, aquatic organisms, and other wildlife.	Ephemeral Stream; riparian habitat	Riparian	1.21 -	60	44603	7	5496	Stream Bank 5 Stabilization	birds:Protect/improve/provide habitat for other wildlife	tion cy	Utilities	30.6554		nds: Mr. & Mrs. David Lindsey	PM - 04:00 -	

Year	Project Name	Project Description	Hahitat Decrrintion	Habitat Type	Acres	Miles	Feet	Donated Land	EDA Section 320	Restoration Technique	Project Banefite	rigert benefits	Activity Name Lead Implementer	Partners	Latitude	Longitude	Main Funding Source	Site Owner	Last Updated Date	NEP Comments	Total Cost
2017	Tiawassee Creek at Park Drive Restoration Project	Stream restoration of of 600 lineal feet of Tiawassee Creek at Park Drive, including the removal of invasive species, stream channel rehabilitation, stream bank stabilization, and the planting of wetland shrubs and trees to restore water quality and to protect, improve, and provide habitat for birds and other wildlife.	Instream and riparian habitat; wetlands	Riparian	1	- 6	00 12000	10		Stream Channel D Rehabilitation	Erosion control:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Restore natural hydrology	Rehab tion	Avalonia Land Conservar cy	Mobile Bay National Estuary Program, National Fish and Wildlife Foundatio n, US Fish and Wildlife Coastal Impact Assistance Program, Alabama Departme nt of Environme ntal Managam ent, Jeoff Lane, Daphne Utilities	30.6323	-87.8851	Alabama Departmen t of Environme ntal Manageme nt Section 319: \$108,000 National Fish and Wildlife Foundation Gulf Environme ntal Benefit Fund: \$8,000 City of Daphne: \$4,000	City of Daphne	Alaba 06-SEP- Enviro 17 \$108, 03.54.48. Natio 888779 Gulf E PM - \$8,00	nal Fish and Wildlife Foundation Environmental Benefit Fund:	ın -
	Stream restoration in Joe's Branch (Section JA)	armored splash pool and wetland area before delivery to the downstream main stem of Joe's Branch. Impacted areas on the slope (minor head cuts) were treated with soil-filled bags to create pocket wetlands.	vines, and ground cover to restore water quality	Forested	-	- 71	00 5005C	10		Stream Bank O Stabilization	Erosion control:Flood control:Improve or protec water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Restore natural hydrology		Mobile Bay National Estuary Program		30.6664			Spanish Fort United Methodist Church	12-OCT- 16 09.34.14. 551877 AM - 04:00 -		
2016	Weeks Bay McAleer Parcel Acquisition	Acquisition through donation of 9-acre to protect, improve, and provide habitat for birds and other wildlife.	Wooded property fronting Fish River	Forested Wetland	9		-	Υ -		0 Land Acquisition	Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Protec	ction -	Mobile Bay NEP (Weeks Bay Watershed Managem ent Plan)	30.4214	-87.8212		Weeks Bay Foundation	09-OCT- 16 08.58.11. 751344 AM - 04:00 -		-

										<u>u</u>					u			
	ription	i i				Cost	d able	320		fits	e enter				g Sourc		l Date	tt e
Name	Desc	2990	Type			oject	Donated Land Data Unavailable	PA Section 320		Be	Nam	ار	ď.	g e	ngipu	1	datec	mmei
ar oiect	Ject	t tiq	bitat	res	lles et	tal Pr	nate ta Ur	A Sec	•	oject	tivity ad	rtuer	ritude	ngitu	고		t u	re Co
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															States Fish			
															and Wildlife		09-OCT-	
	Mobile County purchased the Windsor Road property											Mobile			Service		16	
	to conserve the critical habitats on those properties to support the implementation of the Dog River	Estuarine Shoreline, Forest/Woodland,								Erosion control:Protect or preserve open space:Protect/improve/provide habitat for		Bay National			Coastal Impact		09.02.33. 662374	
Mobile County Windsor Road	Watershed Management Plan currently under	Forested Wetland,	Forested							birds:Protect/improve/provide habitat for other		Estuary			Assistance		AM -	
2016 parcel purchase	development.	Freshwater Marsh	Wetland	125 -	-	422000		0 Lar	nd Acquisition	wildlife	Protection -	Program	30.4415	-88.1426	Program	Mobile County	04:00 -	-
															National			
															Fish and Wildlife			
															Foundation		09-OCT-	
	As a part of the implementation of the Fowl River	Intertidal marshes and flats, upland coastal								Erosion control:Protect or preserve open		Mobile Bay			Gulf Environme		16 09.02.10.	
	Watershed Management Plan, Mobile County	pine and hardwood								space:Protect/improve/provide habitat for		National			ntal Benefit	:	127571	
Mobile County Salt Aire Parcel 2016 Purchase	purchased the Salt Aire property to conserve the critical habitats on those properties.	forest, and open water intertidal estuary	Forested Wetland	233 -	_	3600000	- -	0 Lar	nd Acquisition	birds:Protect/improve/provide habitat for other wildlife	Protection -	Estuary Program	30.4691	-88.106	Fund, City of Mobile	Mobile County	AM - 04:00 -	_
	р средения	, , , , , , , , , , , , , , , , , , , ,										Mobile						
												Bay National						
												Estuary						
												Program, Alabama						
												Departme						
	Wetland restoration project and step pool construction to rehabilitate portions of D'Olive Creek									Erosion control:Flood control:Improve or protect water quality:Improve/Increase educational or		nt of Transporta					21-SEP-	
	before it meets D'Olive Bay. This project included a									recreational		tion,					16	
Gator Alley wetland	step pool stream restoration, invasive species removal, and wetland shrub and tree plantings to	Tidal wetlands and								opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for		Riveria Utilities,					03.31.15. 968633	
restoration/step pool	restore water quality and to protect, improve, and	riparian along D'Olive	Tidal					1 1	eam Channel	fish/shellfish:Protect/improve/provide habitat	Rehabilita	Daphne			City of		PM -	
2016 construction	provide habitat for birds and other wildlife.	Creek	Wetland		400	626000		8000 Re	habilitation	for other wildlife:Restore natural hydrology	tion -	Utilities	30.6531	-87.9121	Daphne	City of Daphne	04:00 -	-
												Mobile						
	Mobile County purchased the Pinetop Road property									Protect or preserve open		Bay National					07-OCT- 16	
	to conserve the critical habitats on those properties to									space:Protect/improve/provide habitat for		Estuary			Coastal		10.51.17.	
Mobile County Pinetop Road	support the implementation of the Dog River Watershed Management Plan currently under	Forest/Woodland, Forested Wetland,	Forested							birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat		Program, NFWF, City			Impact Assistance		880106 AM -	
2016 parcel purchase	development.	Freshwater Marsh	Wetland	18 -		350000		0 Lar	nd Acquisition	for other wildlife	Protection -	of Mobile	30.4286	-88.1321	Program	Mobile County	04:00 -	-
	Small additional land aquisition to further enhance the																21-SEP- 16	
	flood plain and provide vegetative buffer for the	Land acquisition in								Improve or protect water							02.59.38. 091239	
Tiawassee Creek Rolling Hill	Tiawassee stream restoration project to protect water quality and to protect habitat for birds and other	restoration for the	n							quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other					City of		PM -	
2016 Land Acquisition	wildlife.	creek. This is riparian.	Riparian	0.3 -	-	5000	- -	0 Lar	nd Acquisition	wildlife	Protection -	-	30.6418	-87.8896		City of Daphne	04:00 - 07-OCT-	-
																	16	
										Protect or preserve open					NA because		11.05.57.	
Village Point Foundation Marsh	Village Point Foundation Marsh was acquired to	Marsh and Tidal	Tidal							space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other					the land was		705098 AM -	
2016 Acquisition	protect habitat for birds and other wildlife.	Wetlands	Wetland	45 -	-	0	- -	0 Lar	nd Acquisition	wildlife	Protection -	-	30.6588	-87.922	donated	City of Daphne	04:00 -	-
																	06-OCT- 16	
								1	vacivos	Improve/Increase educational or recreational							05.50.06. 957351	
Weeks Bay Wiese Property		Wooded riverine and	Forested					1 1	/asives ntrol/Removal -	opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for	Enhancem				Weeks Bay	Weeks Bay	95/351 PM -	
2016 Restoration	Removal of trash and invasive plants.	upland property	Wetland	124 -		200		0 Ve	getation	other wildlife	ent -	-	30.5829	-87.8071	Foundation	Foundation	04:00 -	-

Year Project Name	Project Description	Habitat Decrrintion	Habitat Type	Acres	Miles	Total Project Cost	Donated Land Data Unavailable	EPA Section 320	Restoration Technique	Project Benefits	Activity Name Lead Implementer	Partners	Latitude	Longitude	Main Funding Source	Site Owner	Last Updated Date	NEP Comments Total Cost
Alabama Coastal Heritage Foundation Baker/Colich Parcel 2016 Acquisition	Alabama Coastal Heritage Foundation acquired a secondary dune property of approximately .14 acres of outstanding beach mouse habitat in the Gulf Highlands Subdivision. This property denominated as the "Baker/Colich Parcel" was appraised at \$25,000.00. The property is not within the Bon Secour Wildlife Refuge but Alabama Coastal Heritage Foundation will be holding and managing it on a long term basis. This protects uplands from storm surge and protects and provides habitat for birds and other wildlife.	Dune	Beach	0.14 -	-	25000		0 Land Acquisi	Improve or protect water quality:Protect/improve/prov birds:Protect/improve/provid wildlife	e habitat for other	Protection -	-	30.237	Coa	tage Alabama		21-SEP- 16 03.17.12. 039584 PM - 04:00 -	
Stream restoration in Joe's 2016 Branch (Section J4-1)	Restoration of J4-1 (~700 linear feet) of Joes Branch due to significant erosion to improve water quality and to protect, improve, and provide habitat for birds and other wildlife. The stream at J4-1 short circuited its relic channel and began down cutting through an existing sanitary sewer trench. The down cutting threatened sewer infrastructure and had already significantly lowered the groundwater to the point that vegetation was being impacted. This project involved re-filling the trench, installing flow deflectors, reconnecting the stream to its historic meandering channel, and providing greater connectivity to its flood plain. Planting is planned along the meandering channel to replace wetland species that were previously lost.	Upland, wetland, riparian streambank	Riparian	-	700	140000		Stream Bank 0 Stabilization	Erosion control:Improve or pr quality:Protect/improve/prov birds:Protect/improve/provid fish/shellfish:Protect/improve for other wildlife:Restore natu	ide habitat for e habitat for r/provide habitat F	Mobile Bay National Rehabilita Estuary Program	City of Daphne, Thompson Engineerin g, City of Spanish Fort, Westminst er Village, Baldwin County, ALDOT, ADEM, Daphne Utilities, National Fish and Wildlife Foundatio n Gulf Environme ntal Benefit Fund	30.6648	Gulf Envi	and dilife ndation ronme Westmi Benefit and Chu	rch of His	12-OCT- 16 09.34.43. 447753 AM - 04:00 -	-
Stream restoration in Joe's 2016 Branch (Section J4-2)	Restoration of J4-2 (~400 linear feet) section of Joes Branch due to severe erosion. Stream banks were stabilized restoring natural hydrology, improving water quality and serves to protect, improve, and provide habitat for birds, aquatic organisms, and other wildlife.	Upland, wetland, riparian streambank	Riparian		400	761200		Stream Bank 0 Stabilization	Erosion control:Flood control: water quality:Protect/improve for birds:Protect/improve/pro fish/shellfish:Protect/improve for other wildlife:Restore natu	e/provide habitat ovide habitat for e/provide habitat	Mobile Bay National Rehabilita Estuary Program	City of Daphne, Thompson Engineerin g, City of Spanish Fort, Westminst er Village, Baldwin County, ALDOT, ADEM, Daphne Utilities	30.6654	Fish Wild Fou Gulf Envi	ronme Benefit	nster Village	06-OCT- 16 05.36.33. 221688 PM - 04:00	-

Year	Project Name	Project Description		Habitat Type	Acres	Miles	Tool Process	Donated Land Data Unavailable	EPA Section 320	Restoration Technique	Project Benefits	Activity Name	Partners	Latitude	Longitude	Main Funding Source	Site Owner	Last Updated Date	NEP Comments Total Cost
													City of Daphne, Goodwyn Mills						
													Cawood, ALDOT, ADEM,						
1													Daphne Utilities,						
													National Fish and			National			
1													Wildlife		1	Fish and			
			Complete stream								Erosion control:Flood control:Improve or protect	I I	Foundatio		1	Wildlife		07-OCT-	
		Complete stream restoration of 2000 feet of D'Olive Creek, including removal of invasive species and	restoration including removal of invasive								water quality:Protect or preserve open space:Protect/improve/provide habitat for	Mobile Bay	n Gulf Environme		1	Foundation Gulf		16 10.51.54.	
		planting herbaceous wetland shrubs and trees to	species and planting								birds:Protect/improve/provide habitat for	National	ntal		1	Environme		020283	
D'O	Olive Creek at I-10 Stream	improve water quality and to protect, improve, and	herbaceous wetland							Stream Channel	fish/shellfish:Protect/improve/provide habitat	Rehabilita Estuary	Benefit		1		Malbis Plantation,	AM -	
2016 Re	storation	provide habitat for birds and other wildlife.	shrubs and trees.	Riparian	- -	- 200	0 308000	0 Y -	0	Rehabilitation	for other wildlife:Restore natural hydrology	tion Program	Fund	30.6586	-87.8803 F	Fund	Inc	04:00 -	-
			East Gulf Coastal Plain																
		Baldwin County 29 acre land acquisistion by Forever	Maritime Forest															09-OCT-	
		Wild. This tract is located adjacent to the Weeks Bay	habitats. The site									,,			l I.			16	
		Reserve in Baldwin County, Alabama and is within the Barrier Islands and Coastal Marshes Ecoregion. This	supports pine savannah within the intermixed	,							Protect/improve/provide habitat for	Alabama			1	Alabama Forever		09.02.55. 867823	
\ _W	eeks Bay Reserve #2 Swift	serves to protect and provide habitat for birds and	bogs and a stream	Forested							birds:Protect/improve/provide habitat for other	Forever Wild			1		Alabama Forever	AM -	
	act : Meyers Addition	other wildlife.	swamp.	Wetland	29	. .	10000	0 - -	0	Land Acquisition	wildlife	Protection Program	_	30.3134	1		Wild Program	04:00 -	_
	, , , , , , , , , , , , , , , , , , , ,										Improve or protect water quality:Protect or					-0 -		07-OCT-	
			Tidal wetlands and								preserve open space:Protect/improve/provide							16	
			marsh located south of	1							habitat for birds:Protect/improve/provide							11.02.38.	
l I		The marsh near D'Olive Bay was donated to protect,	1-10 near D'Olive Bay a	1							habitat for							490942	
	akely River Steiner Land	improve, and provide habitat for birds and other	the mouth of Blakely	Tidal	67						fish/shellfish:Protect/improve/provide habitat	City of		20.6450	07.022		City of Doubles	AM -	
2016 Ac	quisition	wildlife. The City of Daphne acquired 12 acres of priority	River	Wetland	67	- -	-	Y -	1 0	Land Acquisition	for other wildlife Erosion control:Improve or protect water	Protection Daphne	-	30.6459	-87.922 -		City of Daphne	04:00 - 07-OCT-	
		wetlands along D'Olive Bay as a part of the									quality:Protect or preserve open							16	
		implementation of the D'Olive Watershed									space:Protect/improve/provide habitat for							12.46.07.	
		Management Plan. This protects water quality and	Forested and tidal								birds:Protect/improve/provide habitat for							369963	
	Olive Bay Front Land	protects and provides habitat for birds and other	wetlands along D'Olive								fish/shellfish:Protect/improve/provide habitat	City of				City of		PM -	
2016 Ac	quisition	wildlife.	Bay front	Wetland	12	- 100	0 21000	0 - -	0	Land Acquisition	for other wildlife	Protection Daphne	-	30.6486	-87.9152 [Daphne	City of Daphne	04:00 -	-
													Mobile						
													Bay National					21-SEP-	
													Estuary					16	
											Improve/Increase educational or recreational		Program,					10.26.42.	
		Invasives control (mechanical removal and chemical								Invasives	opportunities:Protect/improve/provide habitat		USFWS			USFWS		010253	
		treatment) to protect and improve habitat for birds	Upland, wetland,							Control/Removal -	for birds:Protect/improve/provide habitat for	Enhancem City of	Coastal		1	Coastal		AM -	
2016 Vil	lage Point Park	and other species.	riparian streambank	Riparian	18	- -	5635	0 - -	0	Vegetation	other wildlife	ent Daphne	Program	30.6286	-87.9165 F	Program	City of Daphne	04:00 -	-

Year	Project Name		Habitat Description Habitat Type	Acres	Miles	Total Project Cost	Donated Land Data Unavailable	EPA Section 320	Postovatina Tachnimus	Project Benefits	Activity Name	Lead Implementer Partners	Latitude	Longitude	Main Funding Source	Site Owner	Last Updated Date	NEP Comments Total Cost
												Mobile Bay National Estuary Program, National Fish and Wildlife			National Fish and			
												Foundatio n, US Fish and Wildlife Coastal Impact Assistance			Wildlife Foundation Gulf Environme ntal Benefit Fund, Coastal			
	Stream restoration of Tiawassee Creek including the removal of invasive species, stream channel rehabilitation, stream bank stabilization, and the									Erosion control:Flood control:Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for		Program, Alabama Departme nt of Environme ntal Managam ent, Jeoff			Impact Assistance Program, and the Alabama Departmen t of Environme		21-SEP- 16 02.49.37.	
Tiawassee Creek Restoration 2016 Project	planting of wetland shrubs and trees to restore water quality and to protect, improve, and provide habitat for birds and other wildlife. Land acquisition in conjunction with the Tiawassee stream restoration project that significantly improved	forested wetland, riparian vegetation	Riparian	-	- 140	1340000	0	(Stream Channel 0 Rehabilitation	birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife:Restore natural hydrology Erosion control:Flood control:Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for	Rehabilita City of tion Daphne	Lane, Daphne Utilities Mobile Bay National	30.6331	-87.8836	ntal Manageme nt	City of Daphne	218344 PM - 04:00 - 21-SEP- 16 02.47.40.	_
Tiawassee Land Acquisition 2016 (downstream)	ability to restore the flood plain for Tiaswassee Creek to protect and preserve open space near water restoration projects. Land acquisition to further enhance the flood plain	Upland, wetland, riparian streambank Forested/woodland,	Riparian	26		-	Υ -	(0 Land Acquisition	birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife:Restore natural hydrology Flood control:Improve or protect water quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for	Rehabilita City of Daphne	Estuary Program,	30.6331	-87.8835	N/A - Land donated	City of Daphne	445602 PM - 04:00 - 07-OCT- 16 09.46.45. 318068	_
Tiawassee Parcel Acquisition 2016 (Greenwood)	and provide vegetative buffer for the Tiawassee stream restoration project. Acquistition of critical wetlands to support the restoration project and step pool construction of downstream portions of D'Olive Creek before it meets D'Olive Bay. This project included a step pool stream	forested wetland, riparian vegetation	Forested Wetland	1		-	Y -	(0 Land Acquisition	fish/shellfish:Protect/improve/provide habitat for other wildlife Erosion control:Improve or protect water	City of Protection Daphne	Estuary	30.6336	-87.8896	-		AM - 04:00 - 26-SEP-	_
2016 Gator Alley Land Acquisition	restoration, invasive species removal, and wetland shrub and tree plantings. This was not only a demonstration project but it also serves to restore water quality and to protect, improve, and provide habitat for birds and other wildlife.	Tidal wetlands and riparian along D'Olive Creek	Tidal Wetland	0.3		110000	0	5000	0 Land Acquisition	quality:Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife:Restore natural hydrology	Rehabilita City of tion Daphne	ALDOT, Riveria Utilities, Daphne	30.6531	-87.9121	City of Daphne	City of Daphne	16 04.49.27. 676461 PM - 04:00 - 09-OCT- 16	-
Weeks Bay Ollinger Parcel 2016 Aquisition	Acquisition through fee simple purchase to protect, improve, and provide habitat for birds and other wildlife.	Wetland property adjacent to state own Meadows tract.	ed Forested Wetland	143		250	0	(0 Land Acquisition	Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife Protect or preserve open	Weeks Bay Foundati Protection n	0 -	30.4358	-87.9097		Weeks Bay Foundation	09.01.46. 802377 AM - 04:00 - 26-SEP- 16 05.49.35.	-
Weeks Bay Koontz Property 2016 Easement	Conservation Easement of Forest and Forested wetland tract to protect, preserve, and provide habitat for birds and other wildlife.	Wooded property in Elberta with uplands, wetlands and ponds	Forested Wetland	52	- -	(0 Y -	(0 Easements	space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Bay Foundati Protection n	0 -	30.3974	-87.5886	Weeks Bay Foundation	Thadeus Koontz	994735 PM - 04:00 -	-

300	Project Name	Project Description		Habitat Description Habitat Type	Acres	Miles	Total Project Cost	Donated Land Data Unavailable	EPA Section 320	Restoration Technique	Project Benefits	Activity Name	Lead Implementer	Partners	Latitude	Main Funding Source	Site Owner	Last Updated Date NEP Comments
201	Weeks Bay Juniper Bog management	Controlled burning, invasive plant removal and treatment, fuel load reduction, expansion of pitcher plant habitat through selective thinning.	Pitcher Plant Bog	Forested Wetland	5 -	-	2500		Co	vasives introl/Removal - igetation	Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Weel Bay Maintena nce n	nt, AD	tme CNR	11 -87.819	Weeks Bay 6 Foundation	Weeks Bay Foundation	06-OCT- 16 05.50.59. 626258 PM - 04:00 -
201	Alabama Coastal Heritage Trust Frank Hollon Parcel Acquisition	On February 10, 2016, ACHT acquired and set aside .46 acres of beach and dune habitat for preservation, denominated as the "Frank Hollon Parcel". This property will ultimately be conveyed to the Bon Secour National Wildlife Refuge. This protects uplands from storm surge and protects and provides habitat for birds and other wildlife.	beach and dune	Dune	0.46 -	-	25000		0 Lai	nd Acquisition	Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Alaba Coas: Herit Protection Trust	al ige	30.23	17 -87.910	Alabama Coastal Heritage 7 Trust	Alabama Coastal Heritage Trust	09-OCT- 16 08.59.27. 532266 AM - 04:00 -
201	Alabama Coastal Heritage Foundation McKoy Parcel	ACHT acquired the 1.4 acre beachfront property, an inholding within the Bon Secour Wildlife Refuge. This property will ultimately be conveyed from ACHT to the Bon Secour Wildlife Refuge. It contains outstanding habitat for the Alabama beach mouse, endangered sea turtles and other wildlife. This protects and preserves open space, protects uplands from storm surge, and protects and provides habitat		Dura			1500000				Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other	Alaba Coas Herit	al ige	20.22	M 97 922	Alabama Coastal Harage	Alabama Coastal	09-OCT- 16 09.04.48. 941230 AM - 04:00 -
	1	for birds and other wildlife. Acquired and planted 240 sea oats and 60 panicum plantings on the Fort Morgan Peninsula. This protects uplands from storm surge and protects and provides habitat for birds and other wildlife.	Beach and Dune	Dune Beach		880	1500000			nd Acquisition	wildlife Protect or preserve open space:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Alaba Coasi Enhancem ent Trust	ma al age	30.22	-87.833 -88.012	Alabama Coastal Heritage	Alabama Coastal Heritage Trust	04:00
201	Joes Branch Restoration	Continued restoration of a highly degraded section of Joe's Branch utilizing natural channel design to stabilize a streambank in general conformance with civil engineering and geomorphology principles. The design included natural elements such as wood, vegetation, and rock to convey stormwater, repair head cutting, and minimize down cutting, while also providing habitat in the D'Olive watershed. The goal of this project is to remove D'Olive Creek from the State 303(d) list and reduce the amount of sediment being transported downstream.			5 -	170	0 1140000		1 1		Erosion control:Improve/increase educational or recreational opportunities:Improve or protect water quality:Increase or protect water quantity:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife:Restore natural hydrology	Enhancem ent -	-	30.66	36 -87.906	National Fish and Wildlife 4 Federation	Spanish Fort United Methodist, Westminster Village, Spanish Fort Venture LLC	
201	Invasives Removal in Helen Wood Park	Removal of invasive species with students from Saint Paul's Episcopal School.	Estuarine shoreline, public park with Brackish marsh, and estuarine wetlands	Estuarine Shoreline	1	0 -	200		Co	vasives introl/Removal - igetation	Improve/increase educational or recreational opportunities:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space	Maintena nce -	-	30.56	97 -88.085	US Environme ntal Protection 6 Agency	State of Alabama	03-SEP- 15 12.00.00. 000000 AM - 05:00 -
201	Improvements to Spanish Fort Detention Ponds	Provided and planted 4,242 native plants including in the upper pond: Pickerelweed (Pontederia cordata), Duck potato (Sagittaria latifolia), soft rush (Juncus effuses), Virginia blue flag (Iris virginiana), Goldenclub (Orontium aquaticum), Lizard's tail (Saururus cernus); in the lower pond: 50% Maidencane (Panicum hemitomon), and 50% Bushy bluestem (Andropogon glomeratus); and along edges and slopes: Michaux's milkweed (Asclepias michauxii), Dense Gayfeather (Liatris spicata), Horsetail (Equisetum avense), and Joe Pye Weed (Eutrochium fistulosum).	marsh vegetation, upland riparian	Freshwate r Marsh	0.3	01-	24374		24374 Pla		Erosion control:Flood control:Protect/improve/provide habitat for other wildlife	Establish ment -		30.67	.87 902	US Environme ntal Protection 4 Agency	City of Spanish Fort	29-SEP- 15 12.00.00. 000000 09/29/15 12:06 : Tiffany R England : AM - Entered in plant species and took out 05:00 references to "zones"

Year	Project Description	Habitat Description	Habitat Type	Acres	Miles	Total Project Cost	Donated Land Data Unavailable	EPA Section 320	Restoration Technique	Project Benefits	Activity Name	Partners	Longitude	Main Funding Source	Site Owner	Last Updated Date NEP Comments
2015 Arlington Cove Living Shoreline	Approximately 250-ft of living shorelines oyster reef was installed by volunteer labor in early May 2015.	Estuarine shoreline, salt marsh, beach, and oyster reef habitat	Estuarine Shoreline	0.5 -	7500	76000		C	Shoreline Stabilization/Enhancem	Erosion control:Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife	Establish ment -	- 30.619	4 -83.059		University of South Alabama Foundation	21-SEP- 15 12.00.00. 000000 AM - 05:00 -
2014 Fowl River-O'Brien	Living shoreline structure was deployed successfully followed by installation of marsh grass from donor marsh and nursery on lower tier with 5 volunteers:the upper tier was planted with dune grasses, flowers and bushes in late August 2014	The habitat is shoreline	Estuarine Shoreline	0 -	48				Shoreline	Erosion control:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish		- 30.44			private landowner	14 12.00.00. 000000 AM - 05:00 05-SEP- 14
2014 LeGette Tract	Acquisition of 36 acres of longleaf pine and wetland in Splinter Hill Bog for long term protection.	pine, wetlands This habitat is a	Forested Wetland	36	0 -	-		C	Land Acquisition	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space	Protection -	- 31.02	5 -87.68	5 y National	The Nature Conservancy	12.00.00. 000000 AM - 05:00 - Yes 15-SEP- 14 12.00.00.
Beckwith Camp Living 2014 Shoreline	Guided the Camp through the permitting process and constructed 23 reefs using 1265 oyster castle blocks with 57 volunteers. 155 acre conservation easement that isvitally important as the first landfall for neo-tropical migrant	associated with Bechwith Camp. Maritime Forest, marshes, dunes including a lake, a	Estuarine Shoreline Forest/W	0 -	180	6600		C	Reef Construction - Artificial Materials	Erosion control:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for	Protection -			Dauphin Island Park and Beach	Beckwith Camp	000000
2014 Audubon Sanctuary 2014 Cadillac Square	5 acre conservation easement at this historic site with live oak trees, used for festivals, birding, and large school groups.	Hardwood Canopy - historic site with live oak trees.	k Forest/W oodland	5	0 -	-			Easements Easements	Improve/increase educational or recreational opportunities	Protection -		1 -88.0874 7 -88.1026	Dauphin Island Park and Beach	Public Public	O5:00 - Yes
Orange Beach Highway 161 2014 Wetland Restoration	Created a serpentine wetland system out of the current system of uplands/wetlands occurring along this section of five-lane highway. The area is approximately 1 acre.	Uplands/Wetlands along a 5 lane highway right-o way		1	0 -	55000		C	Planting	Improve/increase educational or recreational opportunities:Improve or protect water quality	Enhancem ent -	- 30.27	7 -87.5806	Mobile Bay National Estuary 6 Program National Oceanic	Public	14 12.00.00. 000000 AM - 05:00
Weeks Bay Reserve-Swift #1 2014 Martin Addition	63 acres acquired as one of three tracts that fill an inholding in the Weeks Bay Reserve along the Mobile Bay shoreline.	Pine Savannah intermixed with bogs and a stream swamp.	Forested Wetland	63	0 -	248000		C	Land Acquisition	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Protection -	- 30.316	2 -87.7775	and Atmospheri c Administrat 5 ion (NOAA)	:	14 12.00.00. 000000 AM - 05:00 15-SEP- 14
Bon Secour River Living 2014 Shoreline	Constructed 40 reefs using ~1700 oyster castle blocks with 27 neighborhood volunteers. Concrete debris was removed, the shoreline prepped and marsh planted.	The habitat is shoreline along the Bon Secour River and associated marsh.	Estuarine Shoreline	0	0 278	8800		C	Reef Construction - Artificial Materials	Erosion control:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish	Reestablis hment -	- 39.325	5 -87.7059	9 NFWF, SCS	Taylor's Riverview Park	12.00.00. 000000 AM - 05:00

lear	oject Name	bitat Description	bitat Type	res	iles	et tal Droject Cost			PA Section 320	storation Technique	oject Benefits	ad Implementer	thorn	titude	ngitude ain Funding Source	,	e Owner st Updated Date	NEP Comments Total Cost
Weeks Bay Reserve-Swift #3 2014 Lipscomb Addition	40 acres acquired as one of the three tracts that fill an inholding in the Weeks Bay Reserve along the Mobile Bay shoreline.	Pine Savannah intermixed with bogs and a stream swamp.	Forested Wetland	A C	0 -	16000		<u>0</u>	0 Land Acquisition	Improve/increase educational or recreationa opportunities:Protect/improve/provide habit for birds:Protect/improve/provide habitat for other wildlife	tat	n -	-	30.3099	National Oceanic and Atmospher c Administrat -87.7687 ion (NOAA)	Public	05-SEP- 14 12.00.00. 000000 AM - 05:00	
2014 Black Bear, LLC	219 acre conservation easement consisting of forested wetlands of mostly longleaf pine and slash pine, some hardwood bottoms, surrounded by urban sprawl	1.	Forested Wetland	219	0 -	-			0 Easements	Improve or protect water quality:Protect/improve/provide habitat for other wildlife	Protectio	n -	-	30.8329	Black Bear, -88.078 LLC	Private	05-SEP- 14 12.00.00. 000000 AM - 05:00	- Yes
Shoreline Stabilization/Habit Creation at Satsuma's Steele 2013 Creek Lodge	1	Steele Creek Lodge is a municipal park and boat ramp facility owned and operated by the City of Satsuma on an embayment of Bayou Sara. The project area consists of riparian buffer and freshwater marsh habitat.		0	. 1	50 1344	5	12.	Shoreline Stabilization/Enhand	em Erosion control:Protect/improve/provide hat for fish/shellfish	oitat Enhance: ent	n -		30 5121	Environme ntal Protection -88.0328 Agency	Public	13-SEP- 13 12.00.00. 000000 AM - 05:00	
Campbell Tract Land 2013 Acquisition	Acquired 80 acres of Grand Bay Savanna for habitat protection. The holding is between Forever Wild Trust tracts and the Grand Bay National Wildlife Refuge.	Pine savanna, salt	Other	80	0 -	6000			0 Land Acquisition	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for ot wildlife:Protect or preserve open space		n -	-		The Nature Conservance		16-SEP- 13 12.00.00. 000000 AM - 05:00	
Mon Louis Island Shoreline Stabilization/Habitat 2013 Enhancement	The northeastern shoreline of Mon Louis Island is impacted by erosion, due to the wave climate that includes chronic exposure to prevailing winds, long-period wakes from ship traffic, and occasional tropical weather events. Consultants from South Coast Engineers, working interactively with six contiguous shoreline property owners, developed a unique design that provides the most logical, site-specific alternative to contiguous bulkheads or piles of rock and rubble proliferating along the western Bay shore. The living shoreline restoration included installation of four rock breakwaters at the natural slope change seaward of the mean high water and placement of clean sand fill to create permanent headlands with intermittent crescent-shaped pocket beaches.		Other	0.31	0 -	17885	7	47	Shoreline Stabilization/Enhand	Erosion control:Improve/increase educationa recreational :em opportunities:Protect/improve/provide habit for fish/shellfish		-	-	30.2629	US Fish and Wildlife -88.062 Service	Private	13-SEP- 13 12.00.00. 000000 AM - 05:00	-
Pelican Point Living Shoreline 2013 Project	922 volunteers helped build a 224-foot stretch of living shoreline along a state-owned parcel on Pelican Point, located north of the mouth of Weeks Bay. The project consisted of building four stretches of 56-foot oyster reefs that will help protect a 329-foot natural sandy shoreline that buffers a black needle rush salt marsh located landward. This living shoreline project was another milestone of the 100-1000: Restore Coastal Alabama Partnership, where The Nature Conservancy plans to build 100 miles of oyster reef breakwaters/living shorelines and protect and promote the growth of more than 1,000 acres of coastal Mabama.	Natural sandy shoreline that buffers a black needle rush salt marsh located landward.	Other	0	- 2	24 25000	0 - -		Shoreline Stabilization/Enhand O ent	Erosion control:Improve or protect water callity:Protect/improve/provide habitat for fish/shellfish	Establish ment	-	-	30.2237	National Fish and Wildlife -87.5022 Foundation	Public	13-SEP- 13 12.00.00. 000000 AM - 05:00	-

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Year Project Na	90	Habitat De Habitat Ty	Acres	Miles Feet	Total Proje	Donated Land Data Unavailable	EPA Section	Rest or ation	Project Be Activity N	Lead Imple	Partners	Longitude	Main Func	Site Owne	Last Upda NEP Comn
Restored a highly degraded head cut tributary to Joe Branch stream in the D'Olive Watershed with the go of removal from the State's 303(d) list and reduction in sedimentation being transported downstream. Sediments deposited in the downstream historical wetland / dead zone were used to construct the upstream Step Pool Storm Conveyance (SPSC). The downstream area was restored to wetland by installing various native trees, shrubs, and herbaceo plantings.	Il Joe's Branch Stream is tributary of D'Olive Creek near the point where the latter empties into D'Olive Bay. The area contains wetland, riparian, and	3	3.3 -	900	1176284	l	0 Planting	Erosion control:Flood control:Protect/improve/provide habitat for other wildlife	Reestablis hment -	-	30.401	3 -87.5414	Alabama Departmen t of Conservation n and Natural Resources		13-SEP- 13 12.00.00. 000000 AM - 05:00
The purpose of this Cooperative Agreement was to assist the City of Foley with the necessary funding for invasive species removal and appropriate prescribed burning at Graham Creek Park in Baldwin County, Alabama. An inventory documents hundreds of different species occurring in the Park, including several rare and uncommon species. The Park, though, has a problem with invasive (exotic) species (nine documented, to date). This area has been treat with both chemical and mechanical invasive species control.	Graham Creek Park consists of forested bottomland wetlands, pine savannah, longlea	af s,	336	0 -	51200)	Invasives Control/Removal - 0 Vegetation	Protect/improve/provide habitat for other wildlife	Enhancem ent -	-	30.34	4 -87.633	US Fish and Wildlife 3 Service	Public	13-SEP- 13 12.00.00. 000000 AM - 05:00
Increased the oyster density in Portersville Bay by distributing oyster shell on a historical oyster reef. To project site was chosen because it had a suitable bottom to hold culture material and within proximit of known oyster larvae. Approximately 4,722 cubic yards of oyster shell were distributed in a 50 acre ple as a settlement substrate for oyster larvae.	Historical oyster reef in	n Shell Bottom	50	0 -	170000) - -	Reef Construction - 0 Natural Materials	Improve or protect water quality:Protect/improve/provide habitat for fish/shellfish	Reestablis hment -	-	30.205	2 -88.1242	National Fish and Wildlife Foundation	Public	13-SEP- 13 12.00.00. 000000 AM - 05:00 -
Oyster Gardeners produced approximately 50,000 oysters which were then distributed among historic oyster reefs in Mobile Bay for restoration purposes. Each Oyster Gardener received four baskets with roughly 25 oyster shell with spat in each at the beginning of the summer and were charged with the care during the growing season. The full grown oyster were collected in October and distributed among the oyster Gardening Program oyster reefs at the beginning of November.	rs		2.5 -	0	4740) - -	Reef Construction - 2000 Natural Materials	Improve/increase educational or recreational opportunities:Improve or protect water quality:Protect/improve/provide habitat for fish/shellfish	Enhancem ent -	_	30.254	7 -87.5935	Gulf of Mexico Foundation	Public	13-SEP- 13 12.00.00. 000000 AM - 05:00 -
The purpose of this Cooperative Agreement was to assist the City of Daphne with invasive species removal at Village Point Park. An inventory documented that over one hundred different specie have been found in the Park, including 8 species of rare or infrequent species and seven of Alabama's state champion trees (more than on any comparable site in the state). The Park, though, has a problem with invasive (exotic) species (eleven documented, t date). Approximately one acre of the property had been filled with debris and old fill material and had lost its hydrological connection and become overgrown with invasives. This area has been	The Park consists of forested uplands, forested wetlands,														13-SEP- 13 12.00.00.
Village Point Park Invasive to the correct height and planted with native wetlan plants.		Forested Wetland	90	0 -	70630)	Invasives Control/Removal - 0 Vegetation	Protect/improve/provide habitat for other wildlife	Reestablis hment -	-	30.62	-87.917	US Fish and Wildlife Service	Public	000000

	ct Description	tat Description	at Type		10	Project Cost		Coction 220		oration Technique	ct Benefits	ity Name	Implementer	iers	pr	itude Fundine Source		Updated Date	Comments
Year	Proje	Наві	Нарі	Acre	Miles	Total	Dong			Rest	Proje	Activ	Lead	Partı	Latit	Long		Last	NEP
Weeks Bay National Estuarine Research Reserve Safe Harbor 2013 Tract Restoration		The Safe Harbor tract is an approximately 85 acre parcel of land containing upland, scrub/shrub, pitcher plant bog and marsh habitat.	Forested Wetland	68	0 -	33874	1		Invasives Control/Removal - 0 Vegetation	Protect/improve/provide habitat for other wildlife	Enhan ent	ncem	-	-	30.421	US Fish and Wildlife -87.83 Service	Public	13-SEP- 13 12.00.00. 000000 AM - 05:00	-
Stream Restoration at Prichard's Jackson Reading 2013 Park	Restored stream bank and riparian habitat and established an educational site showcasing appropriate technologies for managing buffer areas in an urban setting. Removed invasive species from adjacent riparian zones and erosion control was established. Approximately 3,000 native plants were installed on the project site.	The project area contains a small first order tributary to Eight Mile Creek. The stream runs though Prichard's Jackson Reading Park and is characterized by stream bank erosion, invasive species, and riparian habitat.	Riparian	2 -	300	68345	5		Stream Bank 0 Stabilization	Erosion control:Flood control:Protect/improve/provide habitat fo fish/shellfish:Protect/improve/provide habi for other wildlife	I .		-	-	30.4529	National Fish and Wildlife -88.0708 Foundation	Public	13-SEP- 13 12.00.00. 000000 AM - 05:00	-
2012 Weeks Bay Metcalfe Addition	30 acres of forested wetlands acquired for preservation	Forest and marsh wetlands habitat	Forested Wetland	30	0 -	1000000) - -		0 Land Acquisition	Improve/increase educational or recreation opportunities:Protect or preserve open spa	l l	ction -	-	-	30.4192	US Fish and Wildlife -87.8296 Service	l Public	04-OCT- 12 12.00.00. 000000 AM - 05:00	_
Living Shorelines: Erosion Abatement, Habitat Creation and Improved Public Use at Bay Street Water Access, Tow 2012 of Magnolia Springs, Alabama	abate erosion, create shoreline habitat and improve visitor access using Living Shorelines techniques. The source of the erosion problem is primarily boat wake. Successful completion of the project will serve as a	Site is located in medium density residential area. This project will provide riverine shoreline improvement.	Estuarine Shoreline	0 -	80	28000)]		Stream Bank O Stabilization	Erosion control:Improve/increase educatior recreational opportunities:Protect/improve/provide hab for other wildlife		ncem	-	-	30.3965	Town of Magnolia Springs and US Fish and -87.7785 Wildlife	l I Town of Magnolia Springs		10/10/12 11:18: Brenda Lowther: I have confirmed that this project is finished. I have removed the comment about "Successful completion of the project will serve as a demonstration of techniques on a residential scale." The meaning of that statement was that the project was complete and has been thus far successful, however Weeks Bay will be monitoring the area for the next year to see if this practice would be acceptable in other areas.
Coastal Alabama Economic Recovery and Ecological Restoration Project: Creating jobs to protect shorelines, restore oyster reefs and 2012 enhance fisheries production	By using three unique restoration technologies, this project creates three-dimensional oyster reef breakwaters along almost 2 miles of shoreline spread	stabilizes sediments to		0	1.5 -	2900000)]- -		Reef Construction - 0 Natural Materials	Improve or protect water quality:Increase of protect water quantity:Protect/improve/prohabitat for fish/shellfish	I .	ncem	-	-	30.1912	National Oceanic and Atmospher c Administra -87.4727 jon (NOAA)	i t Public	10-OCT- 12 12.00.00. 000000 AM - 05:00	10/10/12 11:10 : Brenda Lowther : I deleted the acreage on this project. it was a typing error on my part.

Year	Project Name		Habitat Description Habitat Type	Acres	Miles	Total Project Cost	Donated Land Data Unavailable	EPA Section 320	Restoration Technique	Project benents Activity Name	Partners Latitude	Longitude	Main Funding Source	Site Owner	Last Updated Date NEP Comments Total Cost
Brooks Park, Chickasaw 2012 Wetlands Restoration	Completed restored fragile wetlands adjacent to the creek through debris removal and eradication of invasive species. Educational signage has been developed and will be placed along the newly created public access trails.	Restoration of marsh wetlands habitat	Freshwate r Marsh	2 -	1300	40000)	Invasives Control/Removal - 0 Vegetation	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for other wildlife:Protect or preserve open space		- 30.765	-88.0837	Mobile Bay National Estuary Program	Public	10-OCT- 12 12.00.00. 000000 10/10/12 11:07 : Brenda Lowther : the work done is listed in the project description 12-SEP-
2012 Coughlan's Hammock Tract	Acquisition of 985 acres of uplands, river bottom hardwoods for preservation	Forest and marsh wetlands habitat	Forested Wetland	985	0 -	-	Yes -	0 Easements	Improve/increase educational or recreational opportunities:Protect or preserve open space	Protection -	- 31.2569	-87.7086	Private donation of	Public	12
2012 Live Oak Landing	638 acres acquired to compliment the Live Oak Landing Forever Wild acquisitions	Forest and marsh wetlands habitat	Forested Wetland	638	0 -	7007000)	0 Land Acquisition	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space	Protection -	- 30.9517	-87.8577	Coastal Impact Assistance Program US F&WS, National Coastal	Public	12.00.00. 000000 AM - 05:00
Weeks Bay Meadows Addition 2012 Land Acquisition	n 685 acres of forested wetlands purchased as part of the Forever Wild project	Forest and marsh wetlands habitat	Forested Wetland	685	0 -	1400000)	0 Land Acquisition	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for other wildlife:Protect or preserve open space		- 30.4192	-87.8296	Wetlands Grant, NERR Systems Habitat Protection	Public	04-OCT- 12 12.00.00. 0000000 AM - 05:00 -
Portersville Bay Land 2012 Acquisition	470 acres acquired through a \$1 million National Coastal Wetlands grant to compliment the Grand Bay Savanna acqusitions	coastal marsh, maritim forest and piney flatwoods	Forested Wetland	470	0 -	1000000)	0 Land Acquisition	Improve/increase educational or recreational opportunities:Protect or preserve open space	Protection -	- 30.3713	-88.2148	US Fish and Wildlife Service Coastal Program	Public	12-SEP- 12 12.00.00. 000000 AM - 05:00 -
													AL Chapter of The Nature Conservanc y, AL Forest		
		Forested wetlands	Forested						Improve/increase educational or recreational				Commissio n and the AL Forest Resource Center through a Legacy Grant		04-OCT- 12 12.00.00. 0000000 AM -
2012 Perdido River-Swift Addition	Remove remaining terrestrial infrastructure to prepare for restoration of pitcher plant bog, longleaf pine, and emergent wetland habitats. Terrestrial infrastructure is defined as any debris left over from the trailer park that previously occupied the site,	Brackish marsh, foreste and scrub shrub estuarine wetland, soft	Wetland	160	0 -	-		0 Land Acquisition	opportunities:Protect or preserve open space	Protection -	- 30.6698	-87.4666	US Fish and Wildlife Service	Weeks Bay National	05:00 - Yes 05-OCT- 10/05/11 10:58 : Brenda Lowther : fixed. see project description. 12.00.00. 10/04/11 13:48 : Brenda Lowther : The signage has not been placed for
2011 Safe Harbor Site Restoration	including, but not limited to concrete slabs, septic systems, electrical poles, and trailer pieces. This project restored pitcher plant bog by controlled burning to suppress tree and shrub layers, mulching	bottom, and associated uplands. This area is a former pitcher plant	Soft Bottom/s	85	0 -	25241		Control/Removal - 0 Vegetation	Protect/improve/provide habitat for other wildlife:Protect or preserve open space Protect/improve/provide habitat for other	Reestablis hment -	- 30.422	-87.827	1	Estuarine Research Reserve	AM - this project, but the restoration work 05:00 is done 19-SEP- 11 12.00.00. 0000000 AM -
2011 Pitcher plant bog restoration	and thinning	bog/wetland	and	40	0 -	12100) - -	0 Prescribed Burn	wildlife:Protect or preserve open space	nce -	- 30.416	-87.818	Service	Weeks Bay Reserve	05:00 -

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	9	criptior	criptio		a l		ct Cost	nd ilable	320	Techn	effts	e e		menter			Soul	0	ed Date	ents
	t Nan	a Des	at Des	!	at Typ		Projec	Oonated Land Oata Unavailable	Section	ration	G. G	ity Nar		Imple	ers de	tude	Fundi		Jpdate	Cost
30	Proje	Proje	Habit	:	Habit Acres	Miles	Feet Total	Dona Data	EPA S	Resto	Proje	Activ		Lead	Partn	Longi	S E		Last l	NEP C
																	US Fish and	i l	04-OCT- 11	10/04/11 13:45 : Brenda Lowther :
																	Wildlife Service		000000	This project has been completed by USFWS. The signage has not been
201	Bohemian Park, Fish River streambank restoration	This project restores eroding streambank and vegetation to maintain the shoreline in a natural state.	Streambank/River public park	Other	5	- 10	00 8800	- -	C	Stream Bank Stabilization	Erosion control:Improve or protect water quality	Reestablis hment	-	-	30.523	1 -87.8096	Coastal Program	Baldwin County	AM - 05:00	placed yet, but the restoration is complete.
																	US Fish and	Ŀ	19-SEP- 11	
		This project constructed living shoreline with bagged									Erosion control:Protect/improve/provide habitat	1					Wildlife Service		12.00.00. 000000	
201	Helen Wood Park Living Shoreline	oyster shells and revegetated with marsh plants just off the shoreline of the public park.	Estuarine shoreline/Public park	Estuarine Shoreline		- 110	00 68200	- -	C	Reef Construction - Natural Materials	for fish/shellfish:Protect/improve/provide habitat for other wildlife	Establish ment	-	-	30.569	7 -88.0852	Coastal Program	State of Alabama	AM - 05:00	_
																			04-OCT-	10/04/11 13:57 : Brenda Lowther : I
										la caratica a							UC Fish see	Alabama		spoke with USFWS and I was told that the site prep has restorative
201	1 Cityonalla Langlack Packayatian	Removed debris and invasive vegetation from site for		Forest/W			12200			Invasives Control/Removal -	Protect/improve/provide habitat for other wildlife	Reestablis hment			21.0	00.220	Wildlife	Department of Conservation and	000000 AM -	value even without the burn. The groundwork removes debris and
201	1 Citronelle Longleaf Restoration	planting of longlear pine trees.	ecosystem	oodland	45	0 -	12300	- -		Vegetation	wiidille	nment	-	-	31.0	-88.228	Service	Natural Resources	05:00 19-SEP-	invasive vegetation
			Wetlands, streams,							Invasivos							US Fish and Wildlife Service	1	12.00.00. 000000	
201	Village Point Park invasives 1 control	This project removes invasive exotic species and plant native plants where necessary in this public park.		Forest/W		0 -	9974			Invasives Control/Removal - Vegetation	Protect/improve/provide habitat for other wildlife	Maintena nce			20 274	1 -87.5453	Coastal	City of Daphne, Alabama	AM - 05:00	
201	Control	native plants where necessary in this public park.	and shoreline	oodiand	10	0 -	3374			Vegetation	whome	lice			30.374	1 -87.5455	Frogram	Alabama	04-OCT-	10/04/11 13:54 : Brenda Lowther : I
																		Alabama	11	spoke with USFWS and I was told that the site prep has restorative
	West Mobile Longleaf	Removed debris and invasive vegatation from site for	longleaf nine forest	Forest/W	v					Invasives Control/Removal -	Protect/improve/provide habitat for other	Reestablis					US Fish and	Department of Conservation and	000000 AM -	value even without the burn. The groundwork removes debris and
201	1 Restoration	planting of longleaf pine trees.	ecosystem	oodland		0 -	22000 -	- -	C) Vegetation	wildlife	hment	-	-	30.583	5 -88.2812	1	Natural Resources	05:00	invasive vegetation.
																			04-OCT-	10/04/11 13:56 : Brenda Lowther : I spoke with USFWS and I was told
		Removed debris and invasive vegetation from site for								Invasives							US Fish and	1	12.00.00. 000000	that the site prep has restorative value even without the burn. The
201	Georgetown Longleaf Restoration	planting of longleaf pine trees, and restored natural	Longleaf pine forest ecosystem	Forest/W oodland			17800	_ _		Control/Removal - Vegetation	Protect/improve/provide habitat for other wildlife	Reestablis hment	_	_	34.69	8 -85.892	Wildlife Service	State of Alabama	AM - 05:00	groundwork removes debris and invasive vegetation.
			Forest and marsh																	
		Acquisition of a 65 acre wetland parcel identified as a	wetlands in the Weeks Bay Watershed,																03-SEP- 10	
		priority for conservation in the Weeks Bay watershed, Baldwin County, Alabama. The parcel adjoins	adjacent to previously acquired National								Protect/improve/provide habitat for								12.00.00. 000000	
201	0 Worcester Tract Acquisition		Estuarine Research Reserve property	Forested Wetland		0 -		- -	0) Land Acquisition	birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space	Protection	-	-	30.433	7 -87.8003	Weeks Bay Foundation		AM - 05:00	- Yes
																	US Environme			
			Riparian habitat near a public access site along														ntal Protection		03-SEP- 10	
		Installation of erosion control structures and planting	Dog River, which had been severely impacted							Shoreline	Erosion control:Protect/improve/provide habitat	t					Agency National		12.00.00. 000000	
201	Dog River Park Shoreline Restoration	of native marsh vegetation along an eroded stretch of shoreline	by erosion from boat traffic	Riparian	0	- -	70 74984	- -	37750		for fish/shellfish:Protect/improve/provide habitat for other wildlife	Protection	-	-	30.630	6 -88.1106	Estuary Program	Public	AM - 05:00	
																	National			
																	Oceanic and		03-SEP- 10	
		Deployment of a living shoreline system, using bagged oyster shell, reefballs, and reefblk, along two	Two miles of estuarine							Shoreline	Erosion control:Improve or protect water						Atmospher c		12.00.00. 000000	
201	Alabama Port and Coffee Island Oyster Restoration	I .	shoreline along Mobile Bay and Portersville Bay	Estuarine Shoreline		0 -	2900000	<u> </u>		Stabilization/Enhancem ent	quality:Protect/improve/provide habitat for fish/shellfish	Enhancem ent	-	-	30.350	4 -88.1202	Administra ion (NOAA)		AM - 05:00	
	-																			

	iption	ription				Cost	able	023	echnique	lits	a	enter			Source		Date	ts l
ear (ear rroject Name	Project Descr	labitat Descr	Habitat Type	Acres	Miles eet	Fotal Project		PA Section 320	Restoration T	roject Bene	Activity Nam	ead Implem	artners	atitude	ongitude	, ite Owner	ast Updated	NEP Commer Total Cost
2010 Wolf Creek Park Acquisition	Acquisition of 20 acres of property in the Wolf Bay Watershed to provide recreational and public access	Riverine and forested upland along Wolf Creek in the Wolf Bay Watershed, Baldwin County, Alabama	Forest/W oodland	20	0 -	635500		0 Land Acquisition	Improve/increase educational or recreationa opportunities:Protect or preserve open space		ction -			30.3642	Baldwin -87.6211 County	Public	03-SEP- 10 12.00.00. 000000 AM - 05:00	
2010 Lillian Park Acquisition	Acquisition of a former marina property along Perdido	Estuarine shoreline area along Perdido Bay in Baldwin County, Alabama	Estuarine Shoreline	5	0 -	1350000	<u> </u>	0 Land Acquisition	Protect or preserve open space	Prote	ction -	-		30.4058	Baldwin -87.4369 County	Public	03-SEP- 10 12.00.00. 000000 AM - 05:00	
2010 Harris Property Acquisition	Acquisition of a 30 acre tract along Fish River in Baldwin County Alabama, a developing area of the	30 acres of riverine and forested upland along Fish River in Baldwin County, AL	Riparian	30	0 -	890000		0 Land Acquisition	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for ot wildlife:Protect or preserve open space	her Establ		-		30.5292	Baldwin -87.8067 County	Public	03-SEP- 10 12.00.00. 000000 AM - 05:00 03-SEP-	
2010 Balzli Preserve Addition	Conservation easement on a wetlands tracts in a rapidly developing area of the Eastern Shore of Mobile Bay	Wetlands tract along the Eastern Shore of Mobile Bay	Tidal Wetland	100	0 -	-		0 Easements	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for ot wildlife:Protect or preserve open space	her Prote	ction -	-		30.415	private homeowne -87.83 r	private	10 12.00.00. 000000 AM - 05:00	- Yes
2010 Relay Reef	sacks of oysters were moved from farther north to this location where freshwater flow is increased, protecting the oysters from oyster drills in the event	Cultch and oyster installation on sandy bottom offshore of Mon Luis Island in Mobile County, AL.	Soft Bottom/s and	800 -	0	1600000		0 Shellfish Seeding	Improve or protect water quality:Protect/improve/provide habitat for fish/shellfish	Establ ment		-		30.4202	National Oceanic and Atmospher c Administra -88.1026 ion (NOAA)	t Public	03-SEP- 10 12.00.00. 000000 AM - 05:00 03-SEP-	
2010 Blackwater River Addition	_	Longleaf pine, wiregrass ecosystem habitat along the Blackwater River	Forest/W oodland	416	0 -	-		0 Easements	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for ot wildlife:Protect or preserve open space	her Protec	ction -	-		30.2963	private -87.3215 landowner	private	10 12.00.00. 000000 AM - 05:00 02-SEP-	- Yes
Village Point Preserve Tree 2009 Planting and Invasive Removal	removal, herbicide treatment, and planting of over	•	Tidal Wetland	5 -	0	5000		0 Planting	Improve/increase educational or recreationa opportunities:Protect/improve/provide habit for birds:Protect/improve/provide habitat for other wildlife	tat	ncem -	-		30.6314	Private contributio -87.8864 ns	City of Daphne, AL	09 12.00.00. 000000 AM - 05:00	
Bon Secour NWR Debris 2009 Removal	and volunteers to restore endangered species habitat, including that of the Alabama beach mouse, Gopher	Intact coastal barrier ecosystem consisting of beach and dunes, scrub/shrub habitat, maritime forest, and pine flatwoods.	Dune	80 -	0) 2000		0 Debris Removal	Improve/increase educational or recreational opportunities:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for ot wildlife:Protect or preserve open space		-			30.2283	US Fish and Wildlife Service National Wildlife Refuge -87.8311 System	US Fish and Wildlife Service Bon Secour National Wildlife Refuge	02-SEP- 09 12.00.00. 000000 AM - 05:00	
															Coastal Impact Assistance Program and Alabama			
2009 Perdido River Tract Phase III	Acquisition of 2,622 acres of wetlands and uplands along the Perdido River, adjacent to previous Alabama Department of Conservation and Natural Resources Forever Wild and State Lands Division acquisitions	uplands along Perdido	Forested Wetland	2622 -	0) -		0 Land Acquisition	Improve/increase educational or recreationa opportunities:Protect/improve/provide habit for birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space	tat r	-	-		30.5469	Departmen t of Conservation n and Natural Resources - State Lands	State of Alabama	02-SEP- 09 12.00.00. 000000 AM - 05:00	- Yes

Year Project Name	Project Description	Habitat Description	Habitat Type	Acres	Miles	Feet	Total Project Cost Donated Land	Data Unavailable	EPA Section 320	Restoration Technique	Project Benefits	Activity name	Lead implementer	Partners	Longitude Main Funding Source	Site Owner	Last Updated Date	NEP Comments Total Cost
2009 Muddy Creek Tree Planting	Ten volunteers planted over 85 native tree species to increase bird nesting habitat at Muddy Creek Wetlands Mitigation Area.	The Muddy Creek Wetlands Mitigation Area both mitigated wetlands lost to the construction of a turning basin in Theodore, AL, but also restored a forested wetland that had been overtaken by invasive species. The swamp was reforested with tupelo gum, sweetbay magnolia, live oak, longleaf pine, and slash pine and opened to the public in 2003.	Forested Wetland			0 5	000 -		0 Planting	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds	Enhance ent	m		30 518	Private Contributio	Alabama State Ports Authority	02-SEP- 09 12.00.00. 000000 AM - 05:00	
Village Point Invasive Species 2009 Control	Mobile Bay National Estuary Program contracted with the City of Daphne to remove invasive exotic species from Village Point Park. Areas where invasive plants had been killed were assessed to determined whether planting of natives was needed.	Eighty acre nature preserve with forested	Tidal Wetland	80 -	-		000 -	-	Invasives Control/Removal - 10000 Vegetation	Erosion control:Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	or	is -	-		US Environme ntal Protection Agency National Estuary -87.8864 Program	City of Daphne	02-SEP- 09 12.00.00. 000000 AM - 05:00	
Rabbit Island SAV Restoration 2009 & Protection	Restoration of 35 acres of seagrass habitat and protection of an additional 100+ acres through the implementation of no-motor zones around shallow seagrass beds in Old River in Baldwin County.	Unique coastal marsh island with extensive seagrass beds	SAV (Submerg ed Aquatic Vegetatio n)	150 -	-	0 230	028 -	-	0 Planting	Protect/improve/provide habitat for fish/shellfish	-	-	-	30.303	National Fish and Wildlife L -87.4575 Fund	The Nature Conservancy	02-SEP- 09 12.00.00. 000000 AM - 05:00	
2009 Oyster Cultch Planting	Oyster cultch planting in Heron Bay, Portersville Bay, and Cedar Point to re-establish and restore oyster reefs damaged by Hurricanes Ivan and Katrina	Tidal wetlands and shell bottom in Mobile County, AL	Shell Bottom	66 -	-	0 1230	000 -	-	Reef Construction - 0 Natural Materials	Improve or protect water quality:Protect/improve/provide habitat for fish/shellfish	Reestab hment	is -	-	30.315	Federal Emergency Manageme nt Agency 5 -88.1433 (FEMA)	State of Alabama	02-SEP- 09 12.00.00. 000000 AM - 05:00	
2009 Little Lagoon SAV Restoration	attempt occurred after the partnership was expanded to include Gulf Shores High School students as volunteers. Because of the damage at Little Lagoon after Ivan, SAV's were planted at Weeks Bay National Estuarine Research Reserve. The planting was not successful because of high salinity and snails' consumption of the grass.In 2008, MBNEP received a 5 Star Grant from the National Fish and Wildlife Foundation to contract with Dr. Just Cebrian of the Dauphin Island Sea Lab to restore SAV at Little Lagoon. The restoration site is located at the west end of Little Lagoon within the borders of the Bon Secour NWR. After several sites were tested, Dauphin Island Sea Lab students and volunteers planted 720 plugs of Halodule wrightii along the shore of the Bon Secour National Wildlife Refuge in 16 dense patches. The patches will act as source populations which will spread out and ultimately cover the area in between them. The restoration will be followed by an extensive	in South Baldwin County and connected to the Gulf of Mexico by an inlet that is currently maintained by an ALDOT dredging program. Submerged aquatic vegetation, historically abundant throughout Little Lagoon, has disappeared in recent years. The site is well protected from wave action, the sediment is sandy and well	SAV (Submerg ed Aquatic	0.86	-	0 51	500 -	-	0 Planting	Improve or protect water quality:Protect/improve/provide habitat for fish/shellfish	Reestab hment	is -	-	30.241	National Fish and Wildlife 4 -87.7897 Fund	Fish and Wildlife Service	02-SEP- 09 12.00.00. 000000 AM - 05:00	

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Year Project Name	Projet Description	Hahirat Descrintion	Habitat Type	Acres	Miles		Donated Land	Data Onavaliable EPA Section 320	Restoration Techniq	Project Renefite	Activity Name	Lead Implementer	Latitude	Longitude	Main Funding Source	Site Owner	Last Updated Date	NEP Comments Total Cost
Juniper Preserve Prescribed 2009 Burn	Restoration of bog area through clearing and fire as required by pitcher plants for renewal. Completing a flora inventory of the control areas, then measuring the plants that return to the cleared areas and to the areas that are both cleared and burned.	Longleaf pine forest and seepage bogs containing pitcher plants and other carnivorous plants	g	15	-	0 266	55) Prescribed Burn	Protect or preserve open space		_	30.4581	87.7994		Weeks Bay	02-SEP- 09 12.00.00. 000000 AM - 05:00 -	_
2009 Fish River Tract	Donation of a 0.5 acre waterfront tract on Fish River to Weeks Bay Foundation.	Riparian and palustrine forested wetland tract on Fish River	Riparian	0.5		0	0 Yes -		Land Acquisition	Improve/increase educational or recreational opportunities:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for wildlife			30 4308	8 -87.8253	l l	Weeks Bay Foundation	02-SEP- 09 12.00.00. 000000 AM - 05:00 -	
	Seventeen high school students worked with local contractors to plant emergent grasses at the Arlington Park wetlands construction project of the Alabama State Ports Authority. Students planted cord grass	Wetlands mitigation area at the northwestern shore of	Tidal	0.5	-					Erosion control:Protect/improve/provide habita for birds:Protect/improve/provide habitat for	Enhancem				Alabama State Ports	Alabama State Ports	02-SEP- 09 12.00.00. 000000 AM -	
2009 Arlington Park Marsh Planting	Acquisition of 479 acres of old-growth forested wetlands adjoining previously acquired Forever Wild and State Lands Division within the Mobile-Tensaw	Old growth forested wetlands within the	Wetland	0		60 190) Planting	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for	ent -	-			7 Authority US Forest	,	05:00 - 02-SEP- 09 12.00.00. 000000 AM -	
2009 N. Q. Adams Tract Addition 2009 Mobile St. Dune Planting	Planting of dune vegetation to stabilize dunes and to protect sea turtle and Alabama beach mouse habitat from storm events and climate change.	Mobile-Tensaw Delta Beaches, dunes, and swales that have been designated as critical habitat for a number of endangered species.	Wetland	0.15		0 86315			D Land Acquisition	Climate Change Adaptation:Erosion control:Protect/improve/provide habitat for other wildlife	Enhancem	-		-87.9019 -87.8311	Friends of Bon Secour National Wildlife	State of Alabama US Fish and Wildlife Service Bon Secour National Wildlife Refuge	05:00 - 02-SEP- 09 12.00.00. 000000 AM - 05:00 -	-
Bon Secour NWR Invasives 2009 Removal	Removal of the exotic plant, Chinese tallow, by way of an herbicide treatment to restore maritime forest habitats for the benefit of many native plant and animal species including Neotropical migrants.	Maritime forest habitat situated between a dune-scrub zone and pine flatwoods that eventually transition to estuarine marshes.		52		0 266	55		Invasives Control/Removal -	Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife			20.2682	-87.7492	Wildlife	US Fish and Wildlife I Service Bon Secour National Wildlife	02-SEP- 09 12.00.00. 000000 AM - 05:00 -	
2009 N.Q. Adams Forever Wild Tract	Acquisition of 1100 acres of old-growth forested wetlands adjoining the Clearwater Tract within the	old-growth forested wetlands within Mobile Tensaw Delta		1100	-	0 198000			D Land Acquisition	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space		-		-87.9019	US Forest	Refuge State of Alabama	02-SEP- 09 12.00.00. 000000 AM - 05:00 -	-
Magnolia Springs Park 2008 Restoration Phase Two	The Magnolia Springs Restoration Project restored a cultural, ecological, and sociological landmark in Baldwin County, Alabama. The objective of this project was to stabilize an existing site from degradation from on-site erosion and storm water infiltration and restore the wetland, riparian, and stream habitat to its natural state.	Wetland/Riparian habitat in Baldwin County	Riparian	8	- 150	0 9288	80) Rehabilitation/Creation	Improve/increase educational or recreational opportunities:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for fish/shellfish:Protect/improve/provide habitat for other wildlife		_	30.402	-87.769	l l	Baldwin County Commission	29-SEP- 08 12.00.00. 000000 AM - 05:00 -	_
	purchase of habitat essential for avian conservation and several rare species of plants and animals, adjoins	wetlands dominated by								Improve/increase educational or recreational opportunities:Protect/improve/provide habitat					US Fish and Wildlife Service National Coastal Wetlands		08-SEP- 08 12.00.00. 000000	
Mobile-Tensaw DeltaMifflin 2008 Lake Tract Addition	previously purchased land along the Tensaw River and Mifflin Lake	flood prone hardwood timber	Forested Wetland	561	0 -	115700	00	C	Land Acquisition	for birds:Protect/improve/provide habitat for other wildlife		-	31.015	-87.911	Grant Program Wolf Bay	State of Alabama	AM - 05:00 - 08-SEP- 08 12.00.00. 000000	-
2008 Prichard Reading Park	Reintroduction of native plant species to a reading park created in an overgrown urban neighborhood.	Streambank, wetlands, near wetlands	Riparian	2	- 30	00 100	00 Yes -	() Planting	Improve/increase educational or recreational opportunities	Enhancem ent -	-	30.758	-88.119	Watershed	City of Prichard	AM - 05:00	

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ue u	cription	cription	ē			ct Cost	nd ilable	220	220	efits	e E	menter			ne Sour		ed Date	ents
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Year	Proje	Habit	Habit	Acres	Miles Feet	Total	Dona: Data	S V G		Proje	Activi	Lead	Latitu	Longi	Main	Site O	Last L	NEP C
															US Fish and			
															Wildlife Service		08-SEP-	
										Drotoct/impresso/provide behitet for					National		08	
		wetlands adjoining land	1							Protect/improve/provide habitat for birds:Protect/improve/provide habitat for					Coastal Wetlands		12.00.00. 000000	
	purchase of habitat essential for avian conservation as well as other rare species of plants and animals	along Bayou Sara	Forested Wetland	318	0 -	477000) - -		0 Land Acquisition	fish/shellfish:Protect/improve/provide habitat for other wildlife		-	30.814	-88.00	Grant 8 Program	State of Alabama	AM - 05:00 -	-
															Hurricane		08-SEP- 08	
	Oyster cultch planting in Heron Bay to reestablish and	Tidal Wetlands and shell													Ivan Disaster	State of Alabama,	12.00.00. 000000	
	restore oyster reefs damaged by Hurricanes Ivan and Katrina.		Shell Bottom	29.8		588000			Reef Construction - 0 Natural Materials	Protect/improve/provide habitat for fish/shellfish	Reestablis hment -		30.352	00 1	Relief 2 Funds	Mobile and Baldwin	AM - 05:00 -	
2008 Oyster Cutter Flanting	Nati ilia.	baldwill Coulities	ВОШОП	29.0	0 -	388000	-		o Natural Materials	nsnysnemsn	mment -	-	30.332	-00.1			03.00	-
															US Fish and Wildlife		29-SEP-	
		Beach, coastal dunes and associated uplands,													Service National		08 12.00.00.	
	Post-Katrina re-vegetation, including native tree, shrub, and grass planting to stabilize sand and provide	salt marsh, and wetlands at the mouth								Erosion control:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for	Rehabilita				Wildlife Refuge	Bon Secour National	000000 AM -	
·	colonial bird nesting habitat	of Mobile Bay	Dune	0	0.5 -	5000	- -	1	0 Planting	other wildlife	tion -	-	30.272	-88.108	8 System	Wildlife Refuge	05:00 - 17-SEP-	-
																	07	
	Acquisition of property located at 604 Bienville Blvd as part of the overall program to conserve the 12-acre									Improve/increase educational or recreational					Privately		12.00.00. 000000	
	Steiner Property for wading bird and waterfowl habitat as well as migratory bird stopover habitat.	Tidal Wetland , Salt Marsh , Upland - forest	Tidal Wetland	0.22	0 -	75000) - -		0 Land Acquisition	opportunities:Protect/improve/provide habitat for birds		-	33.4	-90.266	Raised 7 Funding	Dauphin Island Bird Sanctuaries, Inc.	AM - 05:00 -	-
															US Fish and			
															Wildlife Service		17-SEP-	
	Acquisition of 1,642 acres of piney flatwoods adjacent	Piney flatwoods								Improve/increase educational or recreational					National Coastal		07 12.00.00.	
	to existing Little River Road and the Grand Bay	marsh, maritime forest								opportunities:Protect/improve/provide habitat					Wetlands		000000	
Grand Bay Savanna- Giddens 2007 Tract Addition	Savanna property purchased through AL's Forever Wild Program.	managed as a nature preserve	Forested Wetland	1642	0 -	1478000	- -	1000	0 Land Acquisition	for birds:Protect/improve/provide habitat for other wildlife		-	30.3975	-88.278	Grant 4 Program	State of Alabama	AM - 05:00 -	-
															US Fish and			
	Acquisition in Baldwin County o 894 acres of pine														Wildlife Service		17-SEP-	
	savannah wetland and upland habitat adjacent to existing State of AL tracts and previous acquisition of	Pine Savannah wetland and upland habitat. The								Improve/increase educational or recreational					National Coastal		07 12.00.00.	
	the Forever Wild Program. Management objectives	general area is adjacent	Forested							opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for					Wetlands Grant		000000 AM -	
	include habitat conservation, outdoor recreation, scientific research and education.	to the upper reaches of Perdido Bay.	Wetland	894	0 -	804600	- -	_	0 Land Acquisition	other wildlife:Protect or preserve open space		-	30.4279	-87.403		State of Alabama	05:00 -	-
		The Bon Secour NWR																
		contains 7,000 acres of wildlife habitat for																
		migratory birds, nesting sea turtles and the																
		endangered Alabama beach mouse. It is a													US Fish and		29-AUG-	
	This project consists of removing burriegns debris	coastal beach dune													Service National		06 12.00.00.	
	This project consists of removing hurricane debris deposited by two hurricanes over a two year period.	system that was severely damaged over								Erosion control:Protect/improve/provide habitat					Wildlife		000000	
2006 Post Hurricane Debris Removal	This project was necessary before any dune restoration could take place.	the course of two hurricane seasons.	Dune	180	4.3 -	3900000	- -		0 Debris Removal	for birds:Protect/improve/provide habitat for fish/shellfish:Protect or preserve open space	Rehabilita tion -	-	30.23	-87.8	Refuge 3 System	United States Fish and Wildlife Service	AM - 05:00 -	-
																	29-AUG- 06	
	Acquired property as part of overall program to purchase and conserve the Tupelo Gum Swamp for	Forested wetland								Improve/increase educational or recreational					National Fish and		12.00.00. 000000	
	migratory bird stopover habitat by Dauphin Island Bird	located in the interior of	1 1	0.4		05000			Olland Acquisition	opportunities:Protect/improve/provide habitat			20 254	.00 144	Wildlife	Dauphin Island Bird	AM -	
2006 DIBS- 710 Infanta	Sanctuaries, Inc.	Dauphin Island, AL	Wetland	0.4	υ -	95000	<u> - -</u>		0 Land Acquisition	for birds	<u> - -</u>	-	30.251	-88.11	1 Foundation	Sanctuaries	05:00 -	=

Year Project Name	Project Description Habitat Description	Habitat Type Acres Miles	Feet	Total Project Cost Donated Land	Data Unavailable EPA Section 320 Restoration Technicu	Project Renefite	Activity Name	Partners Latitude	Longitude Main Eunding Source	Site Owner	Last Updated Date NEP Comments Total Cost
This Land Aquisition project con wetlands and uplands along the tract is comprised of 60% forest supporting an Atlantic white-Ce a unique black water stream cor bordered by an upland pine-san conservation, outdoor recreation.	Perdido River. the ded wetland habitats a unique blackwater stream corridor, which is an upland pine-sandhill forest for habitat an upland pine-sandhill forested.		0 277	25800	0 Land Acquisition	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space		- 31.009	Forever -87.91 Wild	Alabama Department of Conservation and Natural Resources	28-AUG- 06 12.00.00. 000000 AM - 05:00
Construction of reef with 3,000 rubble. Concrete was donated b Environmental Services. The Un Alabama will monitor this project feasibility of growing oysters on	y Meridith section of Perdido Bay versity of South north of Ono Island characterized by hard Hard	10 0	- :	70000	Reef Construction - 0 Artificial Materials	Improve or protect water quality:Protect/improve/provide habitat for fish/shellfish	Enhancem ent -	- 30.303	Departmer t of Marine Science, Univ. of South -87.498 Alabama		29-AUG- 06 12.00.00. 000000 AM - 05:00 -
Exotic invasive control of flora ti Planting followed with native pl hydrology to the site. This proje 2006 Nature Trail Restoration educational opportunities.	ants. Finally restored Transitional Upland /		0 :	37580	Invasives Control/Removal - 0 Vegetation	Improve/increase educational or recreational opportunities:Improve or protect water quality:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space:Restore natural hydrology		- 30.422	-87.833 3758	Alabama Department of Conservation and Natural Resources- D State Lands	29-AUG- 06 12.00.00. 0000000 AM - 05:00 -
This project consisted of invasiv and subsequent removal. Specie the Chinese tallowtree with the 2006 Refuge Invasive Plant Control the maritime forest habitat.	s removed included refuge system in Bon		-	5000	Invasives Control/Removal - 0 Vegetation	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife	Rehabilita tion -	- 30.28	US Fish and Wildlife Service National Wildlife Refuge -87.75 System	United States Fish and Wildlife Service	29-AUG- 06 12.00.00. 000000 AM - 05:00 -
Acquisition of 184 acres of wetla flood prone hardwood timber a purchased land along the Tensa 2006 Jessamine Tract conservation, outdoor recreation	djoining previously plants and animals. We River for habitat Home of Bald Cypress Forested		0 24	18400	0 Land Acquisition	Improve/increase educational or recreational opportunities:Protect/improve/provide habitat for birds:Protect/improve/provide habitat for other wildlife:Protect or preserve open space		- 31 008	Forest Legacy -87.909 Trust	Alabama Department of ConservationAlabam a Forever Wild Land Trust	
2006 Jessamine Tract conservation, outdoor recreation This project consists of restorati damaged dunes. Sand fencing at including sea oats, were used to that the dunes could rebuild.	on of hurricane Beach dunes along the nd native plants, refuge were severely	0 4.3		20000	0 Land Acquisition 0 Fencing/Netting	ether wildlife:Protect or preserve open space	Reestablis	- 31.008	United States Fish and Wildlife	United States Fish and Wildlife Service	29-AUG- 06 12.00.00. 000000 AM -

Appendix B

Geospatial Data from local, state, and federal sources

ADCNR Coastal State Parks 2018

ADCNR Forever Wild Tracts 2018

ADCNR Public Access ~2014

ADEM 303(d) Impaired Waters 2018

ADEM Long-Term Water Quality Monitoring Stations

ADEM Water Quality Survey

Alabama Congressional Districts

Alabama Counties

Alabama Funded Projects 2018

Baldwin County Habitats 2001

Baldwin County Soils (Soil Erosion Factor-Kw) 2018

Boat Ramps 2005

Census Tracts Estimates (Educational attainment, Households, Income, Income below poverty level, population, population change 2010-2016) 2016

Coastal Birding Trail ~2015

Contour Line 10-foot

Cook Hydrogeology Sediment Loading Studies

Criteria for Objectives (Headwaters, Riparian Buffers, Nearshore Habitats, Critical Habitats, Access, Sea Level Rise) 2018

EPA Health of Watersheds 2014

EPA NPDES Permits 2016

EPA Superfund Sites (CERCLIS) 2015

EPA TMDL Waters 2015

EPA Toxic Release Inventory Sites 2017

Existing Protected Lands 2018

FEMA Flood Hazard Zones 2017

Floodplain 100-year 2017

Greenways 2014

GSA Coastal Landfills 2003

Habitats (Beach & Dune, Benthic, Intertidal Marsh, Riverine Wetlands, Non-Riverine Wetlands, Pine Savannah, Longleaf Pine Understory, Longleaf Pine,

Maritime Forest, Oyster Reefs, SAV) 2005

Habitats (Estuarine Marine, Freshwater Forested/Unforested, Upland Forest, Upland Scrub/Shrub, Agriculture, Urban) 2016

HUC-12 Watersheds

HUC-12 Watersheds

Hydrography Flowlines

Appendix B

Geospatial Data from local, state, and federal sources

Invasive SAV Habitat

Mobile Bay SAV (1981, 1987, 1994, 2002, 2008, 2009, Summer 2015, Fall 2015)

Mobile County Habitats 2002

Mobile County Soils (Soil Erosion Factor-Kw) 2017

MRLC NLCD Percent Developed Imperviousness 2011

Non-tidally influenced HUC-8 Watersheds

NWI Wetlands ~2009

Oyster Reefs (1910-1913, 1951-1952, 1968)

Plan Targets (Proposed Acquisition Tracts, Proposed Restoration Tracts) 2006

Priority Habitats (Beach & Dune, Intertidal Marsh for Conservation, Intertidal Marsh for Restoration, Riverine Wetlands, Pine Savannah, Longleaf Pine, Maritime Forest, SAV, Stream Riparian Buffers for Conservation, Stream Riparian Buffers for Restoration) 2005

Proposed Watershed Projects (Proposed locations and proposed areas)

Protected Lands 2018

Protected Lands Prior 2006

Ramps and Marina Survey 2003

Regulatory (Coastal Area Resource Protection, Construction Phase BMP Requirements, Low Impact Development, MS4 Permit Coverage, Post Construction Stormwater, Shoreline Stabilization)

SEACAP Dams 2014

Sewer Overflows 2014-2016

Strategies for Goals (Non-Restorable Areas, Preservation/Conservation Areas, Reservation Areas, Restoration Areas) 2018

USACE Sea Level Rise Scenarios (0.5 & 1 meter sea level rise: 2% Annual Chance of Inundation - 50 year flood, 1% Annual Chance of Inundation - 100 year flood) 2018

USFWS Alabama Beach Mouse ~2010

USFWS Critical Habitats ~2003-2009

USFWS Perdido Key Beach Mouse ~2015

USFWS Sea Turtle Nesting Beaches ~2015

USGS GNIS Dams 2014

USGS Tidal Saline Wetland Migration (0.5, 1.0, 2.0 meter sea level rise for 2100 and 2060) 2015

Water Quality Monitoring Stations

Watershed Complexes

Appendix C				T			•	1	1
rojectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
·ojeenz	Freshwater Wetlands	. rojecti ype				Traceionean zan	Traceronical familiage	Status	
	Longleaf Pine								
	Pine Savanna								
	Maritime Forest								
	Intertidal Marsh and Flats								
	1 Streams and Rivers	Habitat Protection	Land Preservation Area	Potential Land Preservation Area	1	Bayou La Batre	217		
	Freshwater Wetlands					,			
	2 Pine Savanna	Habitat Protection	Riparian Buffer Restoration Area	Riparian Buffer Restoration Area		Bayou La Batre	184		
	Freshwater Wetlands					,			
	Intertidal Marsh and Flats								
	Maritime Forest								
	3 Pine Savanna	Habitat Protection	Wetland Preservation Area	Parcels for Wetland Preservation Areas		Bayou La Batre	217		
	4 n/a	Infrastructure	Unpaved Road	2 Mile Road		Bayou La Batre	190		
	5 Maritime Forest	Infrastructure	Unpaved Road	Adams Street	1	Bayou La Batre	190		
	Freshwater Wetlands	IIIIIastructure	Olipaved Koau	Additis Street		вауой са ваше	190		
	6 Pine Savanna	Infrastrustura	Unpaved Road	Cut Off Road		Davey La Batra	190		
		Infrastructure				Bayou La Batre			
	7 Pine Savanna	Infrastructure	Unpaved Road	Hogue Road		Bayou La Batre	190	1	+
	Freshwater Wetlands		Unanced Band	Little Diver Deed		D		l	
	8 Maritime Forest	Infrastructure	Unpaved Road	Little River Road		Bayou La Batre	190	1	-
	9 Freshwater Wetlands	Infrastructure	Unpaved Road	Magnolia Road	(Bayou La Batre	190		
	Freshwater Wetlands								
	10 Pine Savanna	Infrastructure	Unpaved Road	Marine Laboratory Road		Bayou La Batre	190		
	11 n/a	Infrastructure	Unpaved Road	Shrimp Lane		Bayou La Batre	190		
	12 n/a	Infrastructure	Unpaved Road	South Meadow Lane	(Bayou La Batre	190		
	Freshwater Wetlands								
1	13 Maritime Forest	Habitat Protection	Bon Secour Conservation	Potential Conservation Area	(Bon Secour	7-5		
	Freshwater Wetlands								
	Streams and Rivers								
	Longleaf Pine	Habitat							
1	14 Pine Savanna	Restoration	Land Preservation Area	BSR Property Boundary	1	Bon Secour	7-5		
	Freshwater Wetlands								
	Longleaf Pine								
	Pine Savanna								
1	15 Streams and Rivers	Water Quality	Bon Secour River Water Quality/Stormwater	Stormwater	1	Bon Secour	7-12		
									Proposed locatio
									is located on an
									unnamed
1	16 Freshwater Wetlands	Water Quality	Proposed Litter Trap	Litter Trap Location		Bon Secour	7-4		tributary in Foley
	Freshwater Wetlands		.,						, , , , , ,
	Intertidal Marsh and Flats								
	17 Maritime Forest	Habitat Protection	Bon Secour Conservation	Potential Conservation Area		Bon Secour	7-5		
-	17 Wantime Forest	Habitat	Bon Secour Conservation	rotential conservation Area		Don Secoul	7-3		
	18 Freshwater Wetlands	Restoration	Stream Restoration	D4-D6		D'Olive	6-2	Complete	
	Freshwater Wetlands	Habitat	on carri Nestoration			JIIVE	0-2	complete	1
	19 Pine Savanna		Stream Restoration	DA3	,	D'Olive	6.3	Complete	
-	Longleaf Pine	Restoration Habitat	Stream Restoration	DA3		Jolive	6-2	Complete	+
	•		Stroam Postoration	DAE	,	D'Olivo		Complete	
•	20 Pine Savanna	Restoration	Stream Restoration	DAE		D'Olive	6-2	Complete	+
	NA Dina Causana	Habitat	Character Bankson tilan	DAF4		DIOI:		C' .	
	21 Pine Savanna	Restoration	Stream Restoration	DAF1		D'Olive	6-2	Complete	-
		Habitat		Date (84.1 · · · ·)		aloi:		L	
	22 Freshwater Wetlands	Restoration	Stream Restoration	DAF1a (Melanie Loop)		D'Olive	6-2	Complete	-
		Habitat					1	l	
- 2	23 Streams and Rivers	Restoration	Stream Restoration	J SWMF	1	D'Olive	6-2	Complete	ļ
	Pine Savanna	Habitat							
	24 Streams and Rivers	Restoration	Stream Restoration	J4-1, J4-2	1	D'Olive	6-2	Complete	
		Habitat					1		
	25 Pine Savanna	Restoration	Stream Restoration	JA	1 (D'Olive		Complete	1

1									
ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
		Habitat							
	Streams and Rivers	Restoration	Stream Restoration	JB SWMF	C	D'Olive	6-2	Complete	
	Freshwater Wetlands	Habitat							
	Pine Savanna	Restoration	Stream Restoration	JB1 & JB2	C	D'Olive	6-2	Complete	
	Freshwater Wetlands	Habitat		L.	_				
	Pine Savanna	Restoration	Stream Restoration	Tiawasee	C	D'Olive	6-2	Complete	
	Freshwater Wetlands	Habitat	G			a a loi:			
30	Pine Savanna	Restoration	Stream Restoration	Tiawasee Montclair		D'Olive	6-2	Complete	
2.1	n/a	Habitat Dratastian	Priority Coastal Project-Dill	Possible restoration opportunity to include limited use of struture, fill, and vegetation.		Fowl River	218		
31	iiya	nabitat Flotection	Friority Coastai Froject-Dill	struture, mi, and vegetation.		rowi kivei	210		
i				Proposed future submerged reef to include sigange and					
32	n/a	Habitat Protection	Priority Coastal Project-Harrison Isl.	supplemental structure for fish habitat.		Fowl River	218		
32	11,0	Trabitat i Totection	Thomas coustain roject marrison isi.	supplemental structure for fish hubitut.		T OWI TAVEL	210		
i				Proposed future submerged reef to include sigange and					
33	n/a	Habitat Protection	Priority Coastal Project-McDonough	supplemental structure for fish habitat.	C	Fowl River	218		
			.,						
l l		1		Proposed future submerged reef to include sigange and					
34	n/a	Habitat Protection	Priority Coastal Project-Pratt	supplemental structure for fish habitat.	c	Fowl River	218		
1				Proposed future submerged reef to include sigange and					
35	n/a	Habitat Protection	Priority Coastal Project-Wright	supplemental structure for fish habitat.	C	Fowl River	218		
i									
i									location has
i									shifted to the
i				Proposed bank enhancement and protection would					east. Currently in
	Freshwater Wetlands	Habitat		include non-structural stabilization, fill, and appropriate					engineering and
36	Intertidal Marsh and Flats	Restoration	Priority Coastal Project-Bellingrath	vegetation.	1	Fowl River	218	Initiated	design phase.
i				Proposed Split stabilization at base and along north bank					
		Habitat		as needed. Actural length and cost of protection likely	_	5 18:	240		
37	Freshwater Wetlands	Restoration	Priority Coastal Project-Big Boot	lower.	1	Fowl River	218		
i		Habitat		Proposed spit stabilization at base and tip with limited					
30	Freshwater Wetlands	Restoration	Priority Coastal Project-Brown	use of structure, some fill, and vegetation as appropriate.	1	Fowl River	218		
38	Trestiwater Wetlands	Restoration	Priority Coastai Project-Brown	Proposed spit and salt marsh enhancement and	-	I OWI KIVEI	210		Currently in
i		Habitat		protection would include structural stabilization, fill, and					engineering &
39	Maritime Forest	Restoration	Priority Coastal Project-Closing Hole	appropriate vegatation.		Fowl River	218	Initiated	design phase
				Proposed marsh protection and restoration with limited					g.: p.:
i		Habitat		use of structure to re-establish edge fill, and marsh					
40	n/a	Restoration	Priority Coastal Project-Coley	plantings.	c	Fowl River	218		
i									
l l		Habitat		Proposed future submerged reef to include sigange and					
41	n/a	Restoration	Priority Coastal Project-Harrison Pt.	supplemental structure for fish habitat.	C	Fowl River	218		
1		1							
l l		Habitat		Proposed spit stabilization to include fill, vegetation,					
42	Intertidal Marsh and Flats	Restoration	Priority Coastal Project-Harvey	structure; re-establish connection to downstream.	1	Fowl River	218		L
l l		l.,		Proposed salt marsh enhancement and protection would					Currently in
	- 1-	Habitat	Deitseiter Countrie Desirate Countries	include structural stabilization, fill, and appropriate	_	Famil Diver			engineering &
	n/a	Restoration	Priority Coastal Project-Lightcap	vegatation.	- C	Fowl River	218	Initiated	design phase
	Freshwater Wetlands Intertidal Marsh and Flats	Habitat Restoration	Briggity Coastal Broject March	Proposed marsh restoration to include planting, fill, and structure as needed.		Fowl River	218		
44	intertiod Marsh and Flats	nestoration	Priority Coastal Project-Marsh	structure as needed.	-	FOWI KIVEI	218		1
1				Proposed stablization and reinforcement of weak areas					
l l		Habitat		with limited use of structure, sand fill, and vegetation.					
45	Maritime Forest	Restoration	Priority Coastal Project-Memories	Actual length and cost of protection likely lower.		Fowl River	218		
7-5			, coastar roject memories	Proposed spit and salt marsh enhancement and	 		210		Currently in
l l		Habitat		protection would include structural stabilization, fill, and					engineering &
46	n/a	Restoration	Priority Coastal Project-Shrout	appropriate vegetation.		Fowl River	218	Initiated	design phase
	-			Proposed salt marsh enhancement and protection would					Currently in
i I		Habitat		include structural stabilization, fill, and appropriate					engineering &
·									

	1								
ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
				No riparian buffer to the east of stream channel.					
	Freshwater Wetlands	Habitat		Restoration would include planting native hardwood					
4	8 Pine Savanna	Restoration	Priority Headwater Project-BR1	species.		Fowl River	224		
	0 /-	Habitat	Dei-nite Handweten Desiret DD3	Little riparian buffer. Restoration would include additional		Fowl River	22.4		
4	9 n/a	Restoration	Priority Headwater Project-BR2	hardwood species planting.	· ·	rowi River	224		-
				Straight-lined/no riparian buffers. Restoration could likely					
		Habitat		include the installation of in-stream habitat structures &					
5	0 n/a	Restoration	Priority Headwater Project-SR1	re-establishment of the natural riparian buffer.		Fowl River	224		
			,	·					
				Straight-lined/no riparian buffers. Restoration efforts					
				would include creating a more sinuous channel and					
				creating a greater connection to its floodplain. The					
		Habitat		benefits would include increasing flood retention and					
5	1 Streams and Rivers	Restoration	Priority Headwater Project-SR3	wildlife habitat and decreasing nutrient	(Fowl River	224		
				Channel had been straight-lined with very little riparian					
				buffers. Restoration would include creating a meandering					
		Habitat		channel and re-establsihing it with a native hardwood					
5	2 Freshwater Wetlands	Restoration	Priority Headwater Project-SR4	riparian buffer.	(Fowl River	224		
				Straight lined of shannel/					
				Straight-lined of channel/no riparian buffers. Restoration					
		Habitat		would include a newly constructed, sinuous channel. Benefits would include downstream nutrient reduction					
	4 n/a	Restoration	Priority Headwater Project-SR5	and increased flood capacity.	,	Fowl River	224		
	411/4	Restoration	Filolity Headwater Floject-3k3	and increased nood capacity.	1	rowi kivei	224		
				Headwaters that have been altered through					
				channelization and native vegetation removal.					
		Habitat		Restoration would include a newly constructed channel					
5	5 n/a	Restoration	Priority Headwater Project-SR6	and planting the riparian buffer for nutrient reduction.		Fowl River	224		
	.,,=								
				Straight-lined, too wide for drainage area, and					
				streambank erosion from cattle. Restoration efforts					
				would create a new meandering stream with increased					
	Freshwater Wetlands	Habitat		connection to surrounding floodplains and wetlands and					
5	6 Pine Savanna	Restoration	Priority Headwater Project-SR7	added habitat. Cattle exclusion with decrease b	(Fowl River	224		
				Straight-lined channel with no riparian buffer. Restoration	1				
				efforts would include implementation of an offline					
				constructed stormwater wetland in the floodplain of the					
_	,	Habitat	D : 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	stream. Benefits would include effective management			22.4		
5	7 n/a	Restoration	Priority Headwater Project-SWM1	and recharge of stormwater, polluta	(Fowl River	224		
				Headwaters of a chanelized drain that connects to a		1			
				tributary of Muddy Creek. Restoration efforts would		1			
				include implementation of an offline constructed					
		Habitat		stormwater wetland in the floodplain of the stream.		1			
5	8 n/a	Restoration	Priority Headwater Project-SWM3	Benefits would include effective management and r		Fowl River	224		
				Section of Muddy Creek with large rocks armoring the		1			
				south side. Restoration efforts would include					
				implementation of an offline constructed stormwater		1			
		Habitat		wetland in the floodplain of the stream. Benefits would					
5	9 Streams and Rivers	Restoration	Priority Headwater Project-SWM4	include effective management and recharge of st	(Fowl River	224		
						1			
				Straight-lined channel with a highly vegetated streambed					
				connecting to Muddy Creek and surrounding area.		1			
				Restoration efforts would include implementation of an					
		Habitat		offline constructed stormwater wetland in the floodplain					
6	0 Freshwater Wetlands	Restoration	Priority Headwater Project-SWM5	of the stream. Benefits would include	1	Fowl River	224		

ProjectID	HabitatTuno	BrojectT:	DrojectName	Description	Driority! Inhite	Watershedelan	Watershad Dlaub	Status	Notes
ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
				Partially straight-lined channel and surrounding area					
				directly south of Muddy Creek. Restoration efforts would					
				include implementation of an offline constructed					
C1	Frashustar Watlands	Habitat	Driarity Handwater Project CM/MG	stormwater wetland in the floodplain of the stream.	,	Four Diver	224		
61	Freshwater Wetlands	Restoration	Priority Headwater Project-SWM6	Benefits would include effective managemen	1	Fowl River	224		
				Man-made channel connected to an unnamed tributary.					
				Restoration efforts would include implementation of an					
				offline constructed stormwater wetland in the floodplain					
		Habitat		of the stream. Benefits would include effective					
62	n/a	Restoration	Priority Headwater Project-SWM7	management and recharge of stormwater, pol	0	Fowl River	224		
				Site with man-made ditches that lie between Fowl River					
				and associated wetlands. Restoration efforts would					
				include implementation of an offline constructed					
	Freshwater Wetlands	Habitat		stormwater wetland in the floodplain of the stream.					
64	Pine Savanna	Restoration	Priority Headwater Project-SWM9	Benefits would include effective management and	0	Fowl River	224		
				Historic bottomland hardwood wetlands that have been					
				altered over time. Restoration opportunities include					
				plugging drainage ditches and planting bottomland					
		Habitat		hardwood species to restore the area back to its natural					
65	n/a	Restoration	Priority Headwater Project-WR1	conditions, providing increased stormwate	0	Fowl River	224		
				Historic wetland area that is currently being utilized for					
				cattle operations. Restoration would include cattle					
	Longleaf Pine	Habitat		exclusion and planting native hardwood species. Potential to provide additional flood capacity to nearby residential					
66	Pine Savanna	Restoration	Priority Headwater Project-WR2	areas.	1	Fowl River	221		
				Currently farmland in cattle production. Cattle have free					
				access to adjacent streams. Restoration would include					
	Freshwater Wetlands	Habitat		cattle exclusion and planting native hardwood species which would increase water quality. Additional benefits					NRCS funded
67	Pine Savanna	Restoration	Priority Headwater Project-WR3	would be an overall increase in	0	Fowl River	221	Initiated	project
			, , , , , , , , , , , , , , , , , , , ,	Intersection and overpass. Restoration would include	-				, ,,,,,,
				utilization of sedimentation and filtration basins within					
				the cloverleaf that house retension layers, leading to					
60	Longleaf Pine	1-6	Deitseiter Handwerten Denient CM/MA2	water quality improvement through increased retention	0	Faced Division	104		
68	Pine Savanna	Infrastructure	Priority Headwater Project-SWM2	times.	0	Fowl River	194		
				Intersection and overpass. Restoration efforts would					
				include implementation of an offline constructed					
				stormwater wetland in the floodplain of the stream.					
				Benefits would include effective management and					
69	Freshwater Wetlands	Infrastructure	Priority Headwater Project-SWM8	recharge of stormwater, pollutant removal, and habit	0	Fowl River	194		+
70	Pine Savanna Streams and Rivers	Water Quality	Sediment Loading Site	FR1 (Sediment Loading Study)	1	Fowl River	n/a	Complete	
	n/a	Water Quality	Sediment Loading Site	FR3 (Sediment Loading Study)		Fowl River	n/a	Complete	1
72	n/a	Water Quality	Sediment Loading Site	FR7 (Sediment Loading Study)		Fowl River	n/a	Complete	
73	Streams and Rivers	Water Quality	Sediment Loading Site	FR9 (Sediment Loading Study)	1	Fowl River	n/a	Complete	
	Freshwater Wetlands		l		_	If B			
74	Intertidal Marsh and Flats Beaches and Dunes	Habitat Protection	Land Preservation Area	Barber Tracts	1	Wolf Bay	149		-
	Intertidal Marsh and Flats								
	Pine Savanna								1
	Longleaf Pine								
	Freshwater Wetlands	Habitat Protection	Land Preservation Area	Downey Tracts	1	Wolf Bay	149		1
75	Freshwater Wetlanus	Trabitat Frotection		,					
75	rreshwater wetlands	Trabitat Frotestion		Potential Habitat Migration Areas in Halls Mill Creek to					

ProjectID	HabitatType	ProjectType	ProjectName	Description	Driority Habitat	WatershedPLan	WatershedPlanPage	Status	Notes
rojectib	Longleaf Pine	Ртојесттуре	Projectivanie	Description	riiontynabitat	WatersneurLan	watersneurianrage	Status	ivotes
	Pine Savanna								
	Freshwater Wetlands								
77	Intertidal Marsh and Flats	Habitat Protection	Land Preservation Area	Parcel identified for potential land preservation.	1	Dog River	249		
				Halls Mill Creek Properties - 275 acres, Interstate 10 area	_	8			Mobile County in
				(Harrison Tract). One of the largest contiguous					progress of
	Freshwater Wetlands			bottomland hardwood wetland systems remaining in the					purchasing
78	3 Pine Savanna	Habitat Protection	Wetland Preservation Area	greater Dog River Watershed.	1	Dog River	251	Initiated	parcels.
	Longleaf Pine			Halls Mill Creek Properties - 325 acres, Hillcrest Rd. Area.		J			
	Pine Savanna			One of the largest contiguous bottomland hardwood					
	Freshwater Wetlands			wetland systems remaining in the greater Dog River					
79	Streams and Rivers	Habitat Protection	Wetland Preservation Area	Watershed.	1	Dog River	251		
		Habitat							
80	Freshwater Wetlands	Restoration	Riparian Buffer Restoration Area	Halls Mill Creek (Hippie Beach)	1	Dog River	256		
	Longleaf Pine	Habitat							
81	Pine Savanna	Restoration	Riparian Buffer Restoration Area	Halls Mille Creek (Dutchman Woods Dr.)	0	Dog River	256		
		Habitat							
82	n/a	Restoration	Riparian Buffer Restoration Area	Milkhouse Creek (Airport Blvd.)	0	Dog River	256		
		Habitat							
83	n/a	Restoration	Riparian Buffer Restoration Area	Milkhouse Creek (Old Shell Rd.)	0	Dog River	256		
		Habitat							
84	Streams and Rivers	Restoration	Riparian Buffer Restoration Area	Spring Creek	0	Dog River	256		
		Habitat							
85	n/a	Restoration	Stream Restoration	Spring Creek (Cottage Hill Rd.)	0	Dog River	256		
		Habitat							
86	Longleaf Pine	Restoration	Stream Restoration	Spring Creek (Timberland Dr.)	0	Dog River	256		Location
87	Freshwater Wetlands 7 Pine Savanna	Infrastructure	Litter Control Trap	Milkhouse Creek Litter Trap	1	Dog River	235		determined to not be highly impacted. Location was moved.
									Location determined to not be highly impacted. Location was
88	3 n/a	Infrastructure	Litter Control Trap	Spring Creek Litter Trap	0	Dog River	235		moved.
0.0	Longleaf Pine	Recreational Facilities	Recreational Access Point	Timberlane Park-Spring Creek		Dog River	278		
03	Longleaf Pine	racilities	Recreational Access Foint	Tilliberialie Fark-Spring Creek	0	Dog Kivei	270		
	Pine Savanna						1		
	Freshwater Wetlands	Recreational					1	1	
90	Streams and Rivers	Facilities	Recreational Access Point	Vista Ridge Park-Halls Mill Creek	1	Dog River	278		
		Recreational							
91	l n/a	Facilities	Recreational Access Point	Vista Ridge Park - Kayak Launch	0	Dog River	278		
		Recreational			_				
92	2 n/a	Facilities	Stream Restoration	Timberlane Park	0	Dog River	278		
	Freshwater Wetlands	Water Quality	Sediment Loading Site	DR5 (Sediment Loading Study)		Dog River		Complete	
	1 n/a	Water Quality	Sediment Loading Site	DR7 (Sediment Loading Study)		Dog River		Complete	
	Maritime Forest								
99	Freshwater Wetlands	Water Quality	Potential Monitoring Site	Monitoring	0	Dog River	235	<u> </u>	
96	Freshwater Wetlands	Habitat Protection	Land Preservation Area	Parcel identified for potential land preservation.	1	Dog River	256		
	Longleaf Pine								
	Freshwater Wetlands	Habitat					1	1	
97	7 Pine Savanna	Restoration	Restoration Site	Potential Restoration Area	1	Dog River	256		
98	Maritime Forest	Habitat Protection	Land Preservation Area	Parcel identified for potential land preservation.	0	Dog River	256	l	

ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
	Intertidal Marsh and Flats			Potential Habitat Migration Areas in Lower Dog River to					
99	Freshwater Wetlands	Habitat Protection	Habitat Migration Area	allow for managed retreat of critical habitat.	1	Dog River	249	9	
	Pine Savanna								
	Longleaf Pine								
400	Freshwater Wetlands					n n:			
100	Intertidal Marsh and Flats	Habitat Protection	Land Preservation Area	Potential Land Preservation Area	1	Dog River	249	9	NFWF funding in
	Freshwater Wetlands, Maritime								progress to
	Forest, Longleaf Pine, Pine								purchase Perch
101	Savanna, Streams and Rivers	Habitat Protection	Land Preservation Area	Potential Land Preservation Sites	1	Lower Dog River	249	Initiated	Creek parcels.
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								, , , , , , ,
	Pine Savanna			Rabbit Creek Properties, 175 acres. One of the largest					
	Freshwater Wetlands			contiguous bottomland hardwood wetland systems					
102	Intertidal Marsh and Flats		Wetland Preservation Area	remaining in the greater Dog River Watershed.	1	Dog River	251		
	Pine Savanna	Habitat							
103	Freshwater Wetlands	Restoration	Riparian Buffer Restoration Area	Alligator Bayou	0	Dog River	256	5	
	Longleaf Pine								
104	Freshwater Wetlands Pine Savanna	Habitat Restoration	Stream Restoration	Unnamed Tributary to Pattleanaka Payay	0	Dog Biyor	256		
104	Pille Savailla	Restoration	Stream Restoration	Unnamed Tributary to Rattlesnake Bayou	-	Dog River	250		Location
									determined to not
									be highly
									impacted.
									Location was
105	Freshwater Wetlands	Infrastructure	Litter Control Trap	Rabbit Creek Litter Trap	0	Dog River	235	5	moved.
									Location
									determined to not
									be highly
									impacted.
		_							Location was
106	n/a	Infrastructure	Litter Control Trap	Rattlesnake Bayou Litter Trap	0	Dog River	235	i e	moved.
107	12/2	Recreational Facilities	Recreational Access Point	Bay Shore Park - Kayak Launch	0	Dog Biyor	278	,	
107	n/a	Recreational	Recreational Access Point	Bay Shore Park - Kayak Laurich	0	Dog River	2/6		
108	n/a	Facilities	Recreational Access Point	El Rochon - Kayak Launch	0	Dog River	278	2	
100	Freshwater Wetlands	Recreational	Ned Cational Access Form	Hollingers Island Park-Unnamed tributary to lower Dog	<u> </u>	DOB NIVE	270	1	
110	Intertidal Marsh and Flats	Facilities	Recreational Access Point	River	1	Dog River	278	3	
		Recreational				-0			
111	Freshwater Wetlands	Facilities	Recreational Access Point	Kayak Launch	0	Dog River	278	3	
		Recreational							
	Intertidal Marsh and Flats	Facilities	Recreational Access Point	Sawgrass Landing - Kayak Launch		Dog River	278		
113	n/a	Water Quality	Potential Monitoring Site	Monitoring	0	Dog River	278	3	
	Intertidal Marsh and Flats								
114	Freshwater Wetlands	Habitat Protection	Land Preservation Area	Parcel identified for potential land preservation.	1	Dog River	249	9	
	Freshwater Wetlands			Acquisition of 200 cores of high annulative study leaves					
115	Intertidal Marsh and Flats Pine Savanna	Habitat Protection	Acquisition	Acquisition of 200 acres of high quality tidal wetlands in Lower Fish River/Weeks Bay	4	Weeks Bay	11-1		
1115	Intertidal Marsh and Flats	nabitat Frotection	Acquisition	LOWER FISH MIVEL/ WEEKS Day	1	WEEKS Day	11-1	1	+
	Longleaf Pine								
116	Freshwater Wetlands	Habitat Protection	AL Portal Project #129	AL Portal Project-Harrod Tract Addition to the WB*	1	Weeks Bay	11-2	2	
	Freshwater Wetlands		<u> </u>			, , , , , , , , , , , , , , , , , , ,		1	
117	Maritime Forest	Habitat Protection	AL Portal Project #336	Weeks Bay East Gateway Tract	1	Weeks Bay	11-2	2	
		Habitat							
118	Intertidal Marsh and Flats	Restoration	Marsh Restoration	Page 135 of Draft Initial Funding Priorities List	0	Weeks Bay	11-2	2	
	Freshwater Wetlands								
	Longleaf Pine	Habitat	L						
119	Pine Savanna	Restoration	Riparian Buffer Restoration Area	76 acre restoration in Green Branch	1	Weeks Bay	11-2	4	
120	Intertidal March and Flats	Habitat	Safa Harbar March Bastaration	NOAA NRDA Bortol	_	Mooks Boy	44.5	,	
120	Intertidal Marsh and Flats	Restoration	Safe Harbor Marsh Restoration	NOAA NRDA Portal		Weeks Bay	11-2	<u> </u>	

	Ι	1				1			
ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
424		Habitat	s. s	Restoration of an unnamed trib to Fish River near Etta					
	Freshwater Wetlands	Restoration	Stream Restoration	Smith Rd. Project would stabilize 200 LF of streambank		Weeks Bay	11-1		
122	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Dry Branch Road #2	0	Weeks Bay	11-1		
122	Longleaf Pine Freshwater Wetlands	Infrastructura	Unpowed Dood	Assess/Pave Dirt Roads-Etta Smith Road	0	Weeks Day	11.1		
123	Pine Savanna	Infrastructure	Unpaved Road	ASSESS/Pave Dirt Roads-Etta Smith Road	0	Weeks Bay	11-1		
124	Freshwater Wetlands	Infrastruatura	Unpaved Road	Assass/Davis Dist Deads King Dead	1	Weeks Bay	11-1		
	Longleaf Pine	Infrastructure Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-King Road Assess/Pave Dirt Roads-Miller Lane		Weeks Bay	11-1		
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Niller Lane Assess/Pave Dirt Roads-Pierce Road		Weeks Bay	11-1		
	Longleaf Pine	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Pierce Road Assess/Pave Dirt Roads-Unpaved Road		Weeks Bay	11-1		
127	Longlear Pine	mirastructure	Predicting Landscape-Level Impacts to Instream	Assess/ Pave Dirt Roads-Offpaved Road	0	Weeks bay	11-1		
128	n/a	Planning	Se*	NOAA Project Portal #13072	0	Weeks Bay	11-1		
120	Freshwater Wetlands	riallilling	Je	NOAA FTOJECT FOITAI #13072	-	Weeks bay	11-1		
120	Pine Savanna	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Turkey Branc*	1	Weeks Bay	11-1		
123	Freshwater Wetlands	riallilling	raigeted Subwatershed Bacteria Study	raigeted Subwatershed Bacteria Study-Turkey Branc	1	Weeks bay	11-1		
130	Pine Savanna	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Waterhole Br*	1	Weeks Bay	11-1		
150	Freshwater Wetlands	i idiiiiiig	Targeted Subwatershed Bacteria Study	raigeted subwatershed bacteria study waterhole bi	1	VVCCR3 Buy	11.1		
121	Pine Savanna	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Turkey Branc*	0	Weeks Bay	11-1		
131	Freshwater Wetlands	riaiiiiiig	raigeted Subwatershed Bacteria Study	raigeted Subwatershed Nutrient Study-Turkey Branc		Weeks bay	11-1		
122	Pine Savanna	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Upper Green *	0	Weeks Bay	11-1		
132	r nie Savanna	Recreational	raigeted Subwatershed Bacteria Study	raigeted Subwatershed Nutrient Study-Opper Green		Weeks bay	11-1		
12/	n/a	Facilities	NOAA Project Portal #11602	Fish River and Weeks Bay Boat Launches and Parking	0	Weeks Bay	11-1		
	n/a	Water Quality	AL Portal Project #267	New Stream-Gaging Station on Fish River at CR32		Weeks Bay	11-1		
	Freshwater Wetlands	Water Quality Water Quality	Sediment Loading Site	FR12 (Sediment Loading Study)		Weeks Bay	11-1		
	Freshwater Wetlands	Water Quality	Sediment Loading Site	FR16 (Sediment Loading Study)		Weeks Bay	11-1		
	Freshwater Wetlands	Water Quality	Sediment Loading Site	FR17 (Sediment Loading Study)		Weeks Bay	11-1		
130	Intertidal Marsh and Flats	Water Quality	Scament Loading Site	Acquisition of 100 acres of high quality tidal wetlands in	<u> </u>	Weeks buy	11.1		
139	Freshwater Wetlands	Habitat Protection	Acquisition	Magnolia River	1	Weeks Bay	11-1		
133	Freshwater Wetlands	Trabitat Frotection	Acquisition	ividgitotia ritvei	<u> </u>	Weeks buy	11.1		
140	Maritime Forest	Habitat Protection	Magnolia River North Gateway Tract	AL Portal Project #337	0	Weeks Bay	11-2		
2.0	Triancine Forest	Trabitat Frotestion	Magnolia River Preservation Project – Holmes	712 T O T COL 1 T O J C C 1 1 3 3 7	1	Treeks Buy			
141	Maritime Forest	Habitat Protection	=	AL Portal Project #293	1	Weeks Bay	11-2		
	Freshwater Wetlands	Habitat		712 T O T COL 1 T O J C C T 1 2 3 3	-	Treeks Buy			
142	Pine Savanna	Restoration	Magnolia River Bank Erosion - 3,300 ft E CR49	Restoration of a site on Magnolia River	1	Weeks Bay	11-2		
	i ine savanna	Habitat	inagnona niver bank Erosion - Sjood it E ek is	Nesteration of a size on magnetia time.	-	Treeks Buy			
143	n/a	Restoration	Magnolia Springs Habitat Restoration	NOAA Project Portal #2112	١ ،	Weeks Bay	11-2		
1.0	Longleaf Pine	nestoration	magnona springs mastat nestoration	TO THE TOJECT OF CHINE	<u> </u>	Treeks Buy			
	Pine Savanna	Habitat							
144	Freshwater Wetlands	Restoration	Riparian Buffer Restoration Area	163 acre restoration in Upper Weeks Creek	1	Weeks Bay	11-1		
	Freshwater Wetlands	Habitat	F	Telegraphic Control of	†				1
145	Longleaf Pine	Restoration	Riparian Buffer Restoration Area	36 acre restoration in Upper Eslava Branch	0	Weeks Bay	11-1		
1.0	Freshwater Wetlands		P		†				
146	Pine Savanna	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Barnard Road	n	Weeks Bay	11-1		
140	Longleaf Pine		- Proventier	,	Ť				
	Pine Savanna								
147	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Bay Road	0	Weeks Bay	11-1		
247	Longleaf Pine		- p. 2-11-11	,	 				1
148	Pine Savanna	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Charolais Road	0	Weeks Bay	11-1		
	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Davis Road #2		Weeks Bay	11-1		
	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Eslava Drive		Weeks Bay	11-1		
	Longleaf Pine	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-George Younce Road		Weeks Bay	11-1		
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Hartung Road		Weeks Bay	11-1		
101	Longleaf Pine		- p		<u> </u>				
	Pine Savanna					1			
153	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Irene Drive	1	Weeks Bay	11-1		
	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-John Bauer Road		Weeks Bay	11-1		1
			Unpaved Road	Assess/Pave Dirt Roads-Junniper Street North		Weeks Bay	11-1		1
	ln/a	Intrastructure							1
155	n/a Longleaf Pine	Infrastructure	Onpaved Road	rissessy, are sire risads sample, screening	-				
155		Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Lauber Lane		Weeks Bay	11-1		

rojectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
158	Streams and Rivers	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Norris Lane North	0	Weeks Bay	11-1		
159	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Sellers Lane	0	Weeks Bay	11-1		
160	Longleaf Pine	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Unpaved Road	0	Weeks Bay	11-1		
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Woerner Road		Weeks Bay	11-1		
	Pine Savanna					,			
162	Freshwater Wetlands	Infrastructure	Unpaved Road	Priority Road Paving-Lipscomb Road	0	Weeks Bay	11-1		
102	Longleaf Pine	mmastractare	onpared node	Thomas raving Exposure read		Weeks Buy			
163	Freshwater Wetlands	Infrastructure	Unpaved Road	Priority Road Paving-Mannich Lane	0	Weeks Bay	11-1		
	Streams and Rivers	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Mannich Land		Weeks Bay	11-1		
	Freshwater Wetlands	Infrastructure	Unpaved Road	Priority Road Paving-Norris Lane		Weeks Bay	11-1		
166		Infrastructure	Unpaved Road	Priority Road Paving-Norma Road		Weeks Bay	11-1		
100		IIIIrastructure	Onpaved Road	Priority Road Paving-Silerman Road	U	Weeks bay	11-1		
	Freshwater Wetlands								
	Intertidal Marsh and Flats								
	Longleaf Pine								
167	Pine Savanna	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Eslava Branc*	1	Weeks Bay	11-1		
	Pine Savanna								
168	Freshwater Wetlands	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Schoolhouse *	1	Weeks Bay	11-1		
	Longleaf Pine								
	Pine Savanna				1				
169	Freshwater Wetlands	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Weeks Creek *	1	Weeks Bay	11-1		
	Longleaf Pine								
	Freshwater Wetlands								
	Pine Savanna								
170	Intertidal Marsh and Flats	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Magnolia Riv*	1	Weeks Bay	11-1		
	Freshwater Wetlands			18					
171	Pine Savanna	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Upper School*	0	Weeks Bay	11-1		
	Pine Savanna	Water Quality	Sediment Loading Site	MR2 (Sediment Loading Study)		Weeks Bay	11-1		1
	Freshwater Wetlands	Water Quality	Sediment Loading Site	MR3 (Sediment Loading Study)		Weeks Bay	11-1		
	Freshwater Wetlands	Water Quality Water Quality	Sediment Loading Site Sediment Loading Site			Weeks Bay	11-1		
1/4		water Quality	Sediment Loading Site	MR4 (Sediment Loading Study)	U	weeks Bay	11-1		
	Freshwater Wetlands	l		Acquisition of 100 acres of high quality tidal wetlands in	_				
1/5	Intertidal Marsh and Flats	Habitat Protection	Acquisition	Magnolia River	1	Weeks Bay	11-1		
	Pine Savanna								
	Freshwater Wetlands	Habitat							
	Longleaf Pine	Restoration	Riparian Buffer Restoration Area	78 acre restoration in Baker Branch		Weeks Bay	11-1		
	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Barnard Road		Weeks Bay	11-1		
178	Longleaf Pine	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Baughman Road	0	Weeks Bay	11-1		
	Longleaf Pine								
179	Pine Savanna	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Blueberry Lane	0	Weeks Bay	11-1		
180	Longleaf Pine	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Bohemian Hall Road	0	Weeks Bay	11-1		
	Pine Savanna								
181	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Davis Road	0	Weeks Bay	11-1		
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Dick Higbee Road		Weeks Bay	11-1		İ
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Dry Branch Road #1		Weeks Bay	11-1		İ
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Harris Lane		Weeks Bay	11-1		1
	Longleaf Pine	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Holston Lane South		Weeks Bay	11-1		1
	Longleaf Pine	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Holston Lane Assess/Pave Dirt Roads-McCarron Lane		Weeks Bay	11-1		1
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Newman Road		Weeks Bay	11-1		1
107	Longleaf Pine	iiii asti ucture	Onpuved Noad	rasess/1 ave blit hoads-newillall hoad	1	**CCA3 Day	11-1		1
100	Pine Savanna	Infractructura	Unpaved Road	Assess/Pave Dirt Roads-Sedlack Road		Weeks Bay	11-1		
188		Infrastructure Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Sediack Road Assess/Pave Dirt Roads-Snarr Road		Weeks Bay	11-1		1
189		mmastructure	Olipaveu NOdu	MSSESS/ FAVE DITT KOAUS-SIIAIT KOAU	<u></u>	vveeks Ddy	11-1		<u> </u>
	Longleaf Pine		l	/9 9:49 4 6 4:5 4	_				
190	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-South Boulevard	0	Weeks Bay	11-1		ļ
	Longleaf Pine				I				
	Pine Savanna				I				
191	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Ted Lysek Road	0	Weeks Bay	11-1		<u> </u>
	Pine Savanna								
192	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Unpaved Road	0	Weeks Bay	11-1		
	Longleaf Pine			·					
	Pine Savanna	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Woodhaven Dairy Road East	_	Weeks Bay	11-1		1

					1	I			1
ProjectID		ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
	Longleaf Pine								
	Pine Savanna								
194		Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Woodpecker Road	0	Weeks Bay	11-1		
	Longleaf Pine								
195	Freshwater Wetlands	Infrastructure	Unpaved Road	Priority Road Paving-Paul Cleverdon Road - Pave	0	Weeks Bay	11-1		
400	,		Pre-restoration Planning for Baker Branch - a						
196	n/a P	Planning	Tri*	AL Portal Project #417	0	Weeks Bay	11-1		
107	Dina Cayanna	Dlanning	Targeted Cuburatorshed Destaria Study	Targeted Cuburatorshed Destaria Study Daker Brench*		Maaks Day	11-1		
197	Pine Savanna P	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Baker Branch*	U	Weeks Bay	11-1		
100	Freshwater Wetlands P	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Pensacola Br*	١ ,	Weeks Bay	11-1		
150	Longleaf Pine	riaiiiiiig	Targeted Subwatershed Bacteria Study	largeted Subwatershed Bacteria Study-Ferisacola Bi	-	Weeks bay	11-1		1
	Pine Savanna								
	Freshwater Wetlands								
199		Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Polecat Cree*	1	Weeks Bay	11-1		
133	Longleaf Pine		rangeted submatersired bacteria study	Tangeted Sabratershed Sactoria Stady 1 Stead Cree	-	Treeks Buy			
200		Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Upper Baker *	0	Weeks Bay	11-1		
		. 0				,			1
201	Freshwater Wetlands	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Upper Pensac*	0	Weeks Bay	11-1		1
	Longleaf Pine			, , , , , , , , , , , , , , , , , , , ,	1	/			
	Pine Savanna				1				ĺ
	Freshwater Wetlands								
202	Streams and Rivers	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Upper Poleca*	1	Weeks Bay	11-1		
203	Freshwater Wetlands V	Water Quality	Sediment Loading Site	FR13 (Sediment Loading Study)	0	Weeks Bay	11-1		
204	Freshwater Wetlands V	Water Quality	Sediment Loading Site	FR8 (Sediment Loading Study)	0	Weeks Bay	11-1		
	Freshwater Wetlands								
	Intertidal Marsh and Flats								
205	Maritime Forest	Habitat Protection	Oyster Bay Conservation	Potential Conservation Area	1	Bon Secour	7-5	Initiated	
	Freshwater Wetlands								
		Habitat							
206		Restoration	Oyster Bay Conservation	Living Shoreline	1	Bon Secour	7-5		
	Freshwater Wetlands								
		Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Cabinet Shop Road		Weeks Bay	7-5		
208		Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Devine Road	0	Weeks Bay	7-5		
	Freshwater Wetlands	_			_				
209		Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Hinote Glass Road	0	Weeks Bay	7-5		
240	Freshwater Wetlands								
210		Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Upper Perone*	0	Weeks Bay	7-5		
211	Longleaf Pine	Infrastructura	Hanayad Daad	Assass/Dava Dirt Boods Wandhadkar Bood		Maaks Day	7.5		
211	Freshwater Wetlands Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Woodpecker Road	-	Weeks Bay	7-5		
		Habitat							
212		Restoration	Headwater Restoration	Wolf Bay Headwater Restoration	1	Wolf Bay	7-5		1
212	Freshwater Wetlands		Treatment restoration	Tron bay neadwater nestoration	-	buy	7-5		
		Habitat							ĺ
213	_	Restoration	Potential restoration/enhancement site	Wolf Bay potential restoration, enhancement	1	Wolf Bay	7-5		1
	Freshwater Wetlands		,	, , , , , , , , , , , , , , , , , , , ,	1	,	, 3		1
	Maritime Forest				1				ĺ
214	Intertidal Marsh and Flats	Habitat Protection	Skunk Bayou Conservation	Potential Conservation Area	1	Bon Secour	7-5		
		Recreational							
215	Pine Savanna F	Facilities	Trail	Current Trail Project	1	Three Mile Creek	184		<u> </u>
	Freshwater Wetlands	Recreational							
216	Pine Savanna F	Facilities	Trail	MAWSS Landscaped	1	Three Mile Creek	184		
		Recreational							
217		Facilities	Trail	MAWSS Wooded	1	Three Mile Creek	184		
		Recreational							
218		Facilities	Trail	Park	1	Three Mile Creek	184		
		Recreational			1				ĺ
219		Facilities	Trail	Private Property Commercial	0	Three Mile Creek	184		ļ
		Recreational			1				1
220	Pine Savanna F	Facilities	Trail	Private Property Hospital	1	Three Mile Creek	184		1

ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
	Freshwater Wetlands	Recreational							
221	Pine Savanna	Facilities	Trail	Private Property Residential	0	Three Mile Creek	184		
ŀ	Freshwater Wetlands	Recreational							
222	Pine Savanna	Facilities	Trail	Side Path	1	Three Mile Creek	184		
	Freshwater Wetlands	Recreational		L	_				
	Pine Savanna	Facilities	Trail	Wooded		Three Mile Creek	184		
	Longleaf Pine	Water Quality	Langan Park Lake-Dredging	Water Quality		Three Mile Creek	198 198		
	Freshwater Wetlands	Water Quality	One Mile Creek Marine Debris	Stream Clean Up		Three Mile Creek			
	Freshwater Wetlands	Water Quality	Sewer Trunk Line Stormwater Attenuation Tanks (SWAT)	Trunk Line-North of Mobile St. to Stanton-St. Ste*		Three Mile Creek	198 198		+
227 228		Water Quality		Stormwater holding tanks		Three Mile Creek	198		
228	nya	Water Quality	Stream Restoration	Stream Restoration	U	Three Mile Creek	198		Commonth of
ŀ									Currently in
229	2/2	Water Quality	Stream Restoration	12-Mile Creek-Dickens Ferry to Foreman Road		Three Mile Creek	100	Initiated	engineering and design phase
230		Water Quality	Stream Restoration	12-Mile Creek-East Drive to University		Three Mile Creek	198	iiiilateu	uesigii piiase
	Longleaf Pine	Water Quality	Stream Restoration	12-Mile Creek-Hydrologic Model		Three Mile Creek		Complete	+
	Longleaf Pine	Water Quality	Stream Restoration	12-Mile Creek-University to Langan Park Lake		Three Mile Creek	198		
232	Freshwater Wetlands	water quanty	Stream Restoration	12-Wille Creek-Offiversity to Langari Fark Lake		THEE WINE CLEEK	150		
າວວ	Pine Savanna	Water Quality	Stream Restoration	Toulmins Spring Branch	_	Three Mile Creek	198		
233	Freshwater Wetlands	water quality	Stream Nestoration	Tourning Spring Branch	 	THE WHIE CIEEK	190		+
224	Streams and Rivers	Water Quality	Stream Restoration	Toulmins Spring Headwaters to use	1	Three Mile Creek	198		1
234	Freshwater Wetlands	ucci quanty	St. Ca Nestoration	Tourness opining reconnected to use	1	cc ivilic creek	150		1
ŀ	Pine Savanna			Potential Habitat Migration Areas in Upper Dog River to					
235	Intertidal Marsh and Flats	Habitat Protection	Habitat Migration Area	allow for managed retreat of critical habitat.	1	Dog River	249		
233	Freshwater Wetlands	Tidbitat i Totection	Traditat Wilgration Area	anow for managed retreat of critical habitat.	-	DOB HIVE	243		+
ŀ	Pine Savanna								
236	Intertidal Marsh and Flats	Habitat Protection	Land Preservation Area	Potential Land Preservation Area	0	Dog River	249		
230	intertion ividian and riats	Trabitat Frotection	Land Freservation Area	rotential Land Freservation Area		Dog River	243		
ŀ	Freshwater Wetlands, Maritime								
ŀ	Forest, Longleaf Pine, Pine								
237	Savanna, Streams and Rivers	Habitat Protection	Land Preservation Area	Potential Land Preservation Area	1	Dog River	249		
207	Freshwater Wetlands	Tidbitat Trotection	zana i reservation i il ca	Totalida Edila Freservation Area	-	508 111101	2.13		
ŀ	Pine Savanna			Potential Habitat Migration Areas in Upper Dog River to					
238	Intertidal Marsh and Flats	Habitat Protection	Marsh Migration Area	allow for managed retreat of critical habitat.	1	Dog River	249		
	Pine Savanna				_	8			
ŀ	Longleaf Pine	Habitat							
239	Freshwater Wetlands	Restoration	Restoration Site	Potential Restoration Area	1	Dog River	256		
		Habitat				-0 -			
240	Streams and Rivers	Restoration	Riparian Buffer Restoration Area	East Bolton Branch (McVay Dr.)	0	Dog River	256		
		Habitat	·	` ' '					
241	n/a	Restoration	Riparian Buffer Restoration Area	East Eslava Creek (Eagle Dr.)	0	Dog River	256		
	Pine Savanna	Habitat				_			
242	Freshwater Wetlands	Restoration	Riparian Buffer Restoration Area	Montilimar Canal (Heron Lakes)	0	Dog River	256		
	Longleaf Pine	Habitat							
243	Freshwater Wetlands	Restoration	Riparian Buffer Restoration Area	Moore Creek (Riviere Du Chien Golf Course)	1	Dog River	256		<u>1</u>
		Habitat							
244	Pine Savanna	Restoration	Riparian Buffer Restoration Area	Spencer Branch	0	Dog River	256		<u>1</u>
	Longleaf Pine	Habitat							
245	Pine Savanna	Restoration	Riparian Buffer Restoration Area	West Bolton Branch (WP Davidson High School)	0	Dog River	256		<u> </u>
		Habitat					1		1
246	Streams and Rivers	Restoration	Riparian Buffer Restoration Area	West Eslava Creek (Country Club)	0	Dog River	256		
	Longleaf Pine	Habitat							
	Pine Savanna	Restoration	Riparian Buffer Restoration Area	West Eslava Creek (Spring Hill)		Dog River	256		1
248	n/a	Infrastructure	LID	LID-Bioretention-Moore Creek Biorentention Basin	0	Dog River	245		
ŀ					1				
	Freshwater Wetlands	Infrastructure	LID	LID-Constructed Wetland-East Eslava Constructed S*		Dog River	245		
	Freshwater Wetlands	Infrastructure	Litter Control Trap	Bolton Branch/Montlimar Canal litter trap		Dog River		Complete	
251	n/a	Infrastructure	Litter Control Trap	Moore Creek Litter Trap	0	Dog River	235	Complete	1
ŀ		Recreational			1		1		1
252	Freshwater Wetlands	Facilities	Recreational Access Point	Fulton Ridge Park - Kayak Launch	1	Dog River	235		1

						I			
ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
252	Cture and Divers	Recreational	Daniel Anna Daint	Wielesses Beele		D Di	225		
253	Streams and Rivers	Facilities Recreational	Recreational Access Point	Highcrest Park	,	Dog River	235		
254	Streams and Rivers	Facilities	Recreational Access Point	Highcrest Park-Spencer Branch		Dog River	235		
		Recreational							
255	n/a	Facilities	Recreational Access Point	Kayak Launch	0	Dog River	235		
		Recreational							
256	Maritime Forest	Facilities	Recreational Access Point	Moore Creek at Halls Mill Road - Kayak Launch	(Dog River	278		
	Longleaf Pine	Recreational							
257	Pine Savanna	Facilities	Recreational Access Point	Moore Creek at Lees Lane - Kayak Launch	(Dog River	278		
250	Longleaf Pine Pine Savanna	Recreational Facilities	Recreational Access Point	San Souci Park-Eslava Creek		Dog River	278		
258	Pille Savalilla	Recreational	Recreational Access Point	Sall Souci Park-Eslava Creek		Dog River	2/6		
259	n/a	Facilities	Recreational Access Point	San Souci Park - Kayak Launch		Dog River	278		
200	.,, c	Recreational	ned editional recess round	Sun Soudi Fark Rayak Edulien	`	Dog mic.	270		
260	Freshwater Wetlands	Facilities	Recreational Access Point	Scenis Yacht Basin - Kayak Launch		Dog River	278		
261	Freshwater Wetlands	Water Quality	Sediment Loading Site	DR0 (Sediment Loading Study)	(Dog River	278		
262	Streams and Rivers	Water Quality	Sediment Loading Site	DR2 (Sediment Loading Study)	(Dog River	278	Complete	
263	Freshwater Wetlands	Water Quality	Potential Monitoring Site	Monitoring	1	Dog River	278	Complete	
		Recreational							2-sites currently
264	Maritime Forest	Facilities	Recreational Access Point	Perch Creek-kayak launch	(Dog River	278	Complete	open
265	Freshwater Wetlands	Habitat				s s:	270		
265	Pine Savanna	Restoration	Restoration Site	Potential Restoration Area	1	Dog River	278		
266	Longleaf Pine	Habitat Restoration	AL Portal Project #73	Fish River Watershed Restoration Project		Weeks Bay	11-1		
200	Freshwater Wetlands	Restoration	AL FORtal Floject #75	rish river watershed restoration Project		Weeks bay	11-1		
	Pine Savanna	Habitat							
267	Longleaf Pine	Restoration	Riparian Buffer Restoration Area	60 acre restoration in Corn Branch	1	. Weeks Bay	11-1		
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Burris Road		Weeks Bay	11-1		
269	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Corte Road	(Weeks Bay	11-1		
	Longleaf Pine								
	Pine Savanna								
	Freshwater Wetlands	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Dick Higbee Road		Weeks Bay	11-1		
271	Pine Savanna	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Harris Lane	(Weeks Bay	11-1		
272	Longleaf Pine			/2 2:12 0 6:1					
2/2	Pine Savanna Longleaf Pine	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Oak Street		Weeks Bay	11-1		
272	Pine Savanna	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Unpaved Road		Weeks Bay	11-1		
2/3	Freshwater Wetlands	iiiiiastructure	Onpaved Road	Assess/ Fave Dift Roads-Offpaved Road		Weeks bay	11-1		
	Longleaf Pine								
274	Pine Savanna	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Caney Branch*	1	Weeks Bay	11-1		
	Freshwater Wetlands								
	Longleaf Pine								
275	Pine Savanna	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Corn Branch *	1	Weeks Bay	11-1		
	Freshwater Wetlands								
276	Longleaf Pine			T					
2/6	Pine Savanna Freshwater Wetlands	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Perone Branc*		Weeks Bay	11-1		
277	Longleaf Pine	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Bacteria Study-Threemile Cr*	1	. Weeks Bay	11-1		
2//	Longleaf Pine	riaiiiiig	raigeted Subwatershed Bacteria Study	raigeted Subwatershed Bacteria Study-Threemile Ci		Weeks bay	11-1		
	Pine Savanna								
278	Freshwater Wetlands	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Upper Caney *		Weeks Bay	11-1		
	Longleaf Pine	Ĭ	1	,		· ·			
	Pine Savanna								
	Freshwater Wetlands	Planning	Targeted Subwatershed Bacteria Study	Targeted Subwatershed Nutrient Study-Upper Corn B*		Weeks Bay	11-1		
	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Dixon Road		Weeks Bay	11-1		
281	n/a	Infrastructure	Unpaved Road	Assess/Pave Dirt Roads-Peturis Road	(Weeks Bay	11-1		<u> </u>
	Freshwater Wetlands								
	Maritime Forest								
202	Intertidal Marsh and Flats Pine Savanna	Habitat Protocti-	n Land Preservation Area	Potential Land Preservation Area		West Fowl River	239		
282	FINE SAVAIIIIA	navitat Protectio	iritanu Preservation Area	Fotential Land Preservation Area	1	vvest rowl kiver	239		L

ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage S	Status	Notes
283	Intertidal Marsh and Flats	Habitat Protection	Land Preservation Area	Potential Habitat Protection Areas	1	West Fowl River	239		
203	Maritime Forest	Habitat Frotection	Land Freservation Area	roteitiai Habitat Protection Areas	-	West rowritiver	233		
	Pine Savanna								
284	Freshwater Wetlands	Habitat Protection	Wetland Preservation Area	Lower West Fowl River Properties	1	West Fowl River	239		
201	Maritime Forest	Trabitat Frotestion	Vectoria i reservation i rea	zower west rom mer rroperties		West rown inver	255		
	Pine Savanna								
285	Freshwater Wetlands	Habitat Protection	Wetland Preservation Area	Upper Bayou Coden Property	1	West Fowl River	239		
203	Maritime Forest	Trabitat Frotestion	Vectoria i reservation i rea	opper sayou couem roperty	-	West rown inver	255		
	Pine Savanna								
286	Freshwater Wetlands	Habitat Protection	Wetland Preservation Area	Upper Bayou Como	1	West Fowl River	239		
200	rresilvater trettarias	Habitat	Treduita i reservation i nea	opper bayou come		West rown inver	255		
287	Streams and Rivers	Restoration	Conservation Buffer Area	CB-1	_	West Fowl River	202		
207	Streams and myers	Habitat	conservation surrei virea	65.1		West rown inver	202		
288	Maritime Forest	Restoration	Conservation Buffer Area	CB-2		West Fowl River	202		
200	martine rerest	Habitat	conservation surrei virea	00 2		West rown inver	202		
289	Maritime Forest	Restoration	Conservation Buffer Area	CB-3	0	West Fowl River	202		
		Habitat					202		1
290	Maritime Forest	Restoration	Conservation Buffer Area	CB-4	1	West Fowl River	202		
230	Maritime Forest		The state of Sanci Airca			250 . 500 . 10001	202		1
	Freshwater Wetlands	Habitat							
291	Tresimater Trettanas	Restoration	Conservation Buffer Area	CB-5	1	West Fowl River	202		
		Habitat	conservation surrer virea		-	West rown inver	202		
292	Maritime Forest	Restoration	Conservation Buffer Area	CB-6	1	West Fowl River	202		
	Streams and Rivers	Infrastructure	Unpaved Road	Bayou St		West Fowl River	208		
	Maritime Forest								
294	Freshwater Wetlands	Infrastructure	Unpaved Road	Callahan Rd		West Fowl River	208		
	Maritime Forest	astracture	onputed node	Control No	- i	West rown inver	200		
295	Freshwater Wetlands	Infrastructure	Unpaved Road	Clark Rd	1	West Fowl River	208		
	Maritime Forest	Infrastructure	Unpaved Road	Henry Johnson		West Fowl River	208		
250	Freshwater Wetlands	astracture	onpureu nodu	inciny somison	-	West rown inver	200		
297	Maritime Forest	Infrastructure	Unpaved Road	Johnson Rd	1	West Fowl River	208		
	Maritime Forest								
298	Pine Savanna	Infrastructure	Unpaved Road	Lossing Rd	1	West Fowl River	208		
	Maritime Forest	Infrastructure	Unpaved Road	McGraw Blvd		West Fowl River	208		
	Freshwater Wetlands								
300	Pine Savanna	Infrastructure	Unpaved Road	Rock Rd	0	West Fowl River	208		
	Maritime Forest	Infrastructure	Unpaved Road	St Michael St		West Fowl River	208		
	Maritime Forest	Infrastructure	Unpaved Road	Williams Road		West Fowl River	208		
	Maritime Forest								
303	Intertidal Marsh and Flats	Infrastructure	Unpaved Road	Zirlott Road	1	West Fowl River	208		
	Freshwater Wetlands, Pine		•						
	Savanna, Longleaf Pine, Streams								
304	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater Tributary to Hammock Creek	1	Wolf Bay	132		
	Freshwater Wetlands, Pine			,		,			1
	Savanna, Longleaf Pine, Streams								
305	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater Tributary to Hammock Creek	0	Wolf Bay	132		
	Freshwater Wetlands, Pine			·					1
	Savanna, Longleaf Pine, Streams								
306	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater of Sandy Creek	1	Wolf Bay	132		
	Freshwater Wetlands, Pine								1
	Savanna, Longleaf Pine, Streams								
307	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater of Wolf Creek	O	Wolf Bay	132		
	Freshwater Wetlands, Pine								
	Savanna, Longleaf Pine, Streams								
308	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater of Sandy Creek	0	Wolf Bay	132		
	Freshwater Wetlands, Pine			·					
	Savanna, Longleaf Pine, Streams								
300	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater Tributary to Miflin Creek	1 0	Wolf Bay	132		1

ProjectID	HabitatType	ProjectType	ProjectName	Description	PriorityHabitat	WatershedPLan	WatershedPlanPage	Status	Notes
	Freshwater Wetlands, Pine								
	Savanna, Longleaf Pine, Streams								
310	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater to Miflin Creek	C	Wolf Bay	132		
	Freshwater Wetlands, Pine								
	Savanna, Longleaf Pine, Streams								
311	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater Tributary to Miflin Creek	C	Wolf Bay	132		
	Freshwater Wetlands, Pine								
	Savanna, Longleaf Pine, Streams								
312	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater Tributary to Miflin Creek	C	Wolf Bay	132		
	Freshwater Wetlands, Pine								
	Savanna, Longleaf Pine, Streams								
313	and Rivers	Habitat Protection	Conservation Buffer Area	Headwater to Hammock Creek		Wolf Bay	132		
	Freshwater Wetlands, Pine						-		
	Savanna, Longleaf Pine, Streams								
314	and Rivers	Infrastructure	Unpaved Road	Woerner Road		Wolf Bay	135		
	n/a	Infrastructure	Unpaved Road	Roscoe Road		Wolf Bay	135	1	+
313	Freshwater Wetlands, Longleaf	astracture			+ - '		155	 	+
	Pine, Pine Savanna, Streams and	ĺ			1	1			
216	Rivers	Infrastructura	Unpaved Road	Kleinschmidt Road	1 .	Wolf Bay	135		
316		Infrastructure	Olipaveu NOdu	Nemschiller Rodu	+	VVUII Ddy	135	-	+
	Freshwater Wetlands, Pine	ĺ			1	1			
	Savanna, Longleaf Pine, Streams	l	l		1 .				
317	and Rivers	Infrastructure	Unpaved Road	Bruhn Road		Wolf Bay	135		
	Freshwater Wetlands, Pine								
	Savanna, Longleaf Pine, Streams								
318	and Rivers	Infrastructure	Unpaved Road	Breman Road	C	Wolf Bay	135		
		ĺ			1				
	Freshwater Wetlands, Maritime	Habitat			1	1			
319	Forest, Streams and Rivers	Restoration	Stream Restoration Sites	Wolf Creek bank stabilization	1	Wolf Bay	138		
	Freshwater Wetlands, Longleaf	Habitat							
320	Pine, Pine Savanna	Restoration	Stream Restoration Sites	Sandy Creek stabilization where pond dam broke	0	Wolf Bay	138		
	Freshwater Wetlands, Longleaf	Habitat							
321	Pine, Pine Savanna	Restoration	Stream Restoration Sites	Stream restoration on unnamed tributary to Sandy Creek	1	Wolf Bay	138		
		Habitat		Hammock Creek restoration/bank stabilization north of					
322	Pine Savanna, Longleaf Pine	Restoration	Stream Restoration Sites	County Road 20		Wolf Bay	138		
		Habitat		·		·			Project proposal
323	Freshwater Wetlands	Restoration	Stream Restoration Sites	Wolf Creek at Foley Beach Express	1	Wolf Bay	138	Initiated	in development
323	Longleaf Pine, Pine Savanna,		The second secon	The second peace supress	†		150		acveropment
324	Streams and Rivers	Habitat Protection	Land Preservation Area	Sandy Creek/Wolf Creek 10 parcels 1,822.90 total acres	1	Wolf Bay	149		
324	Longleaf Pine, Pine Savanna,	abitat i fotettioni	Land Frederivation Area	Same, Sicely World Creek 10 parcers 1,022.50 total acres	 	on buy	143		+
	Streams and Rivers, Freshwater	ĺ			1	1			
ລາຍ	Wetlands	Habitat Protection	Land Preservation Area	Mifline Creek 8 parcels 515.4 total acres	1	Wolf Bay	149		
323	vveciand5	masitat Frotection	Land Freservation Area	ivinine creek o parceis 313.4 total acres	+ '	won bay	149		+
	Erochwater Wotlands Intertial	ĺ			1	1			
	Freshwater Wetlands, Intertidal	ĺ			1	1			
	Marsh and Flats, Maritime Forest,	L	l						
326	Streams and Rivers	Habitat Protection	Land Preservation Area	Graham Bayou 7 parcels 1,782.25 total acres	1 1	Wolf Bay	149		
	L	ĺ			1				
	Freshwater Wetlands, Intertidal	ĺ			1	1			
	Marsh and Flats, Maritime Forest,	ĺ			1				
327	Streams and Rivers	Habitat Protection	Land Preservation Area	Graham Bayou 7 parcels 1,782.25 total acres	1	Wolf Bay	149		
		ĺ			1				
328	Maritime Forest	Habitat Protection	Land Preservation Area	Graham Bayou 1 parcel 2.84 total acres	C	Wolf Bay	149		1
					1				
	Maritime Forest, Freshwater	ĺ			1	1			
	Wetlands, Intertidal Marsh and	Recreational			1	1			
329	Flats, Pine Savanna, Longleaf Pine	Facilities	Recreational Access	Graham Creek Nature Preserve 484-acres	1	Wolf Bay	151	1	

Appendix E: Habitat Methodology

pendix E: Habitat Methodology										
al Objective	Habitat Type St	eps Data Sets	Total Acres Total Feet	Target Acres	Target Feet	Percent Acres	Percent Feet Methodology	Description	Target Areas	Outcomes
		nfluenced watersheds or drainage basins.	Total / tale / t	ruigetrieies	ruigerreer	. crecile / teres	The second control of the second control of	p-coding non	rangerraeas	Cuttomes
	1	Pine Savanna	386,792				PineSavanna			
	2	Headwaters	233,998				PineSavanna_IntersectHW		Consoniation	Finh O Mildlif
Conserve, restore, and enhance	3	500 acres or greater	146,095				PineSavanna_IntersectHW_500acresOrMore	All Pine Savanna habitat that interesect headwaters, are 500 acres or more in	Conservation,	Fish & Wildlif
18,922 acres of headwater pine	5	Outside Protected Areas	143,341				PineSavanna_IntersectHW_500acresOrMore_HalfMileProtectedAreas_OutsideProtectedAreas	size, half mile from protected areas, outside of protected areas, and are within	Restoration	Migratory Bir
Savanna habitats.	Pine Savanna 6	Tidallyinfluenced Watersheds	18,922	18,922		5%	$Pine Savanna_Intersect HW_500 acres Or More_Half Mile Protected Areas_Outside Protected Areas_Within Tidally Influenced Areas_Within Tidally Influenced Areas_Outside Protected Areas_Within Tidally Influenced Areas_Outside Protected Areas_Outside Protected Areas_Within Tidally Influenced Areas_Outside Protected Areas_Within Tidally Influenced Areas_Outside Protected Areas_Outside Protected Areas_Within Tidally Influenced Areas_Outside Protected Areas_Outside Protected Areas_Within Tidally Influenced Areas_Outside Protected Area$	Tidallyinfluenced watersheds .		
	1	Headwaters	7,931,101				Headwaters			
	2	Outside Protected Areas	7,438,852				Headwaters_OutsideProtectedAreas			
	3	High Health Basins	3,216,203				Headwaters_OutsideProtectedAreas_WithinHighHealthBasins			
Conserve, restore, and enhance	4	500 feet or greater	3,119,582				Headwaters_OutsideProtectedAreas_WithinHighHealthBasins_500ftorGreater	All streamy river headwaters identified within the rioc 12 watershed boundary in	Conservation, Restoration	Fish & Wildlife
567,970 feet of streams, rivers, and	5	Tidallyinfluenced Watersheds	613,136				$Headwaters_Outside Protected Areas_Within High Health Basins_500 ftor Greater_Within Tidally Influenced$			
associated 1,340 acres of riparian	Streams, Rivers,	Exclude Impaired Waters	567,970		567,970		7% Headwaters_OutsideProtectedAreas_WithinHighHealthBasins_500ftorGreater_WithinTidallyInfluenced_ExcludeImpairedWaters	health catchment basins (>70%), are 500 ft or greater in length, are within		
buffers of Tidallyinfluenced	Riparian Buffers							Tidallyinfluenced watersheds, exclude impaired waters (conservation). Acreage is		
watershed or drainage basins.	(Conservation) 7	Stream Buffer 50ft		1,340		100%	Headwaters OutsideProtectedAreas WithinHighHealthBasins 500ftorGreater WithinTidallyInfluenced ExcludeImpairedWaters 50ftBuffer	calculated on a 50ft buffer around identified priority headwaters.		
	1	Headwaters	7,931,101	,			Headwaters			
	2	Outside Protected Areas	7,438,852				Headwaters OutsideProtectedAreas			
	3	Low Health Basins	735,675				Headwaters OutsideProtectedAreas WithinLowHealthBasins			
Conserve, restore, and enhance	4	500 feet or greater	699,056				Headwaters OutsideProtectedAreas WithinLowHealthBasins 500ftorGreater	All headwaters identified within the HUC 12 watershed boundary in Mobile and	Conservation,	
51,601 feet of streams, rivers, and	5	Tidallyinfluenced Watersheds	494,979				Headwaters OutsideProtectedAreas WithinLowHealthBasins 500ftorGreater WithinTidallyInfluenced	Baldwin County that are outside of protected areas, within low health catchment		Fish & Wildlif
associated 123 acres of riparian	Streams, Rivers, 6	Intersects Impaired Water	51,601		51,601		1% Headwaters OutsideProtectedAreas WithinLowHealthBasins 500ftorGreater WithinTidallyInfluenced IntersectImpairedWaters	basins (<70%), are 500 ft greater in length, are within Tidallyinfluenced		
buffers of Tidallyinfluenced	Riparian Buffers							watersheds, intersect impaired waters (restoration). Acreage is calculated on a		
watershed or drainage basins.	(Restoration) 7	Stream Buffer 50ft		123		100%	$Headwaters_Outside Protected Areas_With in Low Health Basins_500 ftor Greater_With in Tidally Influenced_Intersect Impaired Waters_50 ft Buffer$	50ft buffer around identified priority headwaters.		
	1	Freshwater Wetlands	317,834				FreshwaterWetlands			
	2	Headwaters	112,293				FreshwaterWetlands IntersectHW		C	Fire O Marielli
Conserve, restore, and enhance	3	Outside Protected Areas	107,894				FreshwaterWetlands IntersectHW OutsideProtectedAreas	All freshwater wetlands that intersect stream/river headwaters, are outside of	Conservation,	Fish & Wildlife
39,599 acres of freshwater wetland	Freshwater Wetlands 4	High Health Basins	63,273				FreshwaterWetlands_IntersectHW_OutsideProtectedAreas_WithinHighHealthBasins	protected areas, and are within high health catchment basins (>70%), and are	Restoration	Birds, Turtles
habitats.	(Conservation) 5	Tidallyinfluenced Watersheds	39,599	39,599		12%	FreshwaterWetlands_IntersectHW_OutsideProtectedAreas_WithinHighHealthBasins_WithinTidallyInfluenced	within Tidallyinfluenced watersheds (conservation).		
3	1	Freshwater Wetlands	317,834				FreshwaterWetlands			
	2	Headwaters	112,293				FreshwaterWetlands_IntersectHW			
	3	Outside Protected Areas	107,894				FreshwaterWetlands IntersectHW_OutsideProtectedAreas	All freshwater wetlands that intersect stream/river headwaters, are outside of	Conservation,	Fish & Wildlife
	4	Low Health Basins	50,162				FreshwaterWetlands_IntersectHW_OutsideProtectedAreas_WithinLowHealthBasins	protected areas, are within low health catchment basins (<70%), are within	Restoration	Birds, Turtles
Conserve, restore, and enhance 2,43	2 Freshwater Wetlands 5	Coastal Area Resource Protection Areas	3,209				FreshwaterWetlands_IntersectHW_OutsideProtectedAreas_WithinLowHealthBasins_WithinCARP	municipalities that have current wetland/stream buffer regualtions, and are		
acres of freshwater wetland habitats	. (Restoration) 6	Tidallyinfluenced Watersheds	2,432	2,432		1%	$Freshwater Wetlands_Intersect HW_Outside Protected Areas_WithinLow Health Basins_Within CARP_Within Tidally Influenced$	within Tidallyinfluenced watersheds (restoration).		
	1	Longleaf Pine	575,220				Longleaf Pine			
	2	Headwaters	136,499				LongLeafPine IntersectHW			
	3	Undeveloped Areas	136,499				LongLeafPine_IntersectHW_WithinUndevelopedAreas			
	4	Gopher Tortoise Soils	136,499				LongLeafPine IntersectHW WithinUndevelopedAreas WithinGopherTortoiseSoils		Conservation,	Fish & Wildlife
†		Outside Protected Areas	133,262				LongLeafPine_IntersectHW_WithinUndevelopedAreas_WithinGopherTortoiseSoils_Within.5mileofProtectedLands_OutsideProtecedLands	All longleaf pine that intersect headwaters, are within undeveloped areas, are	Restoration	Birds, Turtles
Conserve, restore, and enhance	6							located within areas that contain soils that are highly and moderately suitable for		
23,220 acres of headwater longleaf		Within Tidallyinfluenced watersheds	23,220	23,220		4%	LongLeafPine_IntersectHW_WithinUndevelopedAreas_WithinGopherTortoiseSoils_Within.5mileofProtectedLands_OutsideProtecedLands_WithinT			
pine habitat.	Longleaf Pine 7	,					dallyInfluenced	Tidallyinfluenced watersheds.		
Protect uplands adjacent to coastal habit		ard migration of marshes.								
	1	Pine Savanna	386,792				PineSavanna			
	2	Undeveloped Areas	386,792				PineSavanna WithinUndevelopedAreas			
	3	Intersect upland marsh habitat	364,102				PineSavanna WithinUndevelopedAreas IntersectUplandMarshHabitat			Community
	4	Within 500 feet of SLR Inundation area	4,381				PineSavanna_WithinUndevelopedAreas_IntersectUplandMarshHabitat_Within500ftSLR		Conservation	Resilience
Protect 3,361 acres of Pine Savanna								T.,,	Conscivation	Migratory Bird
adjacent to coastal habitats to								All Pine Savanna habitat that are within undeveloped areas, intersect upland		inigratory bira
accommodate landward migration	Diag Courses	Outside Brother to differen	2 264	2 264		407	Conference Within the dealers of the second the second the second to the second the seco	marsh habitat, are within 500 feet of sea-level rise 1m areas, and are outside		
due to sea level rise.	Pine Savanna 5	Outside Protected Areas	3,361	3,361	ļ	170	PineSavanna_WithinUndevelopedAreas_IntersectUplandMarshHabitat_Within500ftSLR_OutsideProtectedAreas	protected areas	ļ	
ensure adequate open space through ha	bital protection and restora	tion for storm protection/flood prevention.	2,074				BeachacDunas		1	
Stabilize concerns and anher		BeachesDunes					BeachesDunes PachesDunes WithinSt Plaundation	All heaches, dunes and charolines that are within see level rice 1 to 5 to 1 to 1	Concorretion	Community
Stabilize, conserve, and enhance	Passhor Duran	Sea Level Rise 1m with Inundation 50yrs. 1m	1,869 1,267				BeachesDunes_WithinStRinundation ReachesDunes_WithinStRinundation_OutsideRestantedAsses	All beaches, dunes and shorelines that are within sea-level rise 1m areas with	Conservation,	Resilience
1,267 acres of beaches and dunes, and associated shorelines.	Beaches, Dunes, 3 Shorelines 4	Outside Protected Areas	1,267	1,267		61%	BeachesDunes_WithinSLRInundation_OutsideProtectedAreas BeachesDunes_WithinSLRInundation_OutsideProtectedAreas_Between0and10ftElevationLevel	inundation, are outside protected areas, and located between 0 and 10ft	Restoration	Nesting Turtles
and associated shorelines.	Jilorennes 4	Between 0 and 10 ft elevation level Intertidal Marshes Flats	21,511	1,20/		0170	BeachesDunes_WithinStkinungation_OutsideProtectegAreas_betweenUand1UitcleVationLevel	elevation level.		
Connection of the contract of		Sea Level Rise 1m with Inundation 50yrs. 1m	21,511		1		IntertialMarshFlats WithinSLRInundation	-		Community
Conserve, restore, and enhance	Intentidal Merchan C	Jea Level Nise 1111 with munication Joyns, 1111	21,304		1		nteraumoni ido_witinicatini datori	All intentidal manches and flat that are middle and investigation of the description	Canaar	Resilience Shellfish
10,093 acres of nearshore and	Intertidal Marshes &	Outside Dretested Asses	10,093	10.003		470/	Intential Maush Flate, With in Cl. Discondition, Outside Deptember 4 Access	All intertidal marshes and flat that are within sea-level rise 1m with inundation,	Conservation,	
intertidal marshes and flats.	riats 3	Outside Protected Areas		10,093		47%	IntertialMarshFlats_WithinSLRInundation_OutsideProtectedAreas	and are outside of protected areas.	Restoration	Oysters
Conserve, restore, and enhance	Maritimo Ecrast	Maritime Forest Outside Protected Areas	47,277 32,760				MaritimeForest MaritimeForest OutsideDestretedApar	All maritime forest hat are outside of protected areas and are with's 100 for a f	Concorretion	Fich 9 Milelie
1,995 acres of maritime forest.	Maritime Forest 2	Within 100 ft of beach and dune habitat	1,995	1,995		09/	MaritimeForest_OutsideProtectedAreas MaritimeForest_OutsideProtectedAreas Within100ftofBeachDuneShorelineHabitat	All maritime forest hat are outside of protected areas, and are within 100 feet of beach, dune or shoreline habitat.		Fish & Wildlife
Destance and protect hebitate while when	a key rala in accetal 61-1		1,395	1,995		9%	Imanumerorest_onisidentorectedareas_minintonicoldeachbuneshorelineHabitat	peach, dune of Shoreline habitat.	Restoration	Migratory Bird
Restore and protect habitats which play a	a key role in coastal Alabam		F7F 200		1		least action			
	1	Longlead Pine	575,200		 		Long LeafPine	_		1
Connection of the contract of	2	Undeveloped Areas Gopher Tortoise Soils	575,200		 		LongLeafPine_WithinUndevelopedAreas	All location in a that are within under all access on the state of the	Conservation,	Fish & Wildlife
L Conserve, restore, and enhance	3	Gopher Tortoise Soils Outside Protected Areas	293,415		1		LongLeafPine_WithinUndevelopedAreas_WithinGopherTortoiseSoils LongLeafPine_WithinUndevelopedAreas_WithinGopherTortoiseSoils_OutsideProtectedAreas_	All longleaf pine that are within undeveloped areas, are located within areas that contain soils that are highly and moderately suitable for gopher tortoise habitats,		Gopher Tortois
										1
47,084 acres of uplands to protect heritage and culture habitats.	Longleaf Pine 5	1/2 mile from Protected Areas	286,034 47,084	47.084	1	8%	Longteafrine WithinUndevelopedAreas WithinGopherTortoiseSoils OutsideProtectedAr WithinHalfMileOfProtectedAreas eas	are outside of protected areas, and are within 1/2 mile of protected areas.		

Appendix F: Streams and Rivers Headwaters Classification											
Dataset						Select by Attribute					
Geodatabase	Folder	Data	Joined Table	Folder	Ftype	Definition	Fcode	Definition	IsHeadwater		
NHD_H_Alabama_State_GDB.gdb	Hydrography	NHDFlowline	NHDFlowlineVAA	WBD	460	Stream/River	46003 Stream/River Hydrographic Category Perennial		Yes		
					46006 Stream/River Hydrographic Category Intermittent						