

State of Alabama  
FINAL  
Coastal Impact Assistance Program (CIAP)  
Plan  
Fiscal Year 2007 and 2008



Volume 1 of 2

Bob Riley, Governor, State of Alabama

M. Barnett Lawley, Commissioner, Alabama Department of Conservation and Natural Resources

Prepared by the State Lands Division,  
Alabama Department of Conservation and Natural Resources

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Revision Five

Includes Plan Changes from April 21, 2009 through October 21, 2009



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## List of Acronyms

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|            |  |
|------------|--|
| AABC.....  | Alabama Aquatic Biodiversity Center                      |
| ACAMP..... | Alabama Coastal Area Management Program                  |
| ADEM.....  | Alabama Department of Environmental Management           |
| ADPH.....  | Alabama Department of Public Health                      |
| BC.....    | Baldwin County   |
| CCMP.....  | Coastal Conservation Management Plan                     |
| CELCP..... | Coastal and Estuarine Land Conservation Program          |
| CIAP.....  | Coastal Impact Assistance Program                        |
| CPMC.....  | Claude Petet Mariculture Center                          |
| CRAC.....  | Coastal Resources Advisory Committee                     |
| CZMA.....  | Coastal Zone Management Authority                        |
| DCNR.....  | Department of Conservation and Natural Resources         |
| C & D..... | Construction and Demolition                              |
| DCNR.....  | Alabama Department of Conservation and Natural Resources |
| DISL.....  | Dauphin Island Sea Lab                                   |
| DOI.....   | Department of the Interior                               |
| EDRF.....  | Emergency Disaster Relief Fund                           |
| ESA.....   | Endangered Species Act                                   |
| FEMA.....  | Federal Emergency Management Agency                      |
| GSA.....   | Geological Survey of Alabama                             |
| MBNEP..... | Mobile Bay National Estuary Program                      |
| MC.....    | Mobile County  |
| MMS.....   | Minerals Management Service                              |
| MRD.....   | Marine Resources Division                                |
| MSW.....   | Municipal Solid Waste                                    |
| NEPA.....  | National Environmental Protection Act                    |
| NERR.....  | National Estuarine Research Reserve                      |
| NMOC.....  | Non Methane Organic Compound                             |
| NOAA.....  | National Oceanic and Atmospheric Association             |
| NMFS.....  | National Marine Fishery Service                          |
| NRDA.....  | Natural Resource Damage Assessment                       |
| OGB.....   | Oil and Gas Board  |
| SLD.....   | State Lands Division                                     |
| SPD.....   | State Parks Division                                     |
| USACE..... | United States Army Corps of Engineers                    |
| USDA.....  | United States Department of Agriculture                  |
| USFWS..... | United States Fish and Wildlife Service                  |
| WFFD.....  | Wildlife and Freshwater Fisheries Division               |



## 1. Introduction

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The Coastal Impact Assistance Program (CIAP) was established by Section 384 of the Energy Policy Act of 2005 to assist producing states and their coastal political subdivisions (i.e. counties) in mitigating the impacts from Outer Continental Shelf (OCS) oil and gas production. The CIAP legislation appropriated \$250 million per year for fiscal years 2007 through 2010 to be distributed among eligible producing States and their coastal political subdivisions. The eligible States are Alabama, Alaska, California, Mississippi, Louisiana, and Texas. The coastal political subdivisions in Alabama are Baldwin County and Mobile County. The Coastal Impact Assistance Program (CIAP) requires each state to develop a plan to be eligible for the CIAP funding.

The CIAP provision of the Act of the Outer Continental Shelf Lands Act, lists five categories of authorized uses of CIAP funds. Thus, a State or CPS can only use CIAP funds for one or more of the following purposes:

1. projects and activities for the conservation, protection, or restoration of coastal areas, including wetland;
2. mitigation of damage to fish, wildlife, or natural resources;
3. planning assistance and the administrative costs of complying with CIAP;
4. implementation of a Federally approved marine, coastal, or comprehensive conservation management plan; and
5. mitigation of the impact of OCS activities through funding of onshore infrastructure projects and public service needs.

Alabama is one of six states eligible to receive CIAP funds. The total annual allocation for the State of Alabama for FY 2007 and FY 2008 is \$51,103,214.08 split evenly between the years. Thirty-five percent (\$17,886,124.92) of these funds will be allocated and disbursed to Baldwin and Mobile counties. Table 1 summarizes the allocations provided to the State of Alabama, Baldwin County, and Mobile County.

The State of Alabama, Baldwin County, and Mobile County have worked cooperatively to develop CIAP projects for FY 2007 and FY 2008. These projects meet the criteria set forth in the legislation and will provide long-term benefits to Alabama's coastal area. A subsequent CIAP plan will be submitted in the future for FY 2009 and FY 2010 funding.

|  | <b>Total Allocation<br/>for Alabama<br/>(10.54% of 250M)</b> | <b>State of<br/>Alabama<br/>Allocation<br/>(65%)</b> | <b>County<br/>Allocation (35%)</b> | <b>Mobile County<br/>(55.36% of<br/>County<br/>allocation)</b> | <b>Baldwin County<br/>(44.64% of<br/>County<br/>Allocation)</b> |
|--|--|--|------------------------------------|--|---|
| <b>FY 2007</b>                                       | \$25,551,607.04  | \$16,608,544.58                                      | \$8,943,062.46                     | \$4,951,015.14   | \$3,992,047.32  |
| <b>FY 2008</b>                                       | \$25,551,607.04  | \$16,608,544.58                                      | \$8,943,062.46                     | \$4,951,015.14   | \$3,992,047.32  |
| <b>TOTAL<br/>for FY<br/>2007<br/>and FY<br/>2008</b> | \$51,103,214.08  | \$33,217,089.16                                      | \$17,886,124.92                    | \$9,902,030.28   | \$7,984,094.64  |

Table 1. Summary of Coastal Impact Assistance funding for the State of Alabama for FY 2007 and 2008 (Source: Minerals Management Service webpage <http://www.mms.gov/offshore/CIAPmain.htm>)

## 2. Designated State Agency

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The Energy Policy Act's CIAP provision requires that the Governor designate a State agency to develop the Plan and represent the State in interactions with the U.S. Department of the Interior Minerals Management Service for purposes of the Program. On November 3, 2005 Governor Bob Riley designated the Alabama Department of Conservation and Natural Resources (DCNR) as the agency responsible for administering the CIAP. Appendix A includes the letter designating DCNR as the lead agency. The DCNR point of contact for development and implementation of the Plan is M. Barnett Lawley, Commissioner of the Department of Conservation and Natural Resources. His contact information is listed below.

|           |  |
|-----------|--|
|           | <b>State of Alabama</b> designated contact for development and implementation of the Coastal Impact Assistance Program |
| Name      | Commissioner M. Barnett Lawley   |
| Address   | Alabama Department of Conservation and Natural Resources   |
|           | 64 North Union Street  |
|           | Montgomery, Alabama 36130  |
| Telephone | (334) 242-3486   |
| Fax       | (334) 242-0999   |
| E-mail    | dcnr.ciap@dcnr.alabama.gov   |

Further, Commissioner Lawley designated the State Lands Division (SLD) of DCNR to administer the day-to-day responsibilities of the CIAP. Such a role is a natural fit for the State Lands Division, which serves as the state agency sponsor for the National Oceanic and Atmospheric Association (NOAA) funded Alabama Coastal Area Management Program and Weeks Bay National Estuarine Research Reserve. The State Lands Division also managed the NOAA-sponsored CIAP in 2001. The State Lands Division is responsible for management and stewardship of many state-owned lands, including state water bottoms, and serves as the single designated title holder for all lands acquired through the Forest Legacy Program. The SLD administers the State's Forever Wild Land Trust Program, which acquires and conserves land for public use.

In addition to the State Lands Division, there are other divisions within the Department of Conservation and Natural Resource with a mandate to protect and manage coastal areas: the State Parks Division (SPD), the Marine Resources Division (MRD), and the Wildlife and Freshwater Fisheries Division (WFFD). The State Parks Division manages Gulf State Park, a 6150-acre tract of coastal habitat located between Gulf Shores and Orange Beach directly on the Gulf of Mexico. The Marine Resources Division's mission is to conserve, protect, and enhance Alabama's living marine resources in a manner that encourages sustainable economic development and promotes the responsible stewardship of

those resources. The Wildlife and Freshwater Fisheries Division manages, protects, conserves and enhances wildlife and aquatic fishing resources of Alabama.

The goal of the State of Alabama CIAP is to address the potential issues that threaten to impact coastal resources and to identify and implement projects and programs that will restore, protect, and enhance the coastal area and ecosystem.

### 3. Designated Contact for Coastal Political Subdivision

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Two Coastal Political Subdivisions (CPS) lie within Alabama's coastal zone: Baldwin County and Mobile County.

#### a. Baldwin County Commission

|           |  |
|-----------|--|
|           | <b>Baldwin County</b> designated contact for development and implementation of the Coastal Impact Assistance Program |
| Name      | David Ed Bishop, Chairman  |
| Address   | Baldwin County Commission  |
|           | 312 Courthouse Square, Suite 12  |
|           | Bay Minette, AL 36507  |
| Telephone | (251) 990-4606   |
| Fax       | (251) 580-2590   |
| E-mail    | debishop@co.baldwin.al.us  |

Through the CIAP, it is the goal of the Baldwin County Commission to provide conservation, protection, and restoration of environmentally sensitive areas, to provide enhancement to properties already under the care of the County, and to develop long-term plans to assist in these endeavors.

#### b. Mobile County Commission

|           |   |
|-----------|---|
|           | <b>Mobile County</b> designated contact for development and implementation of the Coastal Impact Assistance Program |
| Name      | Stephen Nodine, President   |
| Address   | Mobile County Commission  |
|           | 205 Government Street   |
|           | Mobile, AL 36644  |
| Telephone | (251) 574-8595  |
| Fax       | (251) 574-4722  |
| E-mail    | snodine@mobile-county.net   |

Coastal resources will be conserved, protected, enhanced, and restored by the Mobile County Commission with funding provided by the Coastal Impact Assistance Program. This goal will be achieved by pursuing three overarching objectives:

1. Coastal areas in Mobile County will be more accessible to citizens and will provide increased opportunities for environmental education and recreation in order to foster support for conservation and restoration efforts.
2. Coastal Impact Assistance Program funding will be utilized to assist in implementation of the Mobile Bay National Estuary Program Comprehensive Conservation & Management Plan with regard to selected Water Quality, Habitat Management, Human Uses, and Education & Outreach Action Items.
3. A Mobile County Coastal Resource Protection Program will be developed to promote wise management of natural resources and will include activities such as acquisition and management of coastal habitats, including wetlands.

#### 4. Governor's Certification of Public Participation

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The State of Alabama CIAP funding recipients have worked diligently to involve the public and governmental entities including Federal, State, and local agencies in the development of the CIAP. On March 6, 2007, the State of Alabama, Baldwin County, and Mobile County held a public information meeting to announce the CIAP and to solicit program suggestions. This meeting was held at Five Rivers Alabama's Delta Resource Center on the Mobile Bay Causeway, a central location to both counties. An advertisement was published in the Sunday edition of the Mobile Press-Register and the Baldwin Register two consecutive Sundays prior to the meeting (February 24, 2007 and March 4, 2007). At this meeting, representatives from the Minerals Management Service (MMS), the State of Alabama, Baldwin County, and Mobile County described the CIAP. Appendix B includes a copy of the advertisement. An overview of how the CIAP would be implemented was presented and a request for program suggestions was solicited.

After this meeting, the State of Alabama, Baldwin County, and Mobile County began compiling project lists to be included in the Draft CIAP Plan taking submitted program suggestions into consideration. The draft Mobile County CIAP project list was approved by the Mobile County Commission on April 24, 2007 and was reviewed at the agenda review meeting on April 19, 2007. The draft project lists were discussed by the Baldwin County Commission at two work sessions (April 10, 2007 and April 24, 2007) and the lists were approved by the Baldwin County Commission on May 15, 2007. All of the County meetings listed above are public and agendas and meeting announcements are published in local newspapers prior to the meetings. Also, meeting agendas, meeting announcements, and minutes are published on the Counties' respective websites.

A second public meeting was held on August 30, 2007 at 6:00 pm to announce and release the Draft CIAP Plan. An advertisement was placed in the Mobile and Baldwin County newspapers on August 19<sup>th</sup> and 26<sup>th</sup>, 2007 to announce the meeting (See Appendix C). Also, notification of the meeting was sent to the local leaders of Federal, State, and local agencies. The meeting notice was sent to the attendees of the first public information meeting held in March and all individuals and organizations that solicited information on the CIAP and/or submitted program suggestions. The written transcripts from the public meeting are included in Appendix D-1.

A draft comment period of 30 days began on August 31, 2007. All written comments are included in Appendix D-3. In some instances public comments resulted in modifications to the Plan. Appendix E contains Governor Riley's certification of public participation.



## 5. Coordination with Other Federal Resources and Programs

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In developing the CIAP Plan, the State of Alabama, Baldwin County, and Mobile County selected projects and programs which complemented existing federal resources in coastal Alabama. The framework of the existing Alabama Coastal Area Management Program (ACAMP), Alabama's coastal zone management program was used to provide outreach efforts relating to CIAP plan development. A project was scaled down or deleted if significant other federal funding sources were available. When necessary, federal agency personnel were consulted throughout the State of Alabama CIAP plan development. Partnering with other federal or private resources is documented in each project summary.

Some CIAP projects will be used to complement other federal resources. For example, the State of Alabama plans to rebuild the public fishing pier at Gulf State Park using public assistance funds from the Federal Emergency Management Agency (FEMA) after it was destroyed by Hurricane Ivan in 2004. In order to make the structure more resilient to future storms, CIAP funds will be used to fund the additional costs associated with rebuilding the pier in a more protected location. In addition, the pier will be longer and wider to withstand increased wave energy and wind loads. Also, CIAP has been closely coordinated with other federal land acquisition programs. For example, CIAP will fund land acquisition in the coastal area, as it is an eligible expenditure, while other land acquisition programs eligible statewide, such as the United States Department of Agriculture (USDA) Forest Legacy Program, will be used to target non-coastal acquisition where appropriate.

Utilizing the existing outreach framework of the State of Alabama Coastal Zone Management Program, representatives from Federal, State and local agencies were invited to a meeting of the Coastal Resources Advisory Committee (CRAC). At this meeting, the Draft State of Alabama CIAP Plan was presented and discussed. The purpose of this meeting was to provide an early opportunity to view the draft plan and to coordinate financial resources relative to CIAP funding. Federal representatives were invited from the following federal agencies:

- U.S. Army Corps of Engineers – Mobile District
- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- U.S. Geological Survey
- USDA Natural Resources Conservation Service

Representatives were invited from the following State of Alabama agencies:

- Alabama Department of Transportation
- Alabama Department of Environmental Management
- Department of Public Health (Baldwin and Mobile County)

- Geological Survey of Alabama

Representatives were invited from the other divisions within the Department of Conservation and Natural Resources including:

- State Parks Division
- Marine Resources Division
- Wildlife and Freshwater Fisheries Division

Representatives were invited from the following regional agencies:

- South Alabama Regional Planning Commission
- Mobile Bay National Estuary Program

One of the objectives of this meeting was to solicit formal feedback from the federal agency representatives regarding plan development and to solicit potential costs sharing and financial partnering specific to CIAP projects. The CIAP staff encouraged all agencies present at this meeting to submit written comments on the Draft State of Alabama CIAP Plan.

Federally-approved plans were reviewed during the compilation of the Alabama CIAP project lists to make sure projects did not duplicate existing federal resources and met the objective of these documents. These plans include but are not limited to the following: the Alabama Coastal Area Management Plan, the Weeks Bay National Estuarine Research Reserves Management Plan (NOAA), the Mobile Bay National Estuary Program Comprehensive Conservation Management Plan (EPA), The Alabama Comprehensive Wildlife Conservation Strategy, Alabama Coastal Estuarine Land Conservation Program (USFWS) Forest Legacy Program (U.S. Forest Service) and U.S. Army Corps of Engineers (USACE) coastal project plans. All of these plans listed above have been approved by the respective federal agency and provide long term conservation strategies and action items for Alabama's coastal area.

The Draft CIAP Plan was released to the public for review on August 30, 2007. A total of 47 comments were received of which two were from federal agencies. First, the U.S. Fish and Wildlife Service (USFWS) commended the State of Alabama, Baldwin County, and Mobile County for selecting projects that will, 'benefit U.S. Fish and Wildlife Service trust resources, such as imperiled plant and animal species and migratory birds.' In addition, the USFWS offered to partner with the State of Alabama to restore wildlife habitat for imperiled species and migratory birds on private land impacted by the 2005 hurricane season in order to 'maximize benefit of limited conservation dollars'. The Mobile Bay National Estuary Program submitted a written comment fully supporting the Draft State of Alabama CIAP Plan. In this letter, the MBNEP Director states, 'The State of Alabama, Baldwin County Commission, and Mobile County Commission were wise in selecting programs and projects which complemented existing federal resources'. In sum, the written comments on the Draft State of Alabama CIAP Plan from federal agencies indicate the State of Alabama CIAP coordinated CIAP resources closely with other federal resources and programs.

## 6. Plan Implementation Program

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### ❖ Goals and Objectives of the State of Alabama CIAP Plan

#### **State of Alabama**

The goal of the State of Alabama CIAP is to implement natural resource improvement projects which have a lasting impact on the coastal community. More specific goals are listed below and were developed during the CIAP planning process. Measurable objectives from each goal are included in the associated project description.

1. Acquire and conserve sensitive habitat throughout the coastal area.
2. Manage the State of Alabama CIAP in an efficient, cost-effective, and organized manner in order to meet the program requirements
3. Raise public awareness of conservation and protection of coastal Alabama's designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Weeks Bay, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) through the construction of natural resource-based educational facilities.
4. Develop a tool to evaluate impacts to coastal Alabama marine, estuarine and inland environments resulting from present and planned oil and gas infrastructure associated with development production.
5. Protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.
6. Facilitate management research of Alabama's coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.
7. Increase awareness of conservation and protection of coastal Alabama's designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) through the development and production of natural resource-based educational materials.
8. Improve management and administration of coastal resources and help implement the Alabama Coastal Area Management Plan.
9. Restore coastal areas by removing marine debris resulting from recent hurricanes
10. Implement natural resource trustee assessment and restoration activities associated with injuries to natural resource trust resources, including but not limited to, fish, wildlife, birds and groundwater.
11. Increase public awareness of conservation and protection efforts associated with the coastal marine environment.

## **Baldwin County Commission**

The goals of the Baldwin County Commission, through the CIAP, are to provide conservation, protection and restoration of environmentally sensitive areas, to provide enhancement to properties already under the care of the county, and to develop long-term plans to assist in these endeavors. These goals will be met through the objectives associated with each plan initiatives.

The CIAP goals were coordinated with the Baldwin County Strategic Plan for 2006-2016, which addresses some of the most critical needs within the county and the strategies to meet those needs. A key requirement in the selection of initiatives for the CIAP program was the ability of those projects to meet the objectives in the County's strategic plan. The Baldwin County CIAP initiatives also were required to meet not only the authorized uses of the CIAP but also the strategic plan components. The objectives of the Baldwin County Strategic Plan that were instrumental in developing Baldwin County's CIAP are listed below:

1. Failure to preserve and protect our natural resources would erode life, and adversely impact our economy, water quality, inland waterways, forests and green space, wetlands, and wildlife.
2. By 2011, decrease the pollution and storm water runoff in the County waterways so as improve water quality and maintain EPA and ADEM standards.
3. By 2012, increase and protect mandated green/wetlands space by 50%.
4. By 2009, protect a minimum of 500 acres of habitat of species of greatest conservation need with an emphasis on priority areas depicted in the State Wildlife Action Plan
5. By 2016 provide parks, camping and playground areas at public accesses on water frontage, improve public access to 2 beaches, improve 2 current boat ramps, acquire 1 new boat ramp and build 3 boat ramps on currently owned property.
6. Create and foster partnerships with other local, state and federal agencies to protect endangered species habitat and to prevent species of concern from being listed and lessen impacts to existing endangered using strategies identified in the State Wildlife Action Plan.
7. By 2010, 70% of all graduating seniors will have participated in environmental programs and community projects.
8. By 2014, increase citizen awareness of environmental issues with 35% of citizens reporting they are better informed of environmental issues related to the environment such as: pollution, littering, re-cycling, Value of our environment/wetlands and storm water issues.
9. Address possible or probable decrease in the county's water table from development through appropriate research study.

In addition to the Baldwin County Strategic Plan, the compatibility of the initiatives along with the State of Alabama's CIAP Plan and other federally-approved plans was also considered.

### **Mobile County Commission**

Coastal resources will be conserved, protected, enhanced, and restored by the Mobile County Commission with funding provided by the Coastal Impact Assistance Program. This goal will be achieved by pursuing three overarching objectives:

- Coastal areas in Mobile County will be more accessible to citizens and will provide increased opportunities for environmental education and recreation in order to foster support for conservation and restoration efforts.
- Coastal Impact Assistance Program funding will be utilized to assist in implementation of the Mobile Bay National Estuary Program Comprehensive Conservation & Management Plan with regard to selected Water Quality, Habitat Management, Human Uses, and Education & Outreach Action Items.
- A Mobile County Coastal Resource Protection Program will be developed to promote wise management of natural resources and will include activities such as acquisition and management of coastal habitats, including wetlands.

## ❖ Description of how the State of Alabama, Baldwin County and Mobile County will Manage, Implement and Monitor the CIAP

### **State of Alabama**

The State of Alabama, through the DCNR, is committed to managing the CIAP in an efficient, cost-effective, and organized manner in order to fulfill the requirements of the program. The DCNR, through its State Lands Division (SLD), provides day-to-day management and coordination of the CIAP. Due to its involvement previously in a similar program, the SLD has developed the capacity to manage such a program and regularly manages large-scale grant programs. The State Lands Division employs one full-time staff person, located in the coastal area, dedicated to coordinating all aspects of the CIAP. Additionally, a State Lands Manager oversees the administration of the CIAP on a part-time basis. The State of Alabama is also considering hiring an accounting technician to aid in all financial CIAP matters. These staff members update departmental and other state officials on CIAP-related issues so that informed CIAP decisions are made. Also, close coordination with other relevant DCNR support sections including Accounting, Legal, Engineering, and Coastal Sections occur on a regular basis to ensure proper procedures are created and followed throughout CIAP implementation. CIAP staff work closely with CIAP representatives from the MMS and other applicable federal agencies. In addition, CIAP staff coordinates with representatives from Mobile and Baldwin County regarding timetables, meetings, and reports.

### **Baldwin County Commission**

The Baldwin County CIAP Plan is managed and monitored by the Natural Resources Section of the Planning and Zoning Department. This department in conjunction with other county departments including the Solid Waste Department and the Highway Department will implement the projects. The Grants Coordinator within the Budget Department will submit grant applications, financial and progress reports and requests for reimbursement.

### **Mobile County Commission**

The Mobile County CIAP Program is managed by staff from the Mobile County Environmental Services Department. The staff will be responsible for management, implementation, and monitoring of the Mobile County Coastal Impact Assistance Program. This responsibility includes preparing grant applications, environmental reviews, progress reports and general grant management tasks. The staff will also manage each project from the application stage through procurement to completion and closeout. Procurement procedures and policies currently in place as well as MMS guidelines will be followed to ensure open and fair competition for contracts and purchases and compliance with all other applicable laws and regulations.

## **❖ The State of Alabama Public Participation Process**

- a. CIAP Public Planning Process: There were two primary public meetings held to discuss the CIAP. These meetings were jointly sponsored by the State of Alabama, Baldwin County, and Mobile County and were used as vehicles to introduce the program and solicit public input. Advertisements for these meetings were published in the Mobile-Press Register two Sundays prior to each of these meetings. CIAP staff also sought input through the state's Coastal Zone Management (CZM) program through solicitation of project ideas from CZM staff and in a specific request for input and review from the Coastal Resources Advisory Committee (CRAC). The CRAC is a legislatively defined organization and is supported by the CZM program.

Below is a comprehensive list of all public CIAP planning activities. At each of these meetings, the public was given ample opportunity to comment and provide input. In addition, several federally-approved plans were consulted during the project list development including the Mobile Bay National Estuary Program Coastal Comprehensive and Management Plan and the Alabama Coastal Area Management Program document. Public participation was an

integral component in the development of these two plans. Below is a list of all public meetings and/or public notifications.

- January 9, 2007, the Baldwin County Commission discussed the CIAP at a regularly scheduled work session. This meeting is open to the public and the agendas to the meetings are published in the Baldwin Register one or two days prior to the meeting. Attendees come and go throughout the course of the meetings. In addition, the meeting agendas and transcripts are published on Baldwin County's web site ([www.co.baldwin.al.us](http://www.co.baldwin.al.us)).
- March 2, 2007, Baldwin County distributed its newsletter, Planning Horizons, advertising the CIAP public meeting.
- March 6, 2007, a public information meeting was held at 6:00 pm at Five Rivers Alabama's Delta Resource Center. Thirty-two (32) people attended this meeting. This meeting was advertised in the Mobile-Press Register and the Baldwin Register on February 24, 2007 and March 4, 2007.
- April 4, 2007, CIAP staff met with and informed representatives with The Nature Conservancy and the Friends of Bon Secour National Wildlife Refuge of the CIAP program.
- April 4, 2007 CIAP staff met with and informed representatives from the Geologic Survey of Alabama of the Alabama CIAP Program.
- April 10, 2007, the Baldwin County Commission discussed the CIAP at a regularly scheduled work session. In addition, the meeting agendas and transcripts are published on Baldwin County's web site ([www.co.baldwin.al.us](http://www.co.baldwin.al.us)).
- April 17, 2007 CIAP program staff met and informed representatives from the Organized Seafood Association of Alabama of the CIAP Program.
- April 19, 2007 Mobile County Commission discussed and reviewed Mobile County's Tier 1 and Tier 2 project lists at an Agenda Meeting. This meeting is open to the public and the agendas to the meetings are published in the Mobile Press-Register one or two days prior to the meeting. Attendees come and go throughout the course of the meetings.

- April 24, 2007, the Mobile County Commission approved the CIAP Tier 1 and Tier 2 project lists and approved submittal of such lists to the State for inclusion into the State of Alabama CIAP Plan. This meeting is open to the public and the agendas to the meetings are published in the Mobile Press-Register one or two days prior to the meeting. Attendees come and go throughout the course of the meetings.
- May 15, 2007, the Baldwin County Commission formally approved the CIAP Tier 1 and Tier 2 lists at a regularly scheduled meeting and approved submittal of such lists to the State for inclusion into the State of Alabama CIAP Plan. This meeting is open to the public and the agendas to the meetings are published in the Baldwin Press-Register one or two days prior to the meeting. Attendees come and go throughout the course of the meetings. In addition, the meeting agendas and transcripts are published on Baldwin County's web site ([www.co.baldwin.al.us](http://www.co.baldwin.al.us)). Baldwin County Commission meetings are filmed and the meeting is played continuously on a public access channel available to all cable subscribers in Baldwin County.
- August 30, 2007 at 3:00 pm the Draft CIAP Plan was presented to the Coastal Resources Advisory Committee (CRAC).
- August 30, 2007 at 6:00 pm, the Draft CIAP Plan was released to the public via a public meeting held at Five Rivers Alabama's Delta Resource Center. Fifty-eight (58) people attended this meeting. This meeting was advertised in the Mobile-Press Register and the Baldwin Register on July 19<sup>th</sup> and July 26<sup>th</sup>, 2007. The transcripts from the meeting are included in Appendix D-1.
- August 31, 2007, the comment period for written comments began.
- October 22, 2008 the DCNR Commissioner responded via a letter to all forty-seven comments.
- January 10, 2008 as a result of public comment and input, the Mobile County Commission discussed and reviewed the modified Tier 1 and Tier 2 project lists at an Agenda Meeting. This meeting is open to the public and the agendas to the meetings are published in the Mobile Press-Register one or two days prior to the meeting. Attendees come and go throughout the course of the meetings.
- January 15, 2008, the Mobile County Commission approved the modified CIAP Tier 1 and Tier 2 project lists and approved submittal of such lists to the State for inclusion into the Final State of Alabama

CIAP Plan. This meeting is open to the public and the agendas to the meetings are published in the Mobile Press-Register one or two days prior to the meeting. Attendees come and go throughout the course of the meetings.

- o February 25, 2008: An advertisement was placed in the Mobile-Press Register and Baldwin Register to announce three additional projects included in the Final State of Alabama CIAP Plan including a land acquisition project for Dauphin Island (AL-24 and MC-14) and Public Access Improvements at Big Creek Lake (MC-15).
- b. Written Public Comments All submitted written comments are included in Appendix D-3. Overall, there were 47 comments submitted via e-mail, fax or U.S. mail addressed to the Governor, Bob Riley and other State officials. A response was sent to all comments submitted from the Commissioner thanking them for their participation in the State of Alabama CIAP. The comments and respective responses are summarized in the following table. Appendix D contains the public comments from the August 30, 2008 public meeting, summary tables of all comments received, and the comments.

| <u>Comment</u>  | <u>Number of Comments</u> | <u>Name</u>  | <u>Response/ Resolution</u>  |
|---|---------------------------|--|--|
| Requests funding for a variety of Dauphin Island projects | 35                        | Blackmon; Bonner; Brennon; Brooks ; Collier,C.; Collier, J. (3); Collier, S.; Damiens; Edwards (2); Gaines; Harper (2), Henderson; Mayson, McDermott; Miller (5); Opanowitz, Previto, Roedder, Rogers, Tafra, Thompson, Turner B.; Turner R.; Wheeler; Willis; and Winstead (2). | Per the request of the State legislative delegation from Dauphin Island, the State of Alabama and Mobile County partnered to fund AL-24 and MC-14 -- Land Acquisition of Sensitive Waterfront Property on Dauphin Island in the Final CIAP Plan. |
| Supports CIAP Plan as written with other minor comments   | 7                         | Bishop; Dixon; Malone; Tawes (USFWS); Tew (GSA), Watts; Yeager (MBNEP)   | A letter was sent from the Commissioner thanking each comment author for their participation in the State of Alabama CIAP.   |
| Requests CIAP funding                                     | 1                         | Hallet   | Project was not selected for funding in the Final  |

|   |   |          |  |
|---|---|----------|--|
| to create a coastal resiliency network.   |   |          | Plan, however the Mobile Area Chamber of Commerce will be asked to participate in future planning processes. A letter was sent from the Commissioner thanking the Mobile Area Chamber of Commerce for their participation in the CIAP.   |
| Various comments on the overall Draft Plan and supports funding for Dauphin Island. | 1 | Crozier  | Per the request of the State legislative delegation from Dauphin Island, the State of Alabama and Mobile County partnered to fund AL-24 and MC-14 -- Land Acquisition of Sensitive Waterfront Property on Dauphin Island in the Final CIAP Plan. Other comments were considered by the Commissioner. |
| Supports funding for construction of turn basin in the Mobile River                 | 1 | Lyons    | Project was not selected for funding in the Final Plan because according to MMS program staff, dredging is an ineligible CIAP activity. A letter was sent from the Commissioner thanking the Mobile Port Authority for their participation in the CIAP.  |
| Supports safe harbor facilities for commercial shrimp boats                         | 1 | Anderson | This project is not considered an eligible expenditure of CIAP funds. A letter was sent from the Commissioner  |

|  |           |           |  |
|--|-----------|-----------|--|
|  |           |           | thanking the Alabama Seafood Association for their participation in the CIAP.  |
| Expresses concern about a Mobile County land acquisition project | 1         | Van Fleet | Mobile County removed this project from the Tier 1 list and added a Tier 2 project to acquire land in southern Mobile County |
| <b>Total comments received</b>                                   | <b>47</b> |           |  |

Table 2. Summary of Written Comments submitted during the Public Comment Period (August 31-October 1, 2007).

## ❖ The State of Alabama, Baldwin County, and Mobile County Decision-Making Process for Selecting Projects

Since the Energy Policy Act was approved by Congress in 2005, the State of Alabama, Baldwin County, and Mobile County have met regularly to develop the Alabama CIAP. The regular meetings have been instrumental in discussing eligible CIAP projects. In addition to other administrative functions, these meetings were helpful in discussing each entity's CIAP needs. For example, a partnership to construct and implement real time continuous water quality monitors in the coastal waters of Alabama resulted from these meetings. A list of the Alabama planning meetings is below:

- July 17-18, 2006 the Alabama CIAP team met separately in Reston, Virginia during Grant Guidelines Workshop sponsored by the Minerals Management Service.
- September 7, 2006 the CIAP Planning team met at 10:00 am at South Alabama Regional Planning Commission offices at 110 Beaugard Street in downtown Mobile.
- October 4, 2006 the CIAP Planning team met at 2:00 pm at South Alabama Regional Planning Commission offices at 110 Beaugard Street in downtown Mobile.
- November 8, 2006 the CIAP Planning team met at 10:30 am at South Alabama Regional Planning Commission offices at 110 Beaugard Street in downtown Mobile.
- December 6, 2006 the CIAP Planning team met at 10:30 am at South Alabama Regional Planning Commission offices at 110 Beaugard Street in downtown Mobile.
- January 10, 2007 the CIAP Planning team met at 10:30 am at South Alabama Regional Planning Commission offices at 110 Beaugard Street in downtown Mobile.
- February, 7, 2007 the CIAP Planning team met at 10:30 am Five Rivers Alabama's Delta Resource Center in Spanish Fort, Alabama.
- March 22, 2007 the CIAP Planning team met at 2:00 pm at Five Rivers, Alabama's Delta Resource Center
- June 4, 2007 the CIAP Planning team met at 10:30 am at Five Rivers Alabama's Delta Resource Center in Spanish Fort, Alabama.

- June 18, 2007 the CIAP Planning team met at 10:30 am at Five Rivers Alabama's Delta Resource Center in Spanish Fort, Alabama.
- July 10, 2007 the CIAP Planning team held a conference call to discuss CIAP Plan development.
- July 30, 2007 the CIAP Planning team held a conference call to discuss CIAP Plan development.
- August 8, 2007 the CIAP Planning team held a meeting at 1:30 pm at Five Rivers Alabama's Delta Resource Center in Spanish Fort, Alabama
- September 19, 2007 the CIAP Planning team held a meeting at 1:30 pm at Five Rivers Alabama's Delta Resource Center in Spanish Fort, Alabama.
- November 7, 2007 the CIAP Planning team held a meeting at 10:00 am at Five Rivers Alabama's Delta Resource Center in Spanish Fort, Alabama.
- December 12, 2007 the CIAP Planning team held a meeting at 1:30 pm at Five Rivers Alabama's Delta Resource Center in Spanish Fort, Alabama.
- January 10, 2008 the CIAP Planning team held a meeting at 1:30 pm at Five Rivers Alabama's Delta Resource Center in Spanish Fort, Alabama.

### **State of Alabama**

At the state level, early in the CIAP planning process various divisions within the Department of Conservation and Natural Resources (i.e. the State Lands Division, Marine Resources Division, Wildlife and Freshwater Fisheries Division, and State Parks Division) identified and scoped out restoration and conservation needs, goals, and objectives. This process generated an extensive project list totaling over 300 million dollars in potential project costs. Through the leadership of the Conservation Commissioner, M. Barnett Lawley, the list was condensed based on a variety of factors. First, the project's compatibility with any of CIAP's authorized uses was considered. Second, the availability of other Federal resources was determined for each project. Next, priorities of the Department of Conservation and Natural Resources were evaluated in context to the preliminary project lists. Last, each project had to meet criteria set forth by the goals and objectives of the CIAP as determined by DCNR. The

Commissioner held several meetings to discuss each project in detail. Subsequently, CIAP staff compiled a list of projects which were eligible CIAP expenditures, met DCNR goals, did not duplicate existing programs, and last, represented a cooperative consensus from each respective DCNR division. This process produced a list of projects such as acquisition of sensitive land for conservation, longleaf pine restoration, and enhancement of conservation education through improvements and upgrades to facilities throughout the coastal area

At the same time the State was evaluating its internal priorities, numerous program suggestions were presented to the State of Alabama. These suggestions were documented and evaluated for eligibility and compatibility with the Alabama CIAP. Subsequently, some program suggestions were included in the State of Alabama CIAP Plan in the Tier 1 or Tier 2 project list. This list was published in the State of Alabama Draft CIAP Plan for FY 2007 and FY 2008 and released to the public for comment on August 30, 2007.

During the comment period, 35 of 47 written comments (74% of the total) requested additional CIAP funding for Dauphin Island in Mobile County. As a response to the public participation, Governor Riley; Conservation Commissioner, M. Barnett Lawley; and the Mobile County Commission agreed to partner to contribute \$2,000,000.00 of funding for a selected Dauphin Island project. The state legislative delegation selected a project to acquire waterfront property to be used for the Coastal Kayaking Trail. This project is included as AL-24 and MC-14 in the Final State of Alabama CIAP Plan for FY 2007 and 2008. In sum, the projects identified in the Alabama CIAP Plan have been selected because they provide significant, quantifiable, and long-term results that will assist the State in taking a proactive step towards the ecological and economical vitality for current and future generations.

### **Baldwin County Commission**

The Natural Resource Section of the Planning and Zoning Department developed a list of possible projects for inclusion in the CIAP plan and further solicited project ideas from the public. This information was provided to the Baldwin County Commission for their review and approval. The process for decision making involved an analysis of the proposed projects in relation to the Baldwin County Strategic Plan and the authorized uses of the CIAP plan. Additionally, projects were selected based on common objectives of federally approved plans (Alabama Coastal Area Management Plan and Mobile Bay National Estuary Program Comprehensive Conservation and Management Plan).

### **Mobile County Commission**

The Mobile County Commission appointed the Director of the Mobile County Environmental Services Department to take the lead in identifying projects to be

included in the Mobile County Coastal Impact Assistance Program. An internal planning team was formed that included the County Commissioners, the Mobile County Engineer, and staff from the Environmental Services Department to review identified projects.

Internal planning meetings were held to brief team members on program guidance, develop program goals and objectives, and to review the list of potential projects. The Mobile County CIAP team evaluated the goals and objectives of each project and reviewed the proposed activity's consistency with the Coastal Impact Assistance Program guidance.

Projects were selected for inclusion in the County's portion of the CIAP based on:

1. Compliance with Authorized Uses;
2. Compliance with local objectives and;
3. Feasibility of proposed project

- ❖ How the State of Alabama, Baldwin County, and Mobile County will ensure compliance with all relevant Federal, State, and local laws including each State's Coastal Zone Management Program

#### **State of Alabama**

The State of Alabama CIAP staff will review all projects to ensure compliance with Federal, State, and relevant local laws and regulations. At the Federal level, CIAP projects are subject to authorities such as the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), the Federal Consistency Provisions of Coastal Zone Management Act (CZMA), the Essential Fish Habitat Provisions of the Sustainable Fisheries Act, Coastal Barrier Resources Act, National Historic Preservation Act and the Americans with Disabilities Act. The CIAP staff will obtain all the federal assurances and permits prior to or during the grant phase of each project according to program guidelines. At the State level, the DCNR serves as the lead administrative arm of the ACAMP, the State's Coastal Zone Management Program. The Alabama Department of Environmental Management (ADEM) is the regulatory agency of the Coastal Zone Management Program in Alabama. For each project, ADEM will be consulted and a letter certifying consistency with the ACAMP will be issued. The authorized uses of CIAP fit closely with the goals and objectives of the ACAMP. At the local level, the State of Alabama will coordinate CIAP projects with any relevant building or zoning codes.

### **Baldwin County Commission**

Baldwin County will ensure compliance with all relevant laws by reviewing local, state and federal requirements as they pertain to each project. The permit submittal process for the coastal zone of Alabama will be followed. In addition, the Legal Department of the Baldwin County Commission will review project requirements prior to implementation. The County will also coordinate CIAP project activities with other County departments to ensure that they are compatible.

### **Mobile County Commission**

The Mobile County Commission will ensure compliance with all relevant laws by consulting with federal, state, and local agencies, including consultation with legal staff, and seeking permits where appropriate.

- ❖ Description of the major activities and/or categories to be funded under the Program (e.g., infrastructure, habitat restoration, mitigation, etc.)

### **State of Alabama**

In the State of Alabama Tier One and Tier Two project lists, there are seven major categories of projects including land acquisition, research, energy services planning, habitat restoration and protection, environmental education and public access, environmental education and research facility, and administration. The majority of the State's projects, or roughly 25% of the total projects, are habitat restoration and protection projects. These projects will accomplish the goal of restoring coastal areas through detailed planning and on-the-ground implementation for a wide variety of projects. Most of these projects will restore areas damaged by recent hurricanes and to increase resiliency for future storms. For example, the Gulf State Park Pier will be rebuilt to replace the former pier destroyed by Hurricane Ivan. Another focus of the State of Alabama CIAP is to invest in environmental education and research facilities such as the Weeks Bay Reserve Multipurpose Building (AL-4) or infrastructure improvements to the State's marine research facility on Dauphin Island (AL-20).

Creating a mechanism for the public to learn about the wealth of natural resources in coastal Alabama is another goal of the State of Alabama CIAP. A total of six projects (three on the Tier One list and three on the Tier 2 list) will meet objectives associated with this goal such as the creation of water-based recreation trails. Through the administration of the Forever Wild Land Trust, the State Lands Division has considerable experience in land acquisition and there are several land acquisition projects

in the CIAP Plan which complement existing coastal land acquisition endeavors. Last, the State of Alabama has included projects which will provide more information and data which will enhance management of coastal resources through research and energy services planning. Table 3 and 4 summarizes the State of Alabama's Tier One and Tier Two project by major categories of projects.

### **Baldwin County Commission**

A significant portion of the funds in the Baldwin County CIAP plan meet the CIAP authorized use #1. This authorized use is for projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands. In addition, many of the activities also meet use #4, the implementation of a federally-approved marine, coastal, or comprehensive conservation management plan. Baldwin County recognizes the importance of working with other agencies to address the many environmental concerns that face our area.

### **Mobile County Commission**

The three categories of activities to be funded will be related to improving coastal access, implementation of Action Items included in the Comprehensive Conservation and Management Plan (CCMP) developed by the Mobile Bay National Estuary Program (MBNEP) and implementation of the Mobile County Coastal Resource Protection Program. Improving and controlling the public's access to coastal areas provides opportunities for education and outreach to instill the responsibility of stewardship shared by stakeholders. Providing increased public access and eco-tourism opportunities is also included in the Mobile Bay NEP CCMP. Additional CCMP action items included in the activities to be funded range from reducing opportunities for pathogen introduction to local waters to implementing public education and outreach projects. Activities that support the development and implementation of a Mobile County Resource Protection Program include the acquisition of parcels that contain sensitive habitats for conservation and obtaining equipment needed to manage the maintenance of such parcels.

|                | Total     | Land Acquisition | Research | Energy Services Planning | Habitat Restoration and Protection | Environmental Education and Public Access | Environmental Education and Research Facility | Land Use Planning | Pollution Prevention | Administrative |
|----------------|-----------|------------------|----------|--------------------------|------------------------------------|---|---|-------------------|----------------------|----------------|
| Alabama        | 24        | 2                | 3        | 1                        | 10                                 | 4   | 3   | -                 | -                    | 1              |
| Baldwin County | 10        | 2                | 1        | -                        | 4                                  | 0   | -   | 1                 | 1                    | 1              |
| Mobile County  | 13        | 2                | 2        | -                        | 1                                  | 3   | -   | 1                 | 1                    | 1              |
| <b>TOTAL</b>   | <b>47</b> | <b>6</b>         | <b>6</b> | <b>1</b>                 | <b>15</b>                          | <b>7</b>                                  | <b>3</b>                                      | <b>2</b>          | <b>2</b>             | <b>3</b>       |

Table 3. Tier One Projects by Major Category for State of Alabama, Baldwin County and Mobile County.

|                       | <b>Total</b> | <b>Land Acquisition</b> | <b>Research</b> | <b>Energy Services Planning</b> | <b>Habitat Restoration and Protection</b> | <b>Environmental Education and Public Access</b> | <b>Environmental Education and Research Facility</b> | <b>Land Use Planning</b> | <b>Pollution Prevention</b> | <b>Administrative</b> |
|-----------------------|--------------|-------------------------|-----------------|---------------------------------|---|--|--|--------------------------|-----------------------------|-----------------------|
| <b>Alabama</b>        | 15           | 3                       | 3               | -                               | 6   | -  | 3  | -                        | -                           | -                     |
| <b>Baldwin County</b> | 4            | -                       | 1               | -                               | 1   | -  | -  | -                        | 2                           | -                     |
| <b>Mobile County</b>  | 9            | 2                       | -               | -                               | 1   | 2  | -  | -                        | 4                           | -                     |
| <b>TOTAL</b>          | <b>28</b>    | <b>5</b>                | <b>4</b>        | <b>0</b>                        | <b>8</b>                                  | <b>2</b>   | <b>3</b>   | <b>0</b>                 | <b>6</b>                    | <b>0</b>              |

Table 4. Tier Two Projects by Major Category for State of Alabama, Baldwin County and Mobile County.

❖ An Estimate of the Amount of Funds, by State and CPS, that will be Spent Annually on Each Authorized Use

Appendix F includes tables summarizing the title of each project, estimated cost of each project, and the estimated cost of each project broken down by spending estimate per calendar year of project duration, subtotal of all estimated costs by authorized use, and the total estimated cost for all authorized uses. There is a set of tables for the State of Alabama (F-1), Baldwin County (F-2), and Mobile County (F-3).

**State of Alabama**

Of the twenty-five (24) total projects in the State of Alabama CIAP project list, twenty (20) projects or \$31,724,995.29 (95.51%) of the total funding for FY 2007 and FY 2008 use Authorized Use #1 as a justification. Only two projects or \$616,666.27 (1.99%) of the total funding for FY 2007 and FY 2008 use Authorized Use #2 as a justification. The State of Alabama has budgeted only \$630,472.27 (less than 2%) of the total CIAP funding for FY 2007 and FY 2008 to be used for project administration. Only one project or \$200,000.00 (0.60%) of the total funding use Authorized Use #4 as a justification. The State of Alabama did not use Authorized #5 in any Tier One projects. Table 5 summarizes how the State of Alabama has allocated CIAP funding by Authorized Use.

| <b>State of Alabama Projects by Authorized Use</b> |                    |  |
|--|--------------------|--|
|  |                    | <b>Total Funding by Authorized Use for FY 2008 and FY 2007</b> |
| <b>Authorized Use #1</b>                           | Number of Projects | <b>20</b>  |
|  | Amount             | <b>\$31,724,995.29</b>   |
|  | Percent            | <b>95.51%</b>  |
| <b>Authorized Use #2</b>                           | Number of Projects | <b>2</b>   |
|  | Amount             | <b>\$661,666.27</b>  |
|  | Percent            | <b>1.99%</b>   |
| <b>Authorized Use#3</b>                            | Number of Projects | <b>1</b>   |
|  | Amount             | <b>\$630,427.62</b>  |
|  | Percent            | <b>1.90%</b>   |
| <b>Authorized Use #4</b>                           | Number of Projects | <b>1</b>   |
|  | Amount             | <b>\$200,000.00</b>  |
|  | Percent            | <b>0.60%</b>   |
| <b>Authorized Use #5</b>                           | Number of Projects | <b>0</b>   |
|  | Amount             | <b>\$0.00</b>  |
|  | Percent            | <b>0.00%</b>   |
| <b>Total</b>                                       | Number of Projects | <b>24</b>  |
|  | Amount             | <b>\$33,217,089.18</b>   |
|  | Percent            | <b>100.00%</b>   |

Table 5. Summary of State of Alabama Projects by Authorized Use.

## Baldwin County

Baldwin County has selected ten (10) Tier One Projects for FY 2007 and FY 2008 allocations. Seven (7) of these projects use Authorized Use #1 as a justification. This represents 82.82% or \$5,784,094.64 of the total funding. There are two (2) projects, representing 13.60% or \$950,000.00 of the funding, which use Authorized Use #4 as a justification. Baldwin County has budgeted 3.58% or \$250,000.00 of the funds to be used for CIAP administration. No projects use Authorized Use #2 or Authorized Use #5 as a justification. Table 6 is a summary of Baldwin County CIAP projects for FY 2007 and FY 2008 by Authorized Use. The total FY 2007 and FY 2008 allocation for Baldwin County is \$7,984,094.64. Future CIAP Plans and/or Plan amendments will propose projects to spend the remaining \$1,000,000.00.

| <b>Baldwin County Projects by Authorized Use</b> |                    |  |
|--|--------------------|--|
|  |                    | <b>Total Funding by Authorized Use for FY 2008 and FY 2007</b> |
| <b>Authorized Use #1</b>                         | Number of Projects | 7  |
|  | Amount             | \$5,784,094.64   |
|  | Percent            | 82.82%   |
| <b>Authorized Use #2</b>                         | Number of Projects | 0  |
|  | Amount             | \$0.00   |
|  | Percent            | 0.00%  |
| <b>Authorized Use#3</b>                          | Number of Projects | 1  |
|  | Amount             | \$250,000.00   |
|  | Percent            | 3.58%  |
| <b>Authorized Use #4</b>                         | Number of Projects | 2  |
|  | Amount             | \$950,000.00   |
|  | Percent            | 13.60%   |
| <b>Authorized Use #5</b>                         | Number of Projects | 0  |
|  | Amount             | \$0.00   |
|  | Percent            | 0.00%  |
| <b>Total</b>                                     | Number of Projects | 10   |
|  | Amount             | \$6,984,094.64   |
|  | Percent            | 100.00%  |

Table 6. Summary of Baldwin County Projects by Authorized Use.

## Mobile County

Mobile County has selected thirteen (13) Tier One Projects for both FY 2007 and FY 2008 allocations. Twelve (12) of these projects use Authorized Use #1 as a justification. This represents 96.34% or \$9,540,000.00 of the total funding. Mobile County has budgeted 3.66% or \$362,030.28 of the funds to be used for CIAP administration. No projects use Authorized Use #2, Authorized Use #4 or Authorized Use #5 as a justification. Table 7 is a summary of Mobile County CIAP projects for FY 2007 and FY 2008 by Authorized Use.

| <b>Mobile County Projects by Authorized Use</b> |                    | <b>Total Funding by Authorized Use for FY 2008 and FY 2007</b> |
|---|--------------------|--|
| <b>Authorized Use #1</b>                        | Number of Projects | 12   |
|   | Amount             | \$9,540,000.00   |
|   | Percent            | 96.34%   |
| <b>Authorized Use #2</b>                        | Number of Projects | 0  |
|   | Amount             | \$0.00   |
|   | Percent            | 0.00%  |
| <b>Authorized Use #3</b>                        | Number of Projects | 1  |
|   | Amount             | \$362,030.28   |
|   | Percent            | 3.66%  |
| <b>Authorized Use #4</b>                        | Number of Projects | 0  |
|   | Amount             | \$0.00   |
|   | Percent            | 0.00%  |
| <b>Authorized Use #5</b>                        | Number of Projects | 0  |
|   | Amount             | \$0.00   |
|   | Percent            | 0.00%  |
| <b>Total</b>                                    | Number of Projects | 13   |
|   | Amount             | \$9,902,030.28   |
|   | Percent            | 100.00%  |

Table 7. Summary of Mobile County Projects by Authorized Use.



## 7. Proposed Project Lists

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a. State of Alabama Tier 1 Projects

(Table 1 of 2)

| Project Number | Project Description  | Cost            | Page Number |
|----------------|--|-----------------|-------------|
| AL-1           | Acquisition of Perdido River Longleaf Hills: South Addition  | \$ 6,906,655.00 | 23          |
| AL-2           | Administration of the Coastal Impact Assistance Program  | \$ 580,427.62   | 27          |
| AL-3           | Infrastructure Improvements at Designated Protected Areas in Coastal Alabama   | \$ 500,000.00   | 35          |
| AL-4           | Weeks Bay National Estuarine Research Reserve Education and Multipurpose Building Construction   | \$ 1,392,503.47 | 39          |
| AL-5           | Water-Based Nature Trail Development in Coastal Alabama  | \$ 750,000.00   | 55          |
| AL-6           | GIS-based Inventory of Oil and Gas Leased Tracts Including Pipelines and Infrastructure  | \$ 200,000.00   | 59          |
| AL-7           | Investigation and Control of Non-native Terrestrial Exotic and Nuisance Species in Designated Protected Areas                              | \$ 766,666.67   | 63          |
| AL-8           | Reintroduction of Native Vegetation in Areas Converted for Silvicultural or Agricultural Activities (e.g. reforestation of longleaf areas) | \$ 1,000,000.00 | 67          |
| AL-9           | Wetland restoration in Grand Bay, Mobile-Tensaw Delta, Lillian Swamp and Perdido River   | \$ 416,666.67   | 71          |
| AL-10          | Equipment and Infrastructure Improvements to Enhance Land Conservation Management and Activities in Coastal Areas                          | \$ 642,503.46   | 75          |
| AL-11          | Restoration of Wildlife and Plant Communities Impacted by Habitat Disturbances   | \$ 416,666.27   | 79          |



(Table 2 of 2)

| Project Number | Project Description   | Cost                   | Page Number |
|----------------|---|------------------------|-------------|
| AL-12          | Investigation of Restoration of Hydrology on Mobile Bay Causeway  | \$ 500,000.00          | 83          |
| AL-13          | Implementing Conservation Through Reconstruction of the Gulf State Park Pier  | \$ 8,050,000.00        | 87          |
| AL-14          | Gulf State Park Environmental Education Center  | \$ 2,000,000.00        | 113         |
| AL-15          | Restoration of Gulf State Park Campground Vegetation  | \$ 245,000.00          | 117         |
| AL-16          | Longleaf Pine Restoration at Gulf State Park  | \$ 420,000.00          | 119         |
| AL-17          | Gulf State Park Land Management Program   | \$ 750,000.00          | 123         |
| AL-18          | Freshwater Mollusk and Fish Enhancement and Restoration in Coastal River Systems                                      | \$ 1,000,000.00        | 127         |
| AL-19          | Improvements to the Marine Resources Division's facilities at Claude Petet Mariculture Center in Gulf Shores, Alabama | \$ 4,500,000.00        | 133         |
| AL-20          | Improvements to Marine Resource Division's facilities on Dauphin Island, Alabama                                      | \$ 550,000.00          | 139         |
| AL-21          | Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama          | \$ 100,000.00          | 143         |
| AL-22          | Research Equipment and Software for Artificial Reef and Coastal Resource Management                                   | \$ 330,000.00          | 147         |
| AL-23          | External Audit of Marine Resource Division's Biological Sampling and Analysis Programs                                | \$ 200,000.00          | 151         |
| AL-24          | Acquisition of Sensitive Waterfront Property, Dauphin Island  | \$ 1,000,000.00        | 155         |
| <b>TOTAL</b>   |   | <b>\$33,217,089.16</b> |             |



b. Baldwin County Tier One Projects

| Project Number  | Project Title  | Project Cost   | Page Number |
|---|--|----------------|-------------|
| BC-1  | Wetland and Waterway Protection  | \$900,000.00   | 161         |
| BC-2  | Acquisition of Property for Conservation & Public Access   | \$2,094,094.64 | 167         |
| BC-3  | Administration of the Coastal Impact Assistance Program  | \$250,000.00   | 171         |
| BC-4  | Magnolia Landfill Gas Collection System  | \$650,000.00   | 173         |
| BC-5  | Comprehensive Land Use Plan Development  | \$300,000.00   | 177         |
| BC-6  | Exotic Plant Species Management  | \$100,000.00   | 181         |
| BC-7  | Coastal Dune Restoration   | \$240,000.00   | 185         |
| BC-8  | Shoreline/Habitat Restoration  | \$200,000.00   | 189         |
| BC-9  | Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama | \$250,000.00   | 195         |
| BC-10   | Acquisition of Property for Boating Access   | \$2,000,000.00 | 199         |
| Total *   |  | \$6,984,094.64 |             |
| <p>* NOTE: The total FY 2007 and FY 2008 allocation for Baldwin County is \$7,984,094.64. Future CIAP Plans and/or Plan amendments will propose projects to spend the remaining \$1,000,000.00.</p> |  |                |             |



c. Mobile County Tier One Projects

| Project Number | Project Title  | Project Cost           | Page Number |
|----------------|--|------------------------|-------------|
| MC-1           | Administration of the Coastal Impact Assistance Program  | \$ 362,030.28          | 205         |
| MC-2           | Mobile County River Delta Tourism and Welcome Center Property Acquisition and Improvements                   | \$ 1,527,000.00        | 207         |
| MC-3           | Heron Bay Cut-Off Access Improvements  | \$ 725,000.00          | 211         |
| MC-4           | Dauphin Island Campground Improvements   | \$ 200,000.00          | 215         |
| MC-5           | Dauphin Island Bicycle Trail Repair  | \$ 95,000.00           | 219         |
| MC-6           | Establishment of a Mobile County Recycling Facility  | \$ 775,000.00          | 227         |
| MC-7           | Mobile County Greenprint Project   | \$ 73,000.00           | 231         |
| MC-8           | Sensitive Habitat Restoration and Enhancement of County-owned Property                                       | \$ 1,000,000.00        | 235         |
| MC-9           | Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama | \$ 250,000.00          | 239         |
| MC-10          | North Mobile County Wastewater Facilities  | \$ 1,500,000.00        | 243         |
| MC-11          | Coastal Research Weather Stations  | \$ 145,000.00          | 247         |
| MC-12          | West Mobile County Conservation Property Acquisition   | \$ 2,250,000.00        | 251         |
| MC-13          | Acquisition of Sensitive Waterfront Property, Dauphin Island   | \$ 1,000,000.00        | 255         |
| <b>Total</b>   |  | <b>\$ 9,902,030.28</b> |             |



d. State of Alabama Tier Two Projects

| Project Number | Project Description   | Cost            | Page Number |
|----------------|---|-----------------|-------------|
| AL2-1          | Biodiversity Inventories in Designated Protected Areas of Coastal Alabama                                     | \$500,000.00    | 263         |
| AL2-2          | Assessment of Coastal Alabama Salt Marsh Communities  | \$200,000.00    | 267         |
| AL2-3          | Development of Natural Resource-based Public Education and Outreach Materials for Coastal Alabama             | \$500,000.00    | 269         |
| AL2-4          | Implement and Expand Prescribed Burning Program   | \$100,000.00    | 273         |
| AL2-5          | Expansion of the Graduate Research Program at Weeks Bay National Estuarine Research Reserve                   | \$125,000.00    | 275         |
| AL2-6          | Alabama Coastal Area Management Program Web Portal  | \$50,000.00     | 277         |
| AL2-7          | Removal of Derelict Structures and Vessels in Waterways from Hurricanes                                       | \$250,000.00    | 281         |
| AL2-8          | Support of Natural Resource Damage Assessment Program (NRDA) in Coastal Alabama                               | \$400,000.00    | 285         |
| AL2-9          | Land Acquisition in the Mobile-Tensaw Delta, Perdido River Corridor and/or Lillian Swamp, Baldwin County      | \$10,000,000.00 | 289         |
| AL2-10         | Land Acquisition in the Escatawpa River Corridor and/or Coastal Mobile County                                 | \$10,000,000.00 | 291         |
| AL2-11         | Land Acquisition in the Red Hills, Monroe County  | \$10,000,000.00 | 295         |
| AL2-12         | Artificial Reef -- Construction, Research, and Development  | \$1,000,000.00  | 297         |
| AL2-13         | Outreach for Local Marine Conservation Awareness Public Service Announcements                                 | \$200,000.00    | 299         |
| AL2-14         | Bathymetric, Seismic, and Vibracore Survey of Federal Waters  | \$1,150,000.00  | 301         |
| AL2-15         | Development of GIS-based Applications and Digital Data to Assist in Management of Alabama's Coastal Resources | \$675,000.00    | 303         |



e. Baldwin County Tier Two Projects

| Project Number | Project Title  | Project Cost | Page Number |
|----------------|--|--------------|-------------|
| BC2-1          | Erosion Control Materials for Highway Department       | \$480,000.00 | 309         |
| BC2-2          | Enhancement of Recycling Facility at Magnolia Landfill | \$300,000.00 | 313         |
| BC2-3          | Household Hazardous Waste Amnesty Day                  | \$150,000.00 | 317         |
| BC2-4          | Water & Wastewater Infrastructure Study                | \$100,000.00 | 321         |



f. Mobile County Tier Two Projects

| Project Number | Project Title  | Project Cost    | Page Number |
|----------------|--|-----------------|-------------|
| MC2-1          | Mobile County Conservation Acquisition                                     | \$ 4,000,000.00 | 327         |
| MC2-2          | South Mobile County Wastewater Facilities                                  | \$ 2,500,000.00 | 329         |
| MC2-3          | Dauphin Island Causeway Restoration, Protection, and Public Access Project | \$ 1,000,000.00 | 333         |
| MC2-4          | West Mobile County Wastewater Facilities                                   | \$ 2,500,000.00 | 337         |
| MC2-5          | Theodore Ship Channel Boat Access  | \$ 1,000,000.00 | 341         |
| MC2-6          | Erosion & Sediment Control   | \$ 1,000,000.00 | 345         |
| MC2-7          | Bayfront Park Improvements   | \$ 275,000.00   | 349         |
| MC2-8          | Erosion Control Equipment for Public Works Department                      | \$ 500,000.00   | 353         |
| MC2-9          | Escatawpa Hollow River Park Acquisition and Education Center               | \$ 2,000,000.00 | 357         |



## 8. Proposed Tier One Project Descriptions

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a. State of Alabama Tier One Project Descriptions

Table 1 of 2

| Project Number | Project Description  | Cost            | Page Number |
|----------------|--|-----------------|-------------|
| AL-1           | Acquisition of Perdido River Longleaf Hills: South Addition  | \$ 6,906,655.00 | 23          |
| AL-2           | Administration of the Coastal Impact Assistance Program  | \$ 580,427.62   | 27          |
| AL-3           | Infrastructure Improvements at Designated Protected Areas in Coastal Alabama   | \$ 500,000.00   | 35          |
| AL-4           | Weeks Bay National Estuarine Research Reserve Education and Multipurpose Building Construction   | \$ 1,392,503.47 | 39          |
| AL-5           | Water-Based Nature Trail Development in Coastal Alabama  | \$ 750,000.00   | 55          |
| AL-6           | GIS-based Inventory of Oil and Gas Leased Tracts Including Pipelines and Infrastructure  | \$ 200,000.00   | 59          |
| AL-7           | Investigation and Control of Non-native Terrestrial Exotic and Nuisance Species in Designated Protected Areas                              | \$ 766,666.67   | 63          |
| AL-8           | Reintroduction of Native Vegetation in Areas Converted for Silvicultural or Agricultural Activities (e.g. reforestation of longleaf areas) | \$ 1,000,000.00 | 67          |
| AL-9           | Wetland restoration in Grand Bay, Mobile-Tensaw Delta, Lillian Swamp and Perdido River   | \$ 416,666.67   | 71          |
| AL-10          | Equipment and Infrastructure Improvements to Enhance Land Conservation Management and Activities in Coastal Areas                          | \$ 642,503.46   | 75          |
| AL-11          | Restoration of Wildlife and Plant Communities Impacted by Habitat Disturbances   | \$ 416,666.27   | 79          |



Table 2 of 2

| Project Number | Project Description  | Cost                   | Page Number |
|----------------|--|------------------------|-------------|
| AL-12          | Investigation of Restoration of Hydrology on Mobile Bay Causeway   | \$ 500,000.00          | 83          |
| AL-13          | Implementing Conservation Through Reconstruction of the Gulf State Park Pier   | \$ 8,050,000.00        | 87          |
| AL-14          | Gulf State Park Environmental Education Center   | \$ 2,000,000.00        | 113         |
| AL-15          | Restoration of Gulf State Park Campground Vegetation   | \$ 245,000.00          | 117         |
| AL-16          | Longleaf Pine Restoration at Gulf State Park   | \$ 420,000.00          | 119         |
| AL-17          | Gulf State Park Land Management Program  | \$ 750,000.00          | 123         |
| AL-18          | Freshwater Mollusk and Fish Enhancement and Restoration in Coastal River Systems                                       | \$ 1,000,000.00        | 127         |
| AL-19          | Improvements to the Marine Resources Division's facilities at Claude Peteet Mariculture Center in Gulf Shores, Alabama | \$ 4,500,000.00        | 133         |
| AL-20          | Improvements to Marine Resource Division's facilities on Dauphin Island, Alabama                                       | \$ 550,000.00          | 139         |
| AL-21          | Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama           | \$ 100,000.00          | 143         |
| AL-22          | Research Equipment and Software for Artificial Reef and Coastal Resource Management                                    | \$ 330,000.00          | 147         |
| AL-23          | External Audit of Marine Resource Division's Biological Sampling and Analysis Programs                                 | \$ 200,000.00          | 151         |
| AL-24          | Acquisition of Sensitive Waterfront Property, Dauphin Island   | \$ 1,000,000.00        | 155         |
| <b>TOTAL</b>   |  | <b>\$33,217,089.16</b> |             |



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Acquisition of Perdido River Longleaf Hills: South Addition**

PROJECT NUMBER: **AL-1**

PROJECT CONTACT (S):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Greg Lein, Assistant Director                    |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3484                                   |
| Fax       | (251) 621-1331                                   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | greg.lein@dcnr.alabama.gov                       |

**PROJECT SUMMARY**

LOCATION: **Perdido River Corridor, East Baldwin County, AL**

DURATION: **One Year**

ESTIMATED COST:

| AL-1               |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 6,906,655.00 |
| FY 2007            | \$ 6,906,655.00 |
| FY 2008            | \$ -            |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-1 |                 |
|------|-----------------|
| 2008 | \$ 6,906,655.00 |
| 2009 | \$ -            |
| 2010 | \$ -            |
| 2011 | \$ -            |

GOAL: Using CIAP funding, the State of Alabama will acquire and conserve sensitive habitat throughout the coastal area.

OBJECTIVE: The objective of this project is to purchase approximately 4,796 acres of the Perdido River Tract from The Nature Conservancy.

The Perdido River (30° 42' 27.34" N, 87° 28' 31.56" W) forms most of the eastern boundary between Baldwin County, Alabama, and Escambia County, Florida and flows into Perdido Bay. The Perdido River is one of the highest quality, free-flowing blackwater river systems in the Gulf Coastal Plain. The forests along the river corridor include slash pine flatwoods, pitcher plant seepage bogs, longleaf pine forests, and Atlantic whitecedar swamps. The Perdido River has incredible water clarity and provides high quality fresh water to Perdido Bay, which is home to an abundant diversity of estuarine life, including dwarf seahorses, dolphins, manatees, and coastal arch grasses. The Perdido River contains numerous, large beach quality sandbars at nearly every curve in the river. Lands along the Perdido River corridor are utilized by hundreds of species of neotropical migratory birds as feeding and resting sites during spring and fall migrations.

In early 2006, The Nature Conservancy (TNC) purchased 14,119 acres along the Perdido River from International Paper Corporation, seizing upon a rare opportunity to conserve many acres of sensitive habitat. Subsequently, in December of 2006 the State of Alabama purchased 9,323 acres of this tract from TNC using funding from the State of Alabama's Forever Wild program, 2001 CIAP funds, and funding from the Coastal and Estuarine Land Conservation Program (CELCP). Additional land to the north was also acquired via the Forest Legacy Program. This project continues a comprehensive interstate approach to the conservation and management of a unique coastal ecosystem. Specifically, this project compliments the acquisition of a 7,400 acre conservation easement on the Florida side of the river, by the Florida Forever acquisition program, as well as 2,386 acres recently purchased by the Florida Chapter of the Nature Conservancy.

The objective of this project is to purchase the remaining acreage of this tract (approximately 4,796 acres) from The Nature Conservancy. Maps are included in Appendix G-2 and G-3 depicting the location of the property. A closing date will be scheduled and the title will be

transferred soon after CIAP plan approval. The property will be managed by the SLD and the deed will be restricted according to program requirements. This will be a phased project, whereby the SLD may purchase a portion of the 4,796 acres in separate grant applications.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will acquire land for conservation within the coastal area of Alabama.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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1. DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of  
Conservation  
and Natural Resources**
2. PROJECT TITLE: **Administration of the Coastal Impact Assistance Program**

PROJECT NUMBER: **AL-2**

3. PROJECT CONTACT:

|           | Primary Contact  |
|-----------|--|
| Name      | Cara Stallman  |
| Address   | Alabama State Lands Division   |
|           | Department of Conservation and<br>Natural Resources                                |
|           | 31115 Five Rivers Boulevard  |
|           | Spanish Fort, AL 36527   |
| Telephone | (251) 621-1238   |
| Fax       | (251) 621-1331   |
| E-mail    | <a href="mailto:Cara.Stallman@dcnr.alabama.gov">Cara.Stallman@dcnr.alabama.gov</a> |

4. PROJECT SUMMARY

LOCATION: N/A

DURATION: **One Year (Pre-award costs only)**

ESTIMATED COST:

| AL-2               |              |
|--------------------|--------------|
| Total Project Cost | \$293,744.84 |
| FY 2007            | \$259,386.11 |
| FY 2008            | \$34,358.73  |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-2 |              |
|------|--------------|
| 2009 | \$293,744.84 |
| 2010 | \$ -         |
| 2011 | \$ -         |
| 2012 | \$ -         |

**GOAL:** The goal of this project is to manage the State of Alabama CIAP in an efficient, cost-effective, and organized manner in order to meet the program requirements.

**OBJECTIVE:** This project will encompass all aspects of CIAP administration including program oversight, contract management, public education/outreach, engineering support for CIAP Plan development, and accounting services. As necessary, external contractors will be employed to aid in successful implementation of the State of Alabama CIAP.

## 5. AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #3: planning assistance and the administrative costs of complying with CIAP.
- Justification: This project meets Authorized Use #3 because administrative costs meet the definition of the Authorized Use.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funds.

## 6. PROJECT DESCRIPTION

This grant application seeks pre-award costs for the administration of the CIAP program prior to October 1, 2010.

### GOALS OF THE CURRENT GRANT APPLICATION:

The goal of this grant application is to seek pre-award funding of all costs incurred to the State of Alabama Department of Conservation and Natural Resources for the administration of the Coastal Impact Assistance Program. The grant will seek labor and fringe for the State Lands Manager, Natural Resource Planner, Account, Staff Accountant.

### STATEMENT OF WORK:

When the CIAP was created by the Energy Policy Act of 2005, the State Lands Manger (SLM) was responsible for the program. The SLM began to coordinate with the coastal political subdivisions in Alabama (Mobile and Baldwin County), met with MMS officials, and briefed management on CIAP status and program requirements. To assist in CIAP development, the State Lands Division contracted with the South Alabama Regional Planning Commission (SARPC), a quasi-government entity following state contracting and purchasing procedures. In December of 2006, the SLM hired a Natural Resource Manager (NRP) to assist with all the day-to-day administrative function of CIAP. One-hundred percent of the NRP's time is dedicated to CIAP administration. Further, direct costs of from time, fringe and travel personnel from the Accounting Division of DCNR also participated in the development of the CIAP Program.

The goal of the grant application will seek pre-award costs for the following activities:

1. Preparation of a State of Alabama Draft CIAP Plan for FY 2007 and 2008.
2. Preparation of a State of Alabama Final CIAP Plan for FY 2007 and 2008.
3. Coordination with Baldwin and Mobile Counties
4. Coordinate with other Divisions within the Department of Conservation and Natural Resources including Marine Resources Division, Wildlife and Freshwater Fisheries Division, State Parks Division and the Engineering Section.
5. Coordinate with other agencies within the State of Alabama
6. Coordinates with other local governments, non-profit organizations, and other CIAP stakeholders.
7. Preparation of grant applications submitted prior to October 1, 2010.

## SCHEDULE:

The project will seek pre-award costs only. The grant period will be from the date the grant is awarded to March 31, 2010.

### Major Milestones with dates

1. October 2009 – grant is awarded
2. November 2009 – funds are drawn down on ASAP
3. January 2010 – close-out

### Major Tasks by Duration

1. Award documents will be signed in October of 2009
2. Grant funds will be drawn down in November of 2009
3. Grant will be closed out by March 31, 2010.

## PROJECT MANAGEMENT PLAN:

The CIAP administrative manger for this project is:

|           |  |
|-----------|--|
|           | Primary Contact  |
| Name      | Cara Stallman  |
| Address   | Alabama State Lands Division   |
|           | Department of Conservation and<br>Natural Resources                                |
|           | 31115 Five Rivers Boulevard  |
|           | Spanish Fort, AL 36527   |
| Telephone | (251) 621-1238   |
| Fax       | (251) 621-1331   |
| E-mail    | <a href="mailto:Cara.Stallman@dcnr.alabama.gov">Cara.Stallman@dcnr.alabama.gov</a> |

As the administrative manager, Cara Stallman will be in charge of the compliance with rules and regulations of CIAP, following the program guidance, grant guidance and the award document.

## FACTORS THAT COULD EXPEDITE OR DISRUPT PROJECT SCHEDULE:

The project could be expedited if MMS was able to award the grant earlier than expected, resulting in the ability to draw down the funds earlier. The project schedule could be disrupted by longer review of the grant application resulting in a delay of the award document. However, these risks are minimal as the grant is seeking pre-award costs only.

#### DELIVERABLE:

The deliverable at the completion of the grant will be a copy of the approved State of Alabama CIAP Plan for FY 2007 and FY 2008, three (3) submitted grant applications, and 30 coordinations meeting with Baldwin County and Mobile County.

#### COMPATIBILITY/SYNERGY:

The State of Alabama, through the DCNR, is committed to managing the CIAP in an efficient, cost-effective, and organized manner in order to fulfill the requirements of the program. The DCNR, through its State Lands Division (SLD), provides day-to-day management and coordination of the CIAP. Due to its involvement previously in a similar program, the SLD has developed the capacity to manage such a program and regularly manages large-scale grant programs. The State Lands Division employs one full-time staff person, located in the coastal area, dedicated to coordinating all aspects of the CIAP. Additionally, a State Lands Manager oversees the administration of the CIAP on a part-time basis. These staff members update departmental and other state officials on CIAP-related issues so that informed CIAP decisions are made. Also, close coordination with other relevant DCNR support sections including Accounting, Legal, Engineering, and Coastal Sections occur on a regular basis to ensure proper procedures are created and followed throughout CIAP implementation. CIAP staff work closely with CIAP representatives from the MMS and other applicable federal agencies. In addition, CIAP staff coordinates with representatives from Mobile and Baldwin County regarding timetables, meetings, and reports.

#### CONTROVERSY/SUPPORT:

This project is supported by the DCNR and there is no associated controversy.

#### BUNDLING:

This project is not bundled. Only one project is being submitted in this grant application.

#### PROGRAM INCOME:

No program income will be generated during this project's period of performance.

MAPS/DRAWINGS:

There are no maps and/or drawings included in this application.

7. DESCRIPTION OF ENVIRONMENTAL IMPACTS

There will be no environmental impacts.

8. RELATIONSHIP TO OTHER FEDERAL PROGRAMS

The DCNR manages numerous federal grants and the administration of the CIAP will follow all applicable federal guidelines.

9. FEDERAL, STATE AND LOCAL AGENCIES

Federal Agencies

- Not applicable (no federal permits were required)

State Agencies

- Not applicable (no federal permits were required)

Local Agencies

- Not applicable (no federal permits were required)

10. PROJECT INFORMATION QUESTIONS

**Environmental Review**

- 1) Does the project require any Federal environmental review (e.g., environmental assessment, environmental impact statement, biological opinion)?

Yes  No

- 2) Does the project require any State environmental review (e.g. Consistency Determination, State Historic Preservation Office)?

Yes  No

3) Does the project require local environmental review (e.g., zoning)?

Yes  No

### **Permits**

1) Does this project require any Federal permits?

Yes  No

2) Does this project require and State permits?

Yes  No

3) Does this project require any local permits?

Yes  No

### **Legal Proceedings**

1) Are there any pending legal proceedings that have been taken against any of the permits or related environmental analyses required for the project?

Yes  No

## **11. CHANGES FROM THE APPROVED STATE PLAN**

Section 2. Cara Stallman is the Primary Contact. The original Plan included Will Brantley as the primary contact.

Section 3. This grant is seeking pre-award costs only and therefore does not request all of the money allocated in this grant application. AL-13, the construction of the Gulf State Park Pier reallocated \$50,000.00 from this project for the construction of signs. A summary of the allocation of funding is included below:

|   |              |
|---|--------------|
| Total Amount in the approved CIAP Plan for FY 2007 and 2008       | \$630,427.62 |
| Amount reallocated to AL-13 for signs on the Gulf State Park Pier | \$50,000.00  |
| Amount in AL-02   | \$580,427.62 |
| FY 2007 (original amount minus 50K)                               | \$259,386.11 |
| FY 2008   | \$321,041.51 |
| Amount Requested in first State of Alabama CIAP Grant             | \$293,744.84 |
| FY 2007 spent   | \$259,386.11 |
| FY 2008 spent   | \$34,358.73  |
| Amount remaining in AL-02 for FY 2007                             | \$0.00       |
| Amount remaining in AL-02 for FY 2008                             | \$286,682.78 |

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Infrastructure Improvements at Designated Protected Areas  
in Coastal Alabama**

PROJECT NUMBER: **AL-3**

PROJECT CONTACT (S):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Chris Smith, State Lands Manager                 |
| Address   | Alabama State Lands Division                     | Alabama State Lands                              |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      |  |
|           | Spanish Fort, Alabama 36527                      | Montgomery, Alabama 36130                        |
| Telephone | (251) 621-1238                                   | (334) 242-3484                                   |
| Fax       | (251) 621-1331                                   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | chris.smith@dcnr.alabama.gov                     |

### PROJECT SUMMARY

**LOCATION:** Grand Bay Savanna in southwestern Mobile County, Mobile Tensaw Delta, Weeks Bay, Splinter Hill Bog in northern Baldwin County, Perdido River corridor in eastern Baldwin County, and Lillian Swamp in southeastern Baldwin County (see Appendix G-4)

**DURATION:** Four Years

ESTIMATED COST:

| AL-3               |               |
|--------------------|---------------|
| Total Project Cost | \$ 500,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 500,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-3 |               |
|------|---------------|
| 2008 | \$ 125,000.00 |
| 2009 | \$ 125,000.00 |
| 2010 | \$ 125,000.00 |
| 2011 | \$ 125,000.00 |

**GOAL:** The goal of the State of Alabama CIAP is to conserve and protect Alabama’s designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Weeks Bay, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) by raising the public awareness of these areas through the construction of natural resource-based educational facilities.

**OBJECTIVE:** This project will construct capital improvement projects at four (4) locations throughout coastal Alabama. The first capital improvement project will consist of two (2) kiosks and one-thousand (1000) feet of boardwalk at the Grand Bay savanna. Also, three (3) other capital improvement projects will be planned and constructed at the Lillian Swamp, Perdido River Corridor, Weeks Bay Reserve, Splinter Hill Bog, and/or the Mobile-Tensaw Delta.

The goal of this project is to increase public awareness of conservation and protection of the State of Alabama’s designated protected areas (Grand Bay Savanna, Weeks Bay, Lillian Swamp, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) through the construction of natural resource-based educational facilities. These facilities include boardwalks, trail markers, trails, and viewing platforms. Conservation tracts at these locations have been acquired through a variety of federal, state and local partnerships. Appendix G-4 depicts a map of these areas in coastal Alabama.

The project will contain two components. First, SLD conservation staff will designate an appropriate location and plan for the necessary improvements at four of the following sites:

Grand Bay Savanna, Weeks Bay Reserve, Splinter Hill Bog, Mobile-Tensaw Delta, Lillian Swamp, and the Perdido River Corridor. Exact locations and associated budgets for each improvement within this project will be submitted in the grant application. After this project is approved in the CIAP Plan, the SLD will expend resources in order to better define these projects. Next, four (4) capital improvements projects one each at the Grand Bay Savanna, Lillian Swamp, Perdido River Corridor, Splinter Hill Bog, and/or the Mobile-Tensaw Delta will be designed and constructed by SLD personnel. For example, this project will construct 1000-feet of boardwalk and two (2) kiosks at the Grand Bay Savanna in southeastern Mobile County (30° 24' 28.8" N, 88° 18' 33.68" W). The boardwalk will be approximately 6-feet wide and the kiosks will be 12-feet by 16-feet. Information regarding the remaining improvements at the remaining locations will be determined through an in-house planning process provided with the grant application.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland .
- Justification: This project meets using Authorized Use #1 because this project will construct trails and other educational infrastructure improvements by creating controlled public use areas within natural areas of coastal Alabama. The creation of trails protects and conserves coastal areas by minimizing impact to more sensitive natural areas.

Construction of controlled low impact infrastructure conserves and protects the designated protected area throughout coastal Alabama by creating controlled access and environmental educational opportunities. Controlled access to natural resource land manages the impact of visitors to the natural area and provides a means to educate the public on the value of conservation property.

For example, a boardwalk and kiosks and at Grand Bay will create a destination for birding enthusiasts, hikers, and school groups. The visitors will be directed to one location, as opposed to the entire protected area. Focusing the public's use in one location will help law enforcement patrol a smaller geographic area in addition to minimizing the impact the remaining natural area. Trash receptacles will be made available to minimize illegal dumping throughout the natural area. In addition, educational amenities such as posters, signs, and maps will be available at the location providing information on the natural ecology of the area.

- Cost Sharing: Cost sharing is not applicable to this project
- Partnering: This project will utilize 100% CIAP funding.
- Benefit to Natural Coastal Environment: The development of amenities that support and improve natural resource-based activities encourage a sense of ownership and

stewardship of public land, thus protecting the natural coastal environment. These designated protected areas highlight land conservation and demonstrate successful protection and management of coastal natural resources. One avenue to magnify these accomplishments would be to erect a kiosk at the Grand Bay Savanna that would educate readers on the importance of suitable habitat space for natural resources to thrive through the area's acquisition plan. In addition, this site is a very popular destination for viewing a variety of bird species. Due to this natural appeal, the Grand Bay Savanna is recognized as a key birding location on the Alabama Coastal Birding Trail ([www.alabamacoastalbirdingtrail.com](http://www.alabamacoastalbirdingtrail.com)) and is a featured tour destination for coastal birding festivals and birding enthusiasts. However, this site lacks the improvements, such as boardwalks and trails, to support such heavy human traffic. In its current state, this site is not conducive for conducting tours or facilitating low impact natural resource-based activities. In sum, providing the public a place to experience land conservation first hand in south Alabama enhances the public's appreciation of the natural coastal environment. This appreciation reinforces a sense of ownership of public land and, in turn, results in a benefit to the natural coastal environment.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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1. DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of  
Conservation  
and Natural Resources**
2. PROJECT TITLE: **Weeks Bay National Estuarine Research Reserve  
Education and Multipurpose Building Construction**

PROJECT NUMBER: **AL-4**

3. PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Phillip Hinesley, Chief Coastal Section          |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division, Coastal Section    |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | Five Rivers Alabama's Delta Resource Center      |
|           | 30945 Five Rivers Boulevard                      | 31115 Five Rivers Boulevard                      |
|           | Spanish Fort, Alabama 36527                      | Spanish Fort, Alabama 36527                      |
| Telephone | (251) 621-1238                                   | (251) 621-1216                                   |
| Fax       | (251) 621-1331                                   | (251) 621-1331                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | phillip.hinesley@dcrn.alabama.gov                |

#### 4. PROJECT SUMMARY

LOCATION: **Weeks Bay Reserve, Fairhope, AL**

DURATION: **One Year**

## ESTIMATED COST:

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Note: this amount varies from the approved State of Alabama CIAP Plan for FY 2007 and 2008. This project cost in the approved plan is \$1,392,503.47. Funding from NOAA was leveraged to reduce the CIAP project costs. Reimbursements for additional construction activities associated with this building, potentially including a permeable parking lot, shoreline stabilization through the replacement of a deteriorating bulkhead, and enhancement of the public access areas adjacent to the building, may be submitted in future grant submittals.

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

**Error! Not a valid link.**

Note this amount varies from the approved State of Alabama CIAP Plan for FY 2007 and 2008. This project cost in the approved plan is \$1,392,503.47. The cost decreased as the project as funding from NOAA was leveraged to reduce the project costs. The calendar year of the project duration was changed from 2008 to 2009 due to delay in plan approval.

**GOAL:** The goal of the State of Alabama CIAP is to conserve and protect Alabama's designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Weeks Bay, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) by raising the public awareness of these areas through the construction of natural resource-based educational facilities.

**OBJECTIVE:** The objective of this project is to construct 9,500 square feet of classroom and meeting space to host 2,500 students and visitors annually at the Weeks Bay National Estuarine Research Reserve.

The Weeks Bay Estuarine Research Reserve is located in southwest Baldwin County and is managed by the Coastal Section of the State Lands Division of the Alabama Department of Conservation and Natural Resources. Its mission is to provide leadership to promote informed management of estuarine and coastal habitats through scientific understanding and to encourage land stewardship practices through partnerships, public education, and outreach programs. Thousands of visitors and students come to this facility every year.

The State of Alabama will expend CIAP funds to construct an Education Building and a Multipurpose Building. These buildings will be located immediately adjacent to the confluence of Weeks Bay and Fish River (30° 24' 55.53" N, 87° 49' 31.48" W). The Education Building will provide 6,500 square feet of classroom space and the Multipurpose Building will provide 3,000 square feet of multipurpose meeting space. The classroom space will be used to conduct natural resource-based educational programs in concert with the mission of the Weeks Bay NERR. The State of Alabama will utilize capital improvement funds from the National Oceanic and Atmospheric Administration (NOAA) to complete this project. The project consists of three main features: the Lecture Hall/Education Building, the Multipurpose Building, and the site work/observation deck. The total NOAA funding contributed to this project is \$442,288.23. Of this amount, NOAA contributed \$33,865.13 toward architectural and engineering fees and \$408,423.10 from construction.

Education is the primary purpose of these facilities located at Weeks Bay. In addition, the facilities will support research, monitoring, stewardship, and outreach. The multipurpose meeting space will support the educational classroom. This multipurpose building is smaller than the classroom providing space to house small groups at a time. The function will largely be to support activities in the other building by providing a staging area for meeting materials, site for concurrent sessions of educational classes, and small break out sessions for workshops and conferences. It will also be used to hold meetings separate from ongoing educational programs in the Education Building. For example, meetings of 8-12 persons on varied topics of research, monitoring, or stewardship could take place at the same time a 60 person workshop was in progress next door. This multipurpose space will provide a vital function by providing logistical support for research, processing area for monitoring, gathering place for stewardship, and a site for pre and post outreach field excursions. The Multipurpose Building will house a variety of activities and programs of smaller group size as compared to the larger Education Building.

The education building provides a classroom that will be used for a variety of educational activities as determined by the mission of the Weeks Bay Reserve, guidelines set forth in approved management plans, grants providing funds for program activities, and the needs established by the State Lands Division for the Coastal Section in the Department of Conservation and Natural Resources. Educational activities will be directed toward a variety of audiences that include but are not limited to K-12, college, graduate students and researchers, continuing education groups such as elder hostel and institutes of lifelong learning, environmental groups/organizations/enthusiasts, conservation partners, non-profit organizations, municipal employees, county commissioners, mayors, engineers, soil scientists, wetland ecologists, conservation professionals, and the local community and public at large. The Coastal Training Program at the Reserve will utilize the site for programs that transfer technical information to coastal managers for the purpose of making best management decisions that will better conserve and protect natural resources in coastal Alabama. In making contact with the aforementioned audiences, activities will include but not be limited to K-12 local and regional school class visits, formal workshops and conservation class/course work, internet based learning opportunities, field-based experiential learning activities, summer estuary camp activities, local and regional conferences, research symposia, and public & community meetings. The educational

classroom will provide an opportunity to highlight natural resources of the Weeks Bay estuary and raise public awareness of conservation in coastal Alabama.

The Multipurpose Building provides a multi-programmatic facility that will support activities ongoing in the Education Building as well as provide space for research, stewardship, and outreach activities at Weeks Bay Reserve. The building will be a platform for research providing offices for Reserve research and monitoring staff, space for visiting researchers to process samples and data, and location of logistical support for field based research on Weeks Bay. Stewardship and outreach programs will also be supported by this multipurpose building assisting summer estuary camps and hands on activities that will focus on this waterfront site. Youth programs that interface with excursions on the estuary will use this facility for pre and post sessions to optimize the transfer of topics emphasizing conservation and estuarine science. In support of activities in the Education Building, the multipurpose facility will provide space to assist workshops, conferences, public meetings, research symposia, community activities, board meetings, and other such gatherings by providing a site to stage materials, hand outs, assemble demonstration apparatus, and house overflow sessions as needed. For example, a national bird banding conference is scheduled for the fall of 2008. This conference will have speakers and presentations ongoing in the Education Building while a poster session is set up in the Multipurpose Building. This will allow an overflow of activities to be most efficient with respect to time and space. In many conference formats, concurrent activities or break out rooms are needed and this combination of facility assets will be an optimum use of building space. The Multipurpose Building will become an integral and multifaceted space supporting natural resource-based education on Weeks Bay in coastal Alabama.

A regular and structured K-12 educational curriculum is ongoing at Weeks Bay Reserve and will be taking advantage of the new educational facilities on the waterfront of Weeks Bay. Currently, classes are scheduled morning and afternoon Tuesday through Friday. The Reserve contacts approximately 3,500-4,000 K-12 students in a formal manner as well as visiting groups of opportunity that come to visit the facilities. In addition, the Coastal Training Program typically has two trainings per month on a variety of coastal topics as determined by market analysis and needs assessment performed periodically on a three year rotation. In addition, various outreach activities are scheduled with youth and adult groups. Most of these programs are developed on a case by case basis focusing on conservation of coastal resources and estuarine processes. Frequency of these programs vary between one to three programs a week contacting groups such as scouts, home schools, outward bound, garden clubs, and various environmental groups and organizations.

The buildings have the opportunity for use by the public or other agencies outside the Alabama Department of Conservation and Natural Resources (DCNR), State Lands Division, Coastal Section for purposes consistent with the mission of Weeks Bay Reserve and the department (DCNR). Temporary use of the Education and Multipurpose Building will incur a rental/lease charge that will accumulate in a designated fund in the State Lands Office in Montgomery, Alabama. Fee/charge amount will be established from comparable fees/charges established through survey of the local market. This dedicated fund would be used to support the site on Weeks Bay for items such as utilities (power and water),

maintenance (repairs and improvements), and janitorial services. Funds collected, deposited, and utilized will follow established accounting procedures consistent with guidelines established by the Lands Division and Accounting Section of the department (DCNR) in addition to federal program income guidelines set forth in the grant requirements of the program.

## 5. AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because this project will construct educational infrastructure improvements.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: Three capital improvement grants NOAA were awarded to the Weeks Bay National Estuarine Research Reserve (NERR). These grants were used leveraged with the required 30% state match and CIAP funds to complete the building. The total NOAA funding contributed to this project is \$442,288.23. Of this amount, NOAA contributed \$33,865.13 toward architectural and engineering fees and \$408,423.10 from construction.
- Benefit to Natural Coastal Environment: The mission of the Weeks Bay NERR is to provide leadership to promote informed management of estuarine and coastal habitats through scientific understanding and encourage good stewardship practices through partnerships, public education, and outreach programs. The new building will host many natural resource-based educational activities. These activities will provide the visitor's of Weeks Bay appreciation of the Alabama's coastal natural resources which will foster a long-term sense of stewardship, and in turn will benefit the natural coastal environment.

## 6. PROJECT DESCRIPTION

This grant application represents a minor change to the approved State of Alabama Coastal Impact Assistance Plan for FY 2008 and 2008. The grant is requesting \$941,578.20 in pre-award architectural/engineering (A/E) and construction costs associated with AL-4, Construction of the Weeks Bay National Estuarine Research Reserve Education and Multipurpose Building Construction. This grant requests \$72,088.97 of A/E fees and \$869,489.23 for costs association with construction labor and materials. The approved State of Alabama CIAP Plan allocated \$1,392,503.47. The remaining \$450,925.27 will be expended at a future date via

related construction grant applications, a minor change, or plan amendment. The grant period for this grant will begin July 1, 2009 and end December 31, 2009. This project will seek pre-award costs. Reimbursements for additional construction activities associated with this building, potentially including a permeable parking lot, shoreline stabilization through the replacement of a deteriorating bulkhead, and enhancement of the public access areas adjacent to the building, may be submitted in future grant submittals.

#### GOALS OF THE CURRENT GRANT APPLICATION:

The goal of this project is to use CIAP funding, along with three capital improvement grants from NOAA, to construct a Multipurpose and Education Building. These buildings will be located immediately adjacent to the confluence of Weeks Bay and Fish River (30° 24' 55.53" N, 87° 49' 31.48" W). The Education Building will provide 6,500 square feet of classroom space and the Multipurpose Building will provide 3,000 square feet of multipurpose meeting space. The classroom space will be used to conduct natural resource-based educational programs in concert with the mission of the Weeks Bay NERR. **The State of Alabama will utilize capital improvement funds from the National Oceanic and Atmospheric Administration (NOAA) to complete this project.** The project consists of three main features: the Lecture Hall/Education Building, the Multipurpose Building, and the site work/observation deck. The total NOAA funding contributed to this project is \$442,288.23. Reimbursements for additional construction activities associated with this building, potentially including a permeable parking lot, shoreline stabilization through the replacement of a deteriorating bulkhead, and enhancement of the public access areas adjacent to the building, may be submitted in future grant submittals.

#### STATEMENT OF WORK:

The Weeks Bay Multipurpose and Education Building is located adjacent to the confluence of Weeks Bay and the mouth of Fish River. The building is well-sited as the Weeks Bay Visitors Center is within walking distance. In addition to a spectacular view of the estuary, the location offers a vantage point for viewing wildlife such as mullet, eagles, and dolphins. Further, there is water access and a boat ramp which aids in providing field trips for visitors (see Vicinity Map).

The Weeks Bay Education and Multipurpose Building consist of two pile supported buildings; the Lecture Hall and Multipurpose Building. The Lecture Hall is 6,500 square feet and contains a break room, storage closets, and rest rooms. The Multipurpose Building is 3,000 square feet on consist of one large multipurpose room, restrooms, storage closet and office. Both building are constructed 10-foot

above the ground elevation to meet FEMA and Alabama Building Commission Standards (see plan view and elevation view drawings).

Architectural and engineering services were performed by The Architect Group (TAG) located in Mobile, Alabama. The firm was procured according to Alabama State Law and policy, whereby a request for qualifications was placed on the Alabama Building Commission's website. The request for qualifications contained project summary and project qualification submittal deadline. The advertisement was posted for at least 2 weeks. The link to the website is: <http://www.bc.alabama.gov/rfp-for-ae.htm>. The fees paid to The Architect Group totaled \$105,954.10 of which \$33,865.13 was reimbursed by NOAA capital improvement grant (NA16OR2529-Marine Construction and Facility Master Plan). The amount requested to be reimbursed from 2007 CIAP funds is **\$72,088.97**.

The construction contract for the Construction of the Weeks Bay Education and Multipurpose Building project was bid on June 7, 2007. The estimate for the project was \$950,000.00. The project was advertised on Friday May 18th, Sunday May 20th, and Sunday May 27th, 2007 in the Mobile Register, Huntsville Times, and Birmingham News, in accordance with the State of Alabama competitive bid law. The project was also sent to the Mobile Dodge Room. There were six bidders. Youngblood-Barrett, Inc. submitted the low bid of \$1,095,574.00. Trawick Contractors, Inc. submitted the second highest bid for \$1,166,544.00. The bid was awarded to Youngblood-Barrett, Inc. Construction took approximately 9 months, from December 2007 until August 2008. There were a total of six change orders resulting in the total construction costs of the project \$1,277,912.33. Of this amount, \$408,423.10 was reimbursed by a NOAA grant for construction. This project requests \$869,489.23 of construction costs (labor and materials) to construct the Weeks Bay Multipurpose and Education Building.

## SCHEDULE:

This grant will seek pre award costs only. At the time the grant is submitted, the construction of the building is complete. The grant period will be from July 1, 2009 until December 31, 2009.

## PROJECT MANAGEMENT PLAN:

### Quality Management Assurance & Control:

The project was under construction from November 2007 until September 2008. During this 11-month time period, the architect of the project (Ryan Kiefer) was on site as needed. Per Alabama State Law, construction inspection fees consist of 5% of

the architect fee. The architect fee for the project was \$93,000.00, of which \$4,600.00 cover the cost of architectural engineering inspection. Weekly reports were provided by the architect to the Chief Engineer, Terry Boyd (Project Manager) in order to apprise him of the progress of the construction.

In addition to the construction inspection services provided by the project architect, the Department of Conservation and Natural Resources (DCNR) provided Conservation Construction Inspector (Ron Smoke) to oversee all aspects of the construction. Mr. Smoke was on-site on average of 2-days per week (approximately 768 hours) during construction. He provided a daily inspection report to the Chief Engineer, Terry Boyd (Project Manager) for each day he was oversaw construction. Mr. Smoke worked a total of 2 days per week for 48 weeks (11 months) at an hourly wage of \$15.00 including fringe, resulting in \$15,360.00 of salary and fringe cost for construction inspection. Further, the State of Alabama per diem rate is \$75.00 per day, resulting in \$7200.00 of travel costs (\$150.00 per week for 48 weeks). The total cost of the Conservation Construction Inspector for this project was \$22,560.00. Also, the Chief Engineer, Terry Boyd (Project Manager) provided bi-monthly inspections of the project for a total of 176 hours (16 hours a month for 11 months). Mr. Boyd's hourly rate including fringe is approximately \$52.00 per hour resulting in \$9,153 of labor and fringe costs. Mr. Boyd was required to make 2 trips per months at \$150.00 per month (2 days at Alabama State per diem rate of \$75.00) for 11 months, totaling \$1,650. The approximate total for Mr. Boyd's oversight of the project is \$10,802.00. In sum, construction inspections services total \$33,362.00. Please note these costs are not being sought as reimbursement for this project.

#### DELIVERABLE:

The deliverable of this project will be a copy of the construction contract and Certified Engineer approval of final project inspection. This approval will contain the as-built construction documents.

#### COMPATIBILITY/SYNERGY:

The Weeks Bay Resource Center will be of great benefit to coastal Alabama, the state, region, and local community. Its design and small footprint along with the intended use is most compatible with other uses in the local area. The Weeks Bay facility will be used to support conservation efforts through training, education, and outreach programs. In addition the facility will be a platform for research and stewardship both programs of which are field based in actions and theme. The facility being located overlooking Weeks Bay will dramatically increase the effectiveness of programmatic use. The positioning of this facility will allow personnel to better train, educate, and direct programs of research and stewardship than other locations or facilities that might be used. The location, facility, and personnel will together provide the synergy to

accomplish programmatic goals in a way that would not otherwise be achieved. Further, the construction of this building has been identified in the Weeks Bay Management Plan (approved by NOAA) and the Strategic Plan since the creation of the National Estuarine Research Reserve in the 1986.

#### CONTROVERSY/SUPPORT:

There is very little if any controversial aspect of the Weeks Bay Resource Center. The intended use of this facility is for the purpose of supporting conservation in coastal Alabama. The site design enhances the facility use and fits well with the local community. Support of this facility and the intended use has been strong and is expected to increase as the building gets up and running. Support has come from the Weeks Bay Reserve Advisory Committee, Weeks Bay Foundation, and the Coastal Section, State Lands Division. It is expected that the many conservation partners of the Reserve will offer support as well when the building is used for training programs and other education and outreach activities.

#### BUNDLING:

This project is not bundled. Only one project is being submitted in this grant application.

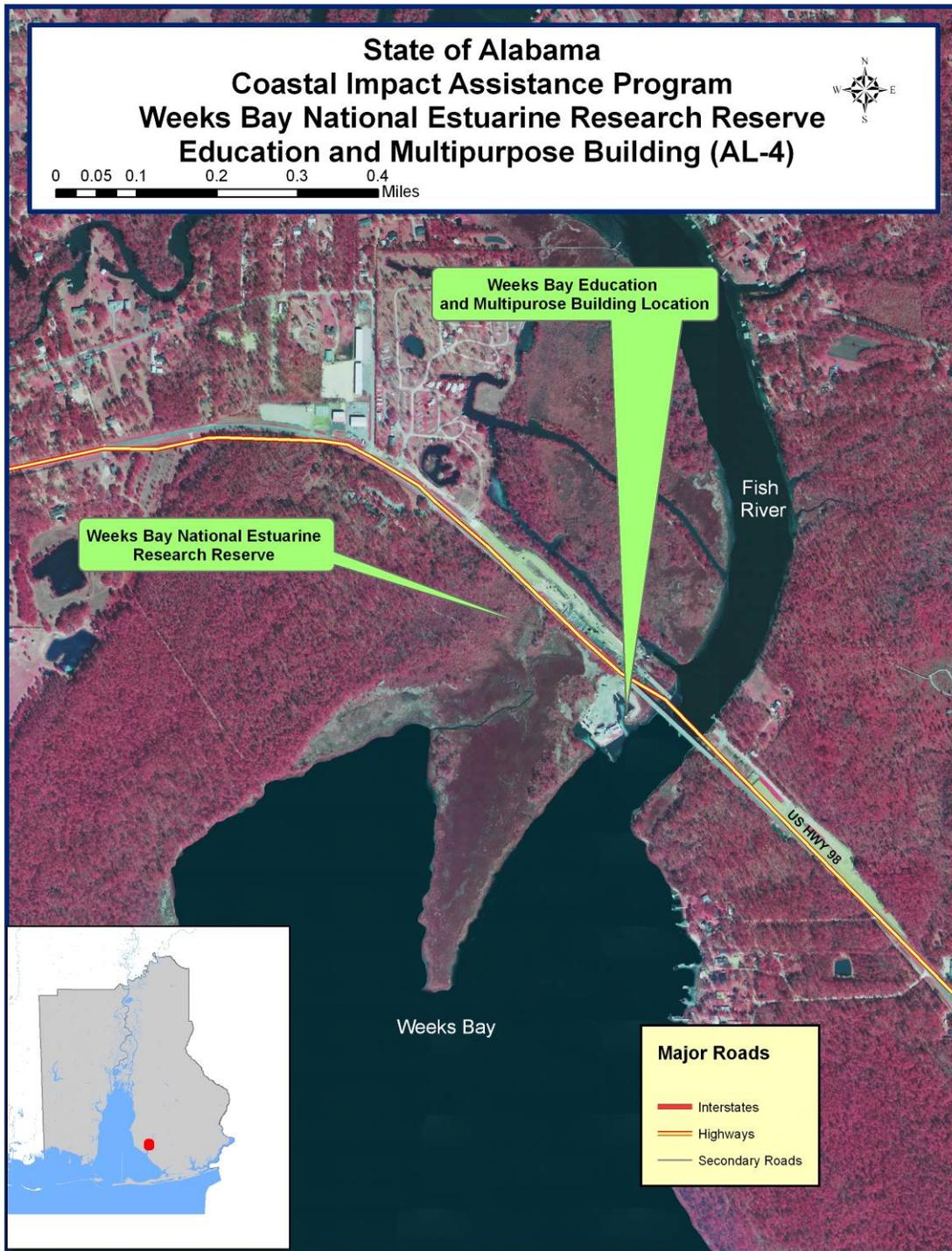
#### PROGRAM INCOME:

No program income will be generated during this project's period of performance.

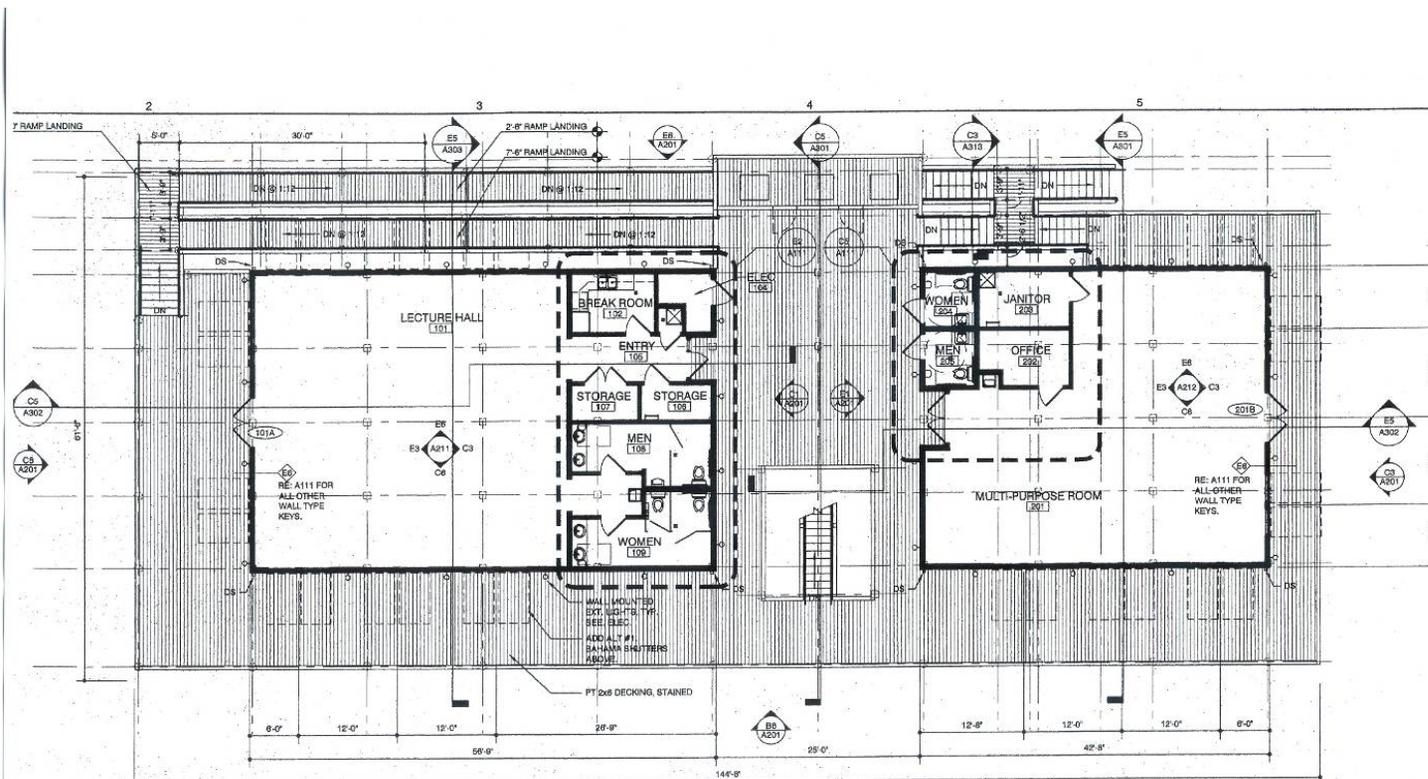
#### MAPS/DRAWINGS:

1. Vicinity Map
2. Plan View
3. Elevation View
4. Photograph of Buildings as Constructed

Vicinity Map



Plan View



C5 FIRST FLOOR PLAN  
1/8"=1'-0" 0 2' 4' 8' 16'

|             |       |                    |              |                            |          |  |  |  |  |
|-------------|-------|--------------------|--------------|----------------------------|----------|--|--|--|--|
| <b>A101</b> | SHEET | DATE: MAY 17, 2007 | JOB NO. 0810 | SHEET TITLE<br>FLOOR PLANS | KEY PLAN |  | <b>Weeks Bay</b><br>National Estuarine<br>Research Reserve<br>Educational &<br>Multi-Purpose Facility<br>Fairhope, Alabama |  |  |
|             |       | NO. DATE REVISION  |              |                            |          |  |  |  |  |

Elevation View



Photograph of Building as Constructed



## 8. DESCRIPTION OF ENVIRONMENTAL IMPACTS

Environmental impacts of the construction of the Weeks Bay Multipurpose and Education Building were minimal. During the design phase, the architects were asked to minimize the footprint of the building in order to reduce stormwater pollution from entering Weeks Bay. During construction, the contractor took extra care to install effective Best Management Practices (BMPs) to avoid any excess pollution from entering Weeks Bay. The building is constructed on pilings in previously disturbed upland, allowing water seep under the building and the parking lot is pervious to minimize runoff. Subsequently, there were no federal or state permits required for the construction of the building. The State Building Commission inspected the building upon completion.

## 11. RELATIONSHIP TO OTHER FEDERAL PROGRAMS

The Weeks Bay Education and Multipurpose Building is a capital facility of the Weeks Bay National Estuarine Research Reserve. The National Estuarine Research Reserve System is a federal network of protected areas established for long-term research, education and stewardship. This partnership program between NOAA and the coastal states protects more than one million acres of estuarine land and water, which provides essential habitat for wildlife; offers educational opportunities for students, teachers and the public; and serves as living laboratories for scientists. Further, in addition to NOAA federal funding, conservation land has been acquired in the Weeks Bay watershed utilizing funding from the 2001 CIAP and US Fish and Wildlife Service National Coastal Wetland Grants Program, among others.

## 12. FEDERAL, STATE AND LOCAL AGENCIES

Federal Agencies

- Not applicable (no federal permits were required)

State Agencies

- Not applicable (no federal permits were required)

Local Agencies

- Not applicable (no federal permits were required)

## 13. PROJECT INFORMATION QUESTIONS

### **Environmental Review**

- 4) Does the project require any Federal environmental review (e.g., environmental assessment, environmental impact statement, biological opinion)?  
 **Yes**  **No**
- 5) Does the project require any State environmental review (e.g. Consistency Determination, State Historic Preservation Office)?  
 **Yes**  **No**
- 6) Does the project require local environmental review (e.g., zoning)?  
 **Yes**  **No**

### **Permits**

- 4) Does this project require any Federal permits?  
 **Yes**  **No**
- 5) Does this project require and State permits?  
 **Yes**  **No**
- 6) Does this project require any local permits?  
 **Yes**  **No**

### **Legal Proceedings**

- 2) Are there any pending legal proceedings that have been taken against any of the permits or related environmental analyses required for the project?  
 **Yes**  **No**

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Water-Based Nature Trail Development in Coastal Alabama**

PROJECT NUMBER: **AL-5**

PROJECT CONTACT (S):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Chris Smith, State Lands Manager                 |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      |  |
|           | Spanish Fort, Alabama 36527                      | Montgomery, Alabama 36130                        |
| Telephone | (251) 621-1238                                   | (334) 242-3484                                   |
| Fax       | (251) 621-1331                                   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | chris.smith@dcnr.alabama.gov                     |

**PROJECT SUMMARY**

**LOCATION: Mobile-Tensaw Delta, Perdido River, and Coastal Alabama**

**DURATION: Four Years**

**ESTIMATED COST:**

| AL-5               |               |
|--------------------|---------------|
| Total Project Cost | \$ 750,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 750,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-5 |               |
|------|---------------|
| 2008 | \$ 187,500.00 |
| 2009 | \$ 187,500.00 |
| 2010 | \$ 187,500.00 |
| 2011 | \$ 187,500.00 |

**GOAL:** The goal of the State of Alabama CIAP is to conserve and protect Alabama’s designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Weeks Bay, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) by raising the public awareness of these areas through the construction of natural resource-based educational facilities.

**OBJECTIVE:** The objective of this project is to construct 100 miles of designated and marked trails in the southern Mobile-Tensaw Delta (Bartram Canoe trail) with 3 day-use platforms and 6 overnight camping platforms, identify and construct 25 miles of designated and marked trails with two access points on the Perdido River, and construct 50 miles of designated and marked trails along Alabama’s coastal waterways (Coastal Kayaking Trail). In addition, at least 15,000 educational maps/brochures will be designed and published for public distribution.

This project consists of three major projects: the expansion of the Bartram Canoe Trail in the Mobile-Tensaw Delta, the creation of the Perdido River Canoe Trail, and the establishment of the Alabama Coastal Kayaking Trail. The goal of this project is to create water-based trails to promote conservation of Alabama’s coastal waterways and wetlands.

- o *Bartram Canoe Trail Expansion:* The Alabama Department of Conservation and Natural Resources, State Lands Division constructed the Bartram Canoe Trail ([www.bartramcanoetrail.com](http://www.bartramcanoetrail.com)) utilizing funding from the 2001 CIAP. The canoe trail is located in the northern Mobile-Tensaw Delta (i.e. north of Interstate 65) and provides day and overnight canoe routes. Signs were installed along the routes and camping sites and platforms were constructed. Also, a brochure and map of the trail was published and widely distributed. This project has been extremely successful as the trail has been used by a variety of users from experienced paddlers to Girl Scout/Boy Scout troops and all of the maps have been distributed to the public. It is estimated over 2000 paddlers utilize the Bartram Canoe Trail annually and the Trail’s use has increased by nearly 50% each year since it opened in 2005. This project will expand the Bartram Canoe Trail into the southern portions of the Mobile-Tensaw

delta (i.e. south of Interstate 65) by adding 6 overnight and 3 day-use trails, along with floating platforms to support the overnight routes. Docks and piers will be added to aid in launching. In addition, signage and a minimum of 15,000 educational maps/brochures will be published. Also, at least three other key entry and exit point locations will be incorporated into the Trail. The specific locations will be determined through an in-house planning process could include Chickasabogue Park, Dead Lake Marina, Byrnes Lake Landing, and Blakeley State Park. Specifics related to these locations will be provided in the grant application.

- *The Perdido River Canoe Trail:* The objective of this project is to establish a canoe trail along the Perdido River, adjacent to State-owned conservation land along the Perdido River Corridor and the tract proposed for purchase in AL-1. The Perdido River serves as most of the boundary between Escambia County, Florida and Baldwin County, Alabama and also provides natural resource-based use opportunities. These include wildlife viewing as well as traditional day use canoeing and kayaking, along with overnight trips. The overnight trips are supported by large beach quality sandbars that serve as suitable camping locations. First, this project will involve developing a master plan and locating sites suitable for overnight camping and camping platforms. This master plan will be developed by trail design professionals. Log jams from recent hurricanes will be identified and at least 2 infrastructure improvements at key entry and exit points will be constructed, with the objective to construct 25 miles of designated and marked trails.
- *Alabama Coastal Kayaking Trail:* The objective of this project is to establish a kayaking trail similar to the Bartram Canoe Trail on coastal Alabama waters. First, SLD conservation staff will identify sites suitable for overnight camping and development of camping platforms. Subsequently, infrastructure improvements, including camping platforms, will be designed and constructed. Next, proper signage will be installed – both on land in the water and brochures and maps will be published. Key entry and exit points along the trail will include the city of Bayou La Batre, Town of Dauphin Island, Gulf State Park, Fort Morgan, Bon Secour National Wildlife Refuge, Five Rivers Alabama’s Delta Resource Center and the Weeks Bay National Estuarine Research Reserve. Also, county and city waterfront parks could be incorporated into the trail, if appropriate. The objective of this project is to construct at least 50 miles of trails including single day and multi-day expeditions.

A generalized map of the location of the water-based nature trails describe above is included in Appendix G-6.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.

- Justification: This project meets Authorized Use #1 because it provides a mechanism for controlled low impact use of Alabama's waterways via a network of water-based trails. Also, educational brochures and maps will be published which will promote Alabama's coastal waterways and associated habitats, thus enhancing public's understanding and appreciation of the resources. This project will conserve and protect the natural environment by creating a means for the public to learn about the associated fish, wildlife and natural resources of coastal Alabama's sensitive aquatic resources. The objective of this project is to create a conservation outreach and educational trail to facilitate conservation education of the unique aquatic coastal habitats of south Alabama. Trail amenities will serve as a means to educate users about conservation and the natural ecology of the area.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **GIS-based Inventory of Oil and Gas Leased Tracts Including  
Pipelines and Infrastructure**

PROJECT NUMBER: **AL-6**

PROJECT CONTACT (S):

|           | Primary Contact                                     |
|-----------|---|
| Name      | Will Brantley, State Lands Manager                  |
| Address   | Alabama State Lands Division                        |
|           | Department of Conservation and<br>Natural Resources |
|           | 64 North Union Street                               |
|           | Montgomery, Alabama 36130                           |
| Telephone | (334) 242-3484                                      |
| Fax       | (334) 242-0999                                      |
| E-mail    | will.brantley@dcnr.alabama.gov                      |

**PROJECT SUMMARY**

LOCATION: **N/A**  
DURATION: **One Year**  
ESTIMATED COST:

| AL-6               |               |
|--------------------|---------------|
| Total Project Cost | \$ 200,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 200,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-6 |               |
|------|---------------|
| 2008 | \$ 200,000.00 |
| 2009 | \$ -          |
| 2010 | \$ -          |
| 2011 | \$ -          |

**GOAL:** The goal of this project is to develop a tool to evaluate impacts to coastal Alabama marine, estuarine and inland environments resulting from existing and planned oil and gas infrastructure. Further, the goal of this project is to support the policies of the Alabama Coastal Area Management Plan (ACAMP) which, among other things, encourages the siting and development of energy facilities of regional or national interest outside environmentally sensitive areas.

**OBJECTIVE:** The objective of this project is to develop a comprehensive GIS compatible database of existing oil and gas infrastructure located in the nearshore and offshore environment of Alabama state waters. Such a database would provide, among other things, details of locations of pipelines, platforms and other infrastructure along with leasing and rights-of-way information. Additionally, this database will be made available for public use.

Alabama has a long history of issuing oil and gas leases in offshore state waters. DCNR has an existing database of state waters leases. The existing database needs to be updated with comprehensive historical leasing information and the database needs to be formatted to be GIS compatible with the State Oil and Gas Board offshore database of lease blocks, wells, platforms, fields, etc...

The objective of this project is to develop a comprehensive GIS compatible database of existing oil and gas infrastructure located in the nearshore and offshore environment of Alabama state waters. Considerable GIS compatible oil and gas infrastructure data for the Alabama state waters and adjacent Federal waters areas are available on websites of the Minerals Management Service and State Oil and Gas Board of Alabama. These data include lease block boundaries, well and platform locations, pipelines, shipping fairways, etc. However, certain critical data for the Alabama state waters area are not currently available, or are only partially available, in GIS compatible databases. These important data include Alabama state waters lease history data; “as built” pipeline, gathering line, and platform data for Alabama state waters; and onshore pipeline and processing facility data. The new datasets, with appropriate metadata, will be incorporated in a comprehensive GIS compatible database and will be served via a web based application.

Through 2007, a total of 81 wells had been drilled in Alabama's state waters. Operators have experienced a high success rate in drilling natural gas well in Alabama coastal waters both in the deep Jurassic Norphlet (>20,000 feet) and the shallow Miocene (<3,500 feet). Sixty-six wells have successfully tested natural gas and nineteen gas fields have been established in state waters. In 2007, offshore state gas production flowed through 48 fixed production structures. The State Oil and Gas Board GIS database has excellent GIS compatible data for wells and fields. However, pipeline and in particular "as built gathering line data for Alabama state waters are not in a digital format. For safety and "right of way" purposes, it is imperative that a comprehensive GIS compatible with the State Oil and Gas Board database be prepared. In addition, a similarly compatible database will be prepared of the fixed production structures in state waters.

Onshore pipelines transport natural gas produced in State and Federal waters to various processing facilities in onshore southern Mobile County, Alabama. A GIS compatible database of these onshore pipelines and processing facilities needs to be prepared for these facilities. The database will be integrated with existing MMS and State Oil and Gas Board databases.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #4: implementation of a federally approved marine, coastal, or comprehensive conservation management plan.
- Justification: This project meets Authorized Use #4 because it meets the objective to the Alabama Coastal Area Management Plan (ACAMP). The ACAMP states the following as a Management Program Policy Statement: *"It is the policy of the Alabama Coastal Area Management Program to encourage the siting and development of energy facilities of regional or national interest outside environmentally sensitive areas."* A more thorough understanding of the location of the infrastructure in state-owned waters meets this objective.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.
- Benefit to Natural Coastal Environment: This project will provide a benefit to the natural coastal environment by providing an enhanced understanding of the locations of existing oil and gas infrastructure through an interactive digital tool. Such a tool will not only help direct resource restoration activities in various coastal environments including wetlands, grassbeds and oyster beds, but it will also better direct the siting of future energy infrastructure so as to minimize natural resource impact.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Investigation and Control of Non-native Terrestrial Exotic  
and Nuisance Species in Designated Protected Areas**

PROJECT NUMBER: **AL-7**

PROJECT CONTACT (S):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Greg Lein, Assistant Director                    |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3484                                   |
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### PROJECT SUMMARY

**LOCATION: Grand Bay Savanna in southwestern Mobile County, Mobile Tensaw Delta, Splinter Hill Bog in northern Baldwin County, Perdido River corridor in eastern Baldwin County, Weeks Bay, and Lillian Swamp in southeastern Baldwin County (see Appendix G-4)**

**DURATION: Four Years**

ESTIMATED COST:

| AL-7               |               |
|--------------------|---------------|
| Total Project Cost | \$ 766,666.67 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 766,666.67 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-7 |               |
|------|---------------|
| 2008 | \$ 191,666.67 |
| 2009 | \$ 191,666.67 |
| 2010 | \$ 191,666.67 |
| 2011 | \$ 191,666.66 |

**GOAL:** The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to treat 1000 acres per year of habitat degraded by the presence of invasive exotic species in designated protected terrestrial areas per project year for a total of 4000 treated acres and to produce one plant genetic origin scientific study.

Except for direct habitat loss, invasive exotic plant species pose the greatest threat to coastal Alabama’s natural habitat and native plant species (Alabama Invasive Plant Council website). The objective of this project is to treat 1000 acres per year of habitat degraded by the presence of invasive exotic species in designated protected terrestrial areas throughout coastal Alabama. These designated protected areas include Grand Bay Savanna in southwestern Mobile County, Mobile Tensaw Delta, Weeks Bay, Splinter Hill Bog in northern Baldwin County, Perdido River corridor in eastern Baldwin County, Weeks Bay, and Lillian Swamp in southeastern Baldwin County (see Appendix G-4).

In the coastal area of Alabama there are several terrestrial invasive exotics in need of management. These plants include: cogon grass (*Imperata cylindrica*), Chinese privet (*Ligustrum sinense*), and Chinese talo (*Sapium sebiferum*). The State Lands Division has successfully managed these plants in natural areas using a variety of methods including herbicide and

mechanical harvesting. The goal of this project is manage native habitats in designated protected areas through better understanding and treatment of invasive species. SLD conservation staff will identify areas in need of treatment and will conduct spot applications of herbicide in natural areas throughout the project period. The objective of this project is to spot treat 1000 acres of designated protected area per project year for a total of 4000 treated acres. Specifically, cogon grass will be managed at the Splinter Hill Bog, Grand Bay Savanna, Lillian Swamp, and the Perdido River Corridor and popcorn trees and privet will be managed in the Mobile-Tensaw Delta and Weeks Bay. Costs associated with this project include labor, herbicide, and equipment. In order to identify better management strategies, the SLD will initiate at least one scientific study to better understand the origin of particular nuisance species along with one plant genetic study. This study will result in a written synthesis of the findings.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it restores habitat and natural areas by removing invasive exotic species. Except for direct habitat loss, invasive exotic plant species pose the greatest threat to coastal Alabama's natural habitat and native plant species (Alabama Invasive Plant Council website). Additionally, this project will further understanding of invasive plant origins in order to better manage specific invasive plant populations.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding and will be supplemented by staff and in-kind support from the State Lands Division.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Reintroduction of Native Vegetation in Areas Converted for  
Silvicultural or Agricultural Activities (e.g. reforestation of  
longleaf areas)**

PROJECT NUMBER: **AL-8**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Will Brantley, State Lands Manager               |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
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**PROJECT SUMMARY**

**LOCATION: Perdido River Corridor, eastern Baldwin County**

**DURATION: Four Years**

**ESTIMATED COST:**

| AL-8               |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,000,000.00 |
| FY 2007            | \$ -            |
| FY 2008            | \$ 1,000,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-8 |               |
|------|---------------|
| 2008 | \$ 250,000.00 |
| 2009 | \$ 250,000.00 |
| 2010 | \$ 250,000.00 |
| 2011 | \$ 250,000.00 |

**GOAL:** The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective is to restore 2,000 acres of Longleaf Pine community in the Perdido River Corridor.

The Perdido River Corridor (30° 42' 27.34" N, 87° 28' 31.56" W) is comprised of publicly-owned state lands which were purchased from an industrial landowner that intensively managed the land for fiber production for over sixty years. Prior to this intensive management, much of the upland area was dominated by Longleaf Pine (*Pinus palustris*). Historically, the Longleaf Pine was the dominant tree species on an estimated 60 million acres in the southeastern United States. However, natural stands of longleaf pine have rapidly declined and currently occupy less than three million acres of its original range. Much of the remaining stands are severely degraded, and thus, does not function fully as a viable ecological system or provide the historical values associated with this forest type. At least 1,200 vascular plant species are endemic to the longleaf pine system, many of which are considered rare, threatened, or endangered by state and federal authorities. The longleaf system is one of the most diverse regions in North America in terms of species richness, species endemism, and community diversity. This system is now reduced to less than 5 percent of its former range, making it one of the most endangered landscapes in North America.

The acquisition of over 20,000 acres in the Perdido River Corridor by the State of Alabama has created a unique opportunity to conduct large-scale Longleaf Pine restoration. The goal of this project is to restore native Longleaf Pine communities along state-owned land in the coastal area. Specifically, the objective of the project is to restore 2,000 acres of native longleaf pine habitat in the Perdido River Corridor. Foresters within the SLD will identify areas in need of restoration via analysis of soil type, previous stand history, and aerial photography to select the areas to be planted in the most cost-effective manner. Costs of the restoration include site preparation, burning, herbicide treatment, seedling propagation, and planting. Approximately 400 longleaf pine seedlings per acre will be planted.

The purposes of site preparation in the context of forest regeneration are to:

1. increase desired species survivability and growth by reducing competition from undesirable species;
2. remove logging debris; and
3. prepare the soil to create the best growing conditions.

CIAP funds will not be used to log any of the existing pine plantations. After restoration, the SLD will employ typical forest management techniques in order to maximize the conservation benefit of this project. For example, Longleaf Pine forests require prescribed fire to maintain stand conditions, reduce competition, promote growth, and reduce fuel load. After stand establishment, restored areas will be subject to a prescribed fire regime implemented by SLD. The SLD will be responsible for long-term forest management after CIAP funds are expended.

## AUTHORIZED USE

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it restores native Longleaf Pine communities in the coastal area of Alabama. According to the scientific literature, less than 5% of native longleaf pine still exists in the southeast. This community provides habitat for many rare plants and animals and is considered one of the most endangered landscapes in North America.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Wetland restoration in Grand Bay, Mobile-Tensaw Delta,  
Lillian Swamp and Perdido River**

PROJECT NUMBER: **AL-9**

PROJECT CONTACT (S):

|           | Primary Contact  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner                    | Greg Lein, Assistant Director                    |
| Address   | Alabama State Lands Division                               | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources           | Department of Conservation and Natural Resources |
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**PROJECT SUMMARY**

**LOCATION: Mobile-Tensaw Delta, Lillian Swamp, and Grand Bay Savanna**

**DURATION: Four Years**

**ESTIMATED COST:**

| AL-9               |               |
|--------------------|---------------|
| Total Project Cost | \$ 416,666.67 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 416,666.67 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-9 |               |
|------|---------------|
| 2008 | \$ 104,166.67 |
| 2009 | \$ 104,166.67 |
| 2010 | \$ 104,166.66 |
| 2011 | \$ 104,166.67 |

GOAL: The goal of the Alabama CIAP is to conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

OBJECTIVE: The objective of this project is to investigate and restore wetland function in the Mobile-Tensaw Delta by developing a restoration plan and designing and implementing restoration on 200 acres of forested wetlands as a pilot project. Also, 20 acres of wetlands will be restored on state-owned land in Grand Bay (near Bayou La Batre) damaged from stranded commercial shrimp boats due to Hurricane Katrina’s storm surge. A study of the hydrologic dynamics in Lillian Swamp will also be produced as part of this project.

Hydrologic conditions in various wetland areas in coastal Alabama have been subject to man-induced alterations over time to extract timber, drain farmland, or create more developable land. Also, recent impacts resulting from Hurricane Katrina have created additional wetland impacts. This goal of this project is to restore natural wetland areas in coastal Alabama.

The Mobile-Tensaw Delta composed of approximately 200,000 acres of forested wetlands, of which approximately 100,000 acres are publicly owned and managed. As most of the MTD was logged extensively in the last two centuries, ditches perpendicular to the main river channel were constructed to aid in the extraction of timber during logging activity. These ditches still exist throughout the MTD and land managers speculate the ditches have altered the natural hydrological regime of the wetlands (i.e. the wetlands have transitioned from permanently-flooded to more seasonally-flooded systems). Filling or blocking of the ditches may be an appropriate restoration strategy; however more information is needed on the ecosystem-scale functions of the wetlands in the MTD. Specifically, more information is needed on the impacts of the ditches prior to large-scale restoration. The SLD will initiate a contract with a university or research institution to investigate these issues in order to develop a specific restoration plan on publicly-owned and managed land. A pilot restoration

project will be included in this study to restore at least 200 acres of wetlands and the results will be published in a publicly available report.

The storm surge associated with Hurricane Katrina was extensive along the Gulf Coast. In Alabama, the southwestern portion of Mobile County experienced the largest storm surge in recent history with the Grand Bay and Bayou La Batre area suffering the most extensive flooding damage in Alabama. Eight large commercial shrimp boats moored in the Bayou were moved by the storm surge and ultimately stranded in salt marshes and associated wetlands due east of Bayou La Batre along the Mississippi Sound. While the boats have been removed, the wetlands experienced significant damage during the removal and relocation process. The State of Alabama will restore the areas damaged by the boats and the removal process (approximately 20 acres). Costs associated with this project will include restoration planning, exotic species removal, planting of native trees or planting of salt marsh species, labor, equipment, and fill material in the excavated areas. The density of the trees will be determined by analysis of the adjacent forested wetland areas.

Lillian swamp, located in southeast Baldwin County is a large wetland complex comprised of forested wetlands and marsh habitat. The underlying hydrology and associated hydrodynamics of this wetland area is driven by geologic influences which have not been well studied in this location. We proposed to initiate a project which investigates and describes the hydrologic processes occurring in Lillian swamp. The resulting report and data will aid in future land management decisions and restoration projects at this location. The purpose of the proposed assessment is to determine the natural hydrologic setting of the southeastern portion of Lillian Swamp. This determination is vital to developing a restoration strategy and to determine the effects, if any, of restoration on residential property along the southeastern perimeter of the swamp. Results of the assessment will document surface- and ground-water movement, determine interactions of surface and ground water, seasonal variation of surface-water runoff and ground-water levels, tidal influence, and will predict changes in the hydrologic character of the swamp caused by restoration efforts. A permanent monitoring system will be established to observe and document changes in the hydrology of the swamp related to climate and land use change in the area.

The first component of the assessment will document current hydrologic conditions, effects of anthropogenic alterations in the study area, and generate data for use in designing restoration strategies and the long-term maintenance and preservation of Lillian Swamp. The work elements and deliverables include:

1. Describe regional hydrogeologic setting and detailed site hydrogeology.
2. Install 20 piezometers for monitoring water table conditions and water quality (land surface elevations of the piezometers will be established by a licensed land surveyor, who will be contracted by GSA, using static GPS sessions of at least 30 minutes to obtain accuracy to less than 1 centimeter). Piezometers will be constructed to serve as permanent water table monitoring stations and may be used to monitor ground-water levels and water quality. Ground-water data will be used to prepare water table maps showing depth to ground water, directions of ground-water movement, and temporal fluctuations of water table levels. One

- piezometer will be outfitted with an automated monitoring system to continuously measure water level, water quality, and precipitation. All other piezometers will be utilized periodically to measure water levels and water quality.
3. Collect surface- and ground-water samples at various times and analyze the samples for more than 30 constituents including nutrients and metals. Tables and maps will be prepared to present the data.
  4. Measure surface-water flow at various sites in the study area to determine storm runoff and infiltration rates. One monitoring site will be outfitted with an automated monitoring system to continuously measure surface water flow. Graphs and maps will be prepared to present data.

The second component of the assessment will assist with development of a restoration strategy, predict post-restoration hydrologic conditions, and monitor conditions during and after restoration. Work elements will include the following:

1. Perform hydrologic computer modeling of ground-water conditions using ground-water level data collected in Phase I and probable restoration elements. Models will be calibrated to pre-restoration conditions and used to simulate post-restoration conditions.
2. Monitor surface- and ground-water conditions during and after restoration. Graphs and maps will be prepared to present and interpret data.

Upon completion of both components of this project, a final report will be prepared.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it restores wetland areas and will provide more informed information to initiate successful wetland restoration activities.
- Cost Sharing: Cost sharing is not applicable to this project
- Partnering: This project will utilize 100% of CIAP funding.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Equipment and Infrastructure Improvements to Enhance  
Land Conservation Management and Activities in Coastal  
Areas**

PROJECT NUMBER: **AL-10**

PROJECT CONTACT (S):

|           | Primary Contact  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner                    | Greg Lein, Assistant Director                    |
| Address   | Alabama State Lands Division                               | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center                | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard<br>Spanish Fort, Alabama 36527 | Montgomery, Alabama 36130                        |
| Telephone | (251) 621-1238   | (334) 242-3484                                   |
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### PROJECT SUMMARY

**LOCATION:** The equipment will be used in the designated protected areas of coastal Alabama including Grand Bay Savanna in southwestern Mobile County, Mobile Tensaw Delta, Weeks Bay, Splinter Hill Bog in northern Baldwin County, Perdido River corridor in eastern Baldwin County, and Lillian Swamp in southeastern Baldwin County (see Appendix G-4).

**DURATION:** One Year

ESTIMATED COST:

| AL-10              |               |
|--------------------|---------------|
| Total Project Cost | \$ 642,503.46 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 642,503.46 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-10 |               |
|-------|---------------|
| 2008  | \$ 642,503.46 |
| 2009  | \$ -          |
| 2010  | \$ -          |
| 2011  | \$ -          |

**GOAL:** The goal of the Alabama CIAP is to conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to acquire a horizontal grinder to maintain 15 miles of fire lane per year and to acquire a amphibious excavator to clear 17,000 linear feet of fire lane annually.

This project involves the acquisition of two will acquire two pieces of equipment to enhance the State Lands Division's capacity to manage land and implement habitat restoration activities in designated protected in coastal Alabama. First, a horizontal grinder will be acquired which will provide for a cost-effective and environmentally friendly mechanism to handle debris associated with the construction of fire lanes in designated protected areas. It is estimated the grinder will be used in the maintenance of 15 miles of fire lanes and trails annually. An amphibious excavator will also be purchased to allow clearing of fire lines in forested wetland areas, where traditional is not functional. All necessary appurtenances and attachments relating to this equipment will be purchased as well. It is estimated the excavator will be used to clear 17,000 linear feet of fire lanes annually. The equipment will be maintained by SLD operators and will only be used for habitat restoration activities in the coastal area. Specific details of cost and attachments will be included in the grant application. Appendix G-4 contains of map of the designated protected areas of coastal Alabama.

AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because access roads and fire lanes are essential for successful management and restoration of natural areas. Specifically, fire lanes are essential for implementing a successful burning regime.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Restoration of Wildlife and Plant Communities Impacted by  
Habitat Disturbances**

PROJECT NUMBER: **AL-11**

PROJECT CONTACT (S):

|           | Primary Contact  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner                    | Jo Lewis, Heritage Section Chief                 |
| Address   | Alabama State Lands Division                               | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center                | 64 North Union Street                            |
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**PROJECT SUMMARY**

**LOCATION: Designated Protected Ares in Coastal Alabama**

**DURATION: Four Years**

**ESTIMATED COST:**

| AL-11              |               |
|--------------------|---------------|
| Total Project Cost | \$ 416,666.27 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 416,666.27 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-11 |               |
|-------|---------------|
| 2008  | \$ 104,166.57 |
| 2009  | \$ 104,166.57 |
| 2010  | \$ 104,166.57 |
| 2011  | \$ 104,166.56 |

**GOAL:** The goal of the Alabama CIAP is to conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to implement prescribed fire in designated protected areas of coastal Alabama. Also, this project will relocate 150 gopher tortoises to the Perdido River Corridor, 40 gopher tortoises to Gulf State Park, 30 gopher tortoises to the Lillian Swamp, and fund the construction and installation of 50 bat houses and 500 warbler houses in various protected areas throughout coastal Alabama.

This project will investigate and restore wildlife communities throughout designated protected areas in coastal Alabama. In order to create the conditions suitable for healthy population of flora and fauna, SLD conservation staff will implement prescribed fire techniques on at least 3,000 acres annually. Tracts targeted for burning will be identified by SLD conservation staff as part of the grant application. The prescribed fire will take place at the Grand Bay Savanna, Perdido River Corridor, and Splinter Hill Bog.

In addition to prescribed fire, select populations of animal species will be restored in suitable locations throughout designated protected areas in coastal Alabama. Vulnerable gopher tortoise (*Gopherus polyphemus*) populations will be relocated, specifically to the Lillian Swamp and the Perdido River Corridor. The objective of this project is to relocate 150 gopher tortoises to the Perdido River Corridor, 40 gopher tortoises to Gulf State Park, and 30 tortoises to the Lillian Swamp.

Formerly common, the gopher tortoise has now been extirpated from parts of its range and many remaining populations are declining. Habitat destruction, habitat degradation through fire exclusion, and human predation have reduced the original number of tortoises by an estimated 80% over the last 100 years.

The gopher tortoise is a critical species in the longleaf pine savanna ecosystem. Its presence is apparent from the burrows which it digs into sandy soils. Its burrow may be 10 feet deep and 25-35 feet (diagonally) long, providing a well insulated refuge for the tortoise as well as 358 other species including 301 invertebrates and 57 vertebrate species. The creation of the burrow refuge has acknowledged the gopher tortoise by ecologists as the keystone species

for its habitat. Among the inquilines (co-inhabitants of the burrow) include the dung beetle which converts the dung into soil nutrients, the gopher frog which is found nowhere else but in burrows, various snakes such as the pine snake, coachwhip racer, red rat snake, gray rat snake, the eastern diamondback rattlesnake and the threatened Eastern indigo snake. Occupiers of abandoned burrows include the fox squirrel, opossum, raccoon, red and gray foxes, bobcats, armadillo and bobwhite quail.

The source of gophers for this project will be coordinated with the U.S. Fish and Wildlife Service and other wildlife protection organizations and will follow all federal, state and local guidelines. For example, all relocated gophers will be subjected to respiratory disease testing. Relocated gophers may come from private property and other threatened areas. In Baldwin County, the gopher tortoise is not protected by any federal or state laws, resulting in a need for a voluntary-based relocation program.

Other species habitat enhancement projects will be implemented including the construction and installation of bat boxes and bird houses for warblers (Parulidae). Specifically, 50 bat boxes will be constructed and installed in the Mobile-Tensaw Delta and 500 birdhouses for warblers (Parulidae) will be strategically placed at the Grand Bay Savanna, Mobile-Tensaw Delta, and the Lillian Swamp. Costs associated with this project include labor and materials.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #2: mitigation of damage to fish, wildlife, or natural resources.
- Justification: This project will restore plant and wildlife communities that have suffered damage from neglect and/or a lack of the use of natural management techniques. Most of the acreage of coastal Alabama's designated protected areas has been acquired since the adoption of the Forever Wild Program in 1992. Prior to purchase, most of the acquired land was not subject to prescribed fire or natural species management. In the past century forest fires, were thought to be undesirable and fires were suppressed due to the successful Smokey the Bear campaign. Due to neglect prior to the state's ownership of these lands, the 2-4 cycle of growing season burns has been interrupted. The flora of the longleaf pine ecosystem has evolved to thrive under a cycle of growing season fires every 2-4 years. Because of forest fragmentation, natural fires do not carry over the great distances they once did and therefore fires must be prescribed to mimic the natural fire regime. Subsequently, undesirable undergrowth can dominate and can cause deleterious effect on the natural function of the ecosystem altering the plant and animal species composition. This project will implement prescribed burning coupled with species enhancement projects to mitigate for the lack of natural management (i.e. damage) within coastal Alabama's designated protected areas.

In addition to fire exclusion, gopher tortoise habitat has suffered widespread destruction throughout coastal Alabama. Gopher tortoises require sandy soils for digging burrows and an open tree canopy in order for sunlight to reach the ground.

The sunlight favors the growth of small plants for the gopher tortoise's diet. Fire is also critical for gopher tortoise habitat. In coastal Alabama, the preferred habitat for gopher tortoise has been destroyed due to development, timber production, and agriculture. In the designated protected areas of coastal Alabama, gopher tortoise habitat has been destroyed for commercial timber production. Relocating of these species to fire-maintained pine savanna areas will mitigate the damage of habitat destruction.

In a similar manner, the species enhancement projects will mitigate damage from lack of natural land management techniques due to intensive land use. For example, conversion of land to a pine plantation, removed natural roost sites and nesting cavities from older trees. Bat and bird boxes installed in designated protected areas will mitigate this habitat loss.

- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.

STATE OF ALABAMA

COASTAL IMPACT ASSISTANCE PROGRAM PLAN

DESIGNATED STATE AGENCY OR CPS: Alabama State Lands  
Department of Conservation  
and Natural Resources

PROJECT TITLE: Investigation of Restoration of Hydrology on Mobile Bay  
Causeway

PROJECT NUMBER: AL-12

PROJECT CONTACT (S):

|           |   |
|-----------|---|
|           | Primary Contact                                     |
| Name      | Cara Stallman, Natural Resource<br>Planner          |
| Address   | Alabama State Lands Division                        |
|           | Department of Conservation and<br>Natural Resources |
|           | Five Rivers Alabama's Delta<br>Resource Center      |
|           | 30945 Five Rivers Boulevard                         |
|           | Spanish Fort, Alabama 36527                         |
| Telephone | (251) 621-1238                                      |
| Fax       | (251) 621-1331                                      |
| E-mail    | cara.stallman@dcnr.alabama.gov                      |

PROJECT SUMMARY

LOCATION: Mobile Bay Causeway, Spanish Fort, Alabama

DURATION: One Year

ESTIMATED COST:

| AL-12              |               |
|--------------------|---------------|
| Total Project Cost | \$ 500,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 500,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-12 |               |
|-------|---------------|
| 2008  | \$ 500,000.00 |
| 2009  | \$ -          |
| 2010  | \$ -          |
| 2011  | \$ -          |

**GOAL:** The goal of the Alabama CIAP is to conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is initiate, design, investigate, and answer research questions relating to restoring historic hydrologic conditions of the upper Mobile Bay prior to development of the Mobile Bay Causeway. Such research will assist decision-makers in hydrologic restoration needs of upper Mobile Bay along with potential associated causeway infrastructure modifications.

The Mobile Bay Causeway (30° 40' 10.2" N, 87° 56' 25.41" W) was constructed in 1927 to link Baldwin County to Mobile County. It was the last section of roadway constructed to link US Highway 90 between Jacksonville, Florida and Sacramento, California. Large areas of open water/marsh habitat were filled with dredged material in certain locations in to order to provide a base for the roadway. The filled areas may restrict hydrologic inputs north and south of the Causeway. The environmental impact of this dike-like structure is altered water flow between these two areas, resulting in less mixing of salt and fresh waters. Several studies have investigated general opportunities to restore some of the land crossings through the construction of bridges. Specifically, in 2001 the U.S. Army Corps of Engineers (USACE) published the *Upper Mobile Ecosystem Restoration Project – Proposed Modification to U.S. Highway 90 (Causeway)* as a 206 project. The recommendations of this study included the following:

1. Upon a recommendation from a non-federal sponsor, the USACE will prepare a Preliminary Restoration Plan to provide more detailed information on the activities and costs required to perform Feasibility Level Analysis.
2. Perform an Environmental Assessment describing the positive and negative environmental impacts of the restoration.
3. Create feasibility level bridge/culvert designs

As a follow-up to this report, the USACE published a *Preliminary Restoration Plan* in 2003. This document computed some rough quantities required to establish hydrologic flow in four areas of potential restoration sites included Chacaloochee Bay, Justins Bay, Sardine Pass, and Shellbank River (Please see Figure G-7). This study ruled out the use of culverts to provide water exchange due to an unsuitable foundation. This study also computed rough order of magnitude costs for construction of bridges.

*(Note: this project will implement recommendations made by the two published USACE documents.).*

In addition to maintaining the right-of-way, the State of Alabama is an active stakeholder on the Mobile Bay Causeway. Specifically, the four of the five divisions within the Department of Conservation and Natural Resources maintain conservation facilities. The State Parks Division operates Meaher State Park; Marine Resources Division maintains numerous boat ramps on the Causeway; and the Wildlife and Freshwater Fisheries houses the District 5 field offices; and the State Lands Division owns and manages several hundred acres along the Causeway including the newly-opened Five Rivers Alabama's Delta Resource Center.

These state-owned facilities highlight the unique ecology of the immediate area around the roadway as it represents the confluence of the Mobile-Tensaw Delta and the Mobile Bay. Thousands of fresh and saltwater fish live in the adjacent bays along with a wide diversity of mammals. In sum, due to its location and important ecological characteristics, the State of Alabama supports the investigation of any effort to improve the habitat characteristics of the area. Appendix G-7 depicts a map of the potential restoration areas along the Mobile Bay Causeway.

The goal of this project is to investigate restoration opportunities in the coastal area of Alabama. Specifically, the objective of this project is initiate, design, and answer research questions relating to restoring the Mobile Bay Causeway. Such research will assist decision-makers in determining infrastructure needs associated with this roadway. First, a research plan will be developed using existing data and recommendations from previous studies. This research plan will clearly outline steps in addressing the potential impacts of restoration strategies such as removal the land bridges. The measurable objective for this project will be a research plan report that compiles existing data, identifies data needs, and summarizes the next steps with respect to implementing restoration of the Causeway/Delta (i.e. a feasibility level analysis). This feasibility analysis will result in testing to support engineering design and an economic analysis describing the costs and benefits associated with the restoration. Specifically, the flow and sedimentation patterns north and south of the roadway will be analyzed to evaluate the potential impacts of altering flows in this estuary.

The tasks involved in this project will include:

1. The completion of a comprehensive analysis of existing data and reports relating to Mobile Bay Causeway which identifies data needs.
2. The collection of preliminary data (as determined from step 1 above).

3. The production of a research plan or roadmap that details the next steps including further data collection (if necessary) and restoration activities.

If the results of this project suggest an improvement to ecological processes in Mobile Bay and the Delta, this project could serve as a springboard for future restoration efforts to implement activities that result in improved hydrology. Future CIAP funding or other funding partnerships could be used to pay for subsequent engineering and construction costs, if necessary. This research plan will perform sediment toxicological studies following the recommendations of Step 1 above.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will result in more information leading to the restoration of the Mobile Bay Causeway. Restoration activities could include the removal of land bridges and or the installation of culverts to restore fresh and salt water mixing regimes in the bays and bayous of the southern Mobile Tensaw Delta.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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1. DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of  
Conservation  
and Natural Resources**

2. PROJECT TITLE: **Implementing Conservation through Reconstruction  
of the Gulf State Park Pier**

PROJECT NUMBER: **AL-13**

3. PROJECT CONTACT (S):

|           | Primary Contact                                     |
|-----------|---|
| Name      | Will Brantley, State Lands Manager                  |
| Address   | Alabama State Lands Division                        |
|           | Department of Conservation and<br>Natural Resources |
|           | 64 North Union Street                               |
|           | Montgomery, Alabama 36130                           |
| Telephone | (334) 242-5502                                      |
| Fax       | (334) 242-0999                                      |
| E-mail    | will.brantley@dcnr.alabama.gov                      |

4. PROJECT SUMMARY

LOCATION: **Gulf State Park, Gulf Shores, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| AL-13              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 8,050,000.00 |
| FY 2007            | \$ 8,050,000.00 |
| FY 2008            | \$ -            |

Please Note: This funding amount represents a minor change from the approved State of Alabama Final CIAP Plan for FY 2007 and 2008. The approved plan allocated \$8,000,000.00 to this project. The minor change increases the project amount by \$50,000.00 to total \$8,050,000.00. The additional \$50,000.00 will be subtracted from AL-2, Administration of the Coastal Impact Assistance Program. The amount allocated to AL-2 in the approved Plan is \$630,427.62. After subtracting \$50,000.00, the amount remaining in AL-2 is \$580,427.62. The additional funds will be used to construct the educational signage to be installed on the Pier.

**SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:**

| AL-13 |                 |
|-------|-----------------|
| 2008  |                 |
| 2009  | \$ 8,000,000.00 |
| 2010  | \$ 50,000.00    |
| 2011  | \$ -            |

Please Note: This funding amount represents a minor change from the approved State of Alabama Final CIAP Plan for FY 2007 and 2008. The approved plan allocated \$8,000,000.00 to this project. The minor change increases the project amount by \$50,000.00 to total \$8,050,000.00. The additional \$50,000.00 will be subtracted from AL-2, Administration of the Coastal Impact Assistance Program. The amount allocated to AL-2 in the approved Plan is \$630,427.62. After subtracting \$50,000.00, the amount remaining in AL-2 is \$580,427.62. The additional funds will be used to construct the educational signage to be installed on the Pier. Funds for the construction of the Pier funds for the pier will be expended in 2009 as the project seeks pre-award costs for construction (\$8,000,000.00). The educational signage (\$50,000.00) will be installed within the first year after the Pier is constructed.

**GOAL:** The goal of the State of Alabama CIAP is to conserve and protect Alabama's designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Weeks Bay, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) by raising the public awareness of conservation issues through the construction of natural resource-based educational facilities.

**OBJECTIVE:** The objective of this project is to benefit natural coastal resources, facilitate natural resource based educational opportunities, enhance marine research activities and raise public awareness of coastal natural resources through the reconstruction of the Gulf State Park Pier in Gulf Shores Alabama. After construction is completed, Department of Conservation and Natural Resources (DCNR) naturalists will resume implementation of weekly (at least 52) natural resource-based education programs. Additionally, a minimum of twenty-five (25) interactive interpretive exhibits will be constructed along the length of the pier providing the public information regarding natural resource management issues such as endangered sea turtle protection, coastal erosion processes, marine mammal protection, dune habitat restoration, water quality protection, and many others.

The Gulf State Park Pier is located in Gulf State Park, in the city of Gulf Shores, Alabama on the Gulf of Mexico (30° 14' 56.16" N, 87° 40' 6.80" W) and managed by DCNR. Natural resource managers for the DCNR have long recognized the importance of conserving public land in a manner that protects significant natural resources while also providing the public opportunities to utilize and appreciate the resources. This balance is best articulated in the stated goals of the United States Department of the Interior (DOI) in which resource protection, responsible resource use, and recreation are identified as three of the five departmental goals. Likewise the DCNR manages its assets, including the Gulf State Park and pier, in a similar manner.

The former pier was destroyed by Hurricane Ivan in 2004 and benefited the natural coastal environment, facilitated marine fishery research, and marine fishery surveys, and also served as infrastructure for connecting a saltwater pipeline (funded with 2001 CIAP funding) which provided saltwater for the nearby Claude Petet Mariculture Center (see AL-19) in support of DCNR marine research targeted at the declining red snapper fishery. Additionally, the former pier served as a natural resource education platform, reaching almost 200,000 annual visitors prior to 2004.

Construction of the new pier will allow the state to further support and enhance these coastal conservation activities by serving as a conservation tool reaching up to 400,000 visitors annually. The 20-foot wide and 1510-foot long pier with a small octagon at the halfway point and a much larger octagon at the end of the pier will also become a regional focal point for promoting the message of coastal conservation. Additionally, recycling and restroom facilities will further promote the conservation message as well as provide a benefit to the natural coastal environment (see schematic located in Section 6 (Maps/Drawings) of the grant application).

The construction of the Gulf State Park Pier was bid out in accordance with Alabama Competitive Bid Laws (Section 41-16-20, Code of Alabama, 1975) in August of 2007. The total cost of the pier project is \$16,380,507.00, of which \$8,000,000.00 of CIAP funds are allocated. The CIAP funds will be restricted to the following construction elements: pilings,

pile caps, stringers, restrooms, and the wooden boardwalk. Other construction project costs such as mobilization, parking lot construction, and the concession building will be paid for utilizing other funding sources.

In addition to the formal educational programs, twenty-five (25) interactive and interpretative coastal conservation exhibits will be constructed along the length of the Pier as an additional means to provide the Pier's 400,000 annual visitors the coastal conservation message. Further, these exhibits will provide the DCNR an opportunity to highlight to the public a variety of coastal conservation and environmental issues including endangered species conservation (i.e. beach mouse, sea turtle), dune protection and ecology, water quality protection, and threats to marine mammals and the marine fishery. The exhibits will be developed and designed by natural resource professionals in order to most effectively engage the public's interest. Also, these exhibits will be maintained and periodically updated by DCNR staff so as to provide the most current and up-to-date coastal conservation information. The budget for the creation of the educational signage is \$50,000.00.

This project will consist of two phases. The first phase will be to seek pre-award costs for the construction of the pier. The second phase will develop, construct, and install educational signage of the pier (\$50,000.00). The second phase will not seek pre-award costs for the pier.

A map of the pier's location (vicinity map), schematic, plan view, and typical cross section are located in Section 6 (Maps/Drawings) of the grant application.

## 5. AUTHORIZED USES

- This project meets the criteria set forth in **Authorized Use #1**: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project is being justified using Authorized Use #1 because it provides public access to the coastal environment and benefits the natural coastal environment as described below:
  1. **Environmental Education Facility**: DCNR naturalists will schedule fifty-two (52) environmental programs on the Pier annually. These programs will engage elementary, middle and high school students, families, and retirees, on a variety of natural resource education issues including sea turtle conservation, beach mouse habitat conservation and dune ecology. For example, after turtle nesting season, volunteers will be trained to identify sea turtle nests along Alabama's beaches. The pier offers a worthy vantage point for nest identification training. Schools from both Baldwin and Mobile Counties will schedule field trips to the Pier and will learn about coastal natural resource management and environmental issues.

In addition to the formal educational programs, twenty-five (25) interactive and interpretative coastal conservation exhibits will be constructed along the length of the Pier as an additional means to provide the Pier's 400,000 annual visitors the coastal conservation message. Further, these exhibits will provide the DCNR an opportunity to highlight to the public a variety of coastal conservation and environmental issues including endangered species conservation (i.e. beach mouse, sea turtle), dune protection and ecology, water quality protection, and threats to marine mammals and the marine fishery. The exhibits will be developed and designed by natural resource professionals in order to most effectively engage the public's interest. Also, these exhibits will be maintained and periodically updated by DCNR staff so as to provide the most current and up-to-date coastal conservation information.

2. **Research Facility:** The Gulf State Park Pier will serve as a tool for conducting marine research which drives the development of effective marine conservation strategies which are implemented by the DCNR.
  - **Fishery Surveys:** The pier serves as the prime data collection point for the National Marine Fishery Service (a.k.a. NOAA Fisheries) statistical fishery surveys to assess catch rates and gather biological information from harvested fish. During the period of 2000 through 2003, twenty-three percent (23%) of Alabama's annual, recreational shore interviews conducted through the NOAA Fisheries Statistics Survey were collected from saltwater fishermen fishing on the Gulf State Park Pier. Additionally, survey participants are provided information regarding local fishery conservation programs.
  - **Saltwater Intake:** The former pier was used as an attachment point for an intake structure, which provided a consistent and reliable supply of high salinity water used for research with marine organisms at the Claude Petet Mariculture Center (CPMC). Prior to Hurricane Ivan, the facility was the first hatchery on the Gulf Coast to identify food sources and raise Red Snapper (*Lutjanus campechanus*) from larvae to adults. Furthermore, Red Snapper larvae were generated at CPMC and provided to other Gulf Coast hatcheries in order to augment regional populations.

As part of the reconstruction of saltwater pipeline, an intake structure with an access platform will be attached to the new pier to prevent navigational hazards and ease maintenance requirements. The new intake will assure a constant supply of seawater with minimal interaction from bottom sediments. Large quantities of seawater are necessary at CPMC to develop spawning programs for various marine finfish. Spawnd fish can be used in various research activities designed to enhance knowledge of life histories and habitat requirements as well as determining the

impacts of industry on marine life. Knowledge gained will assist in the conservation of studied fish.

3. **Controlled Public Access:** The Gulf State Park Pier will benefit the natural coastal environment by hosting tourists, school groups, bird watchers, and the general public in a manner which allows the DCNR resource managers to control the extent and manner which natural resources are utilized. It will provide a single centralized location for all of the various resources user groups and will offer access to the beach, dunes, and open waters of the Gulf of Mexico in a controlled and planned manner. Among those user groups, this pier will provide access to the natural coastal environment to those who cannot afford their own boat or a charter boat. In the absence of the pier, other coastal areas may be subject to overuse and potential environmental degradation. For example, without the pier, visitors will access the beach area by walking across the dunes, potentially damaging the natural ecology of these natural systems which are important in supporting critical habitat for endangered species. Recycling facilities for the public will be located at the pier as a means to reduce coastal pollution, and support the conservation and environmental message promoted by natural resource managers. For example, DCNR sponsors a monofilament recovery and recycling program. In 2007 and 2008, this program successfully recycled approximately 22,000-feet (almost 4 miles) of monofilament resulting in a reduction of marine debris deposited in coastal waterways. (For more information regarding the monofilament recycling program please visit: <http://www.southeasternwildlifeconservation.org/accoi.htm>).
4. **Endangered Species Enhancement:** According to the U.S. Fish and Wildlife Service, there are over 250 acres of critical habitat in Gulf State Park for the endangered Alabama Beach Mouse (*Peromyscus polionotus ammobates*). Beach mice are an important part of the coastal dune ecosystem. Thriving beach mouse populations indicate a healthy dune system. The mice themselves contribute to successful habitat conservation by collecting and distributing seeds. Uneaten seeds grow into plants which help to stabilize and maintain dunes. The construction of the Gulf State Park Pier has been closely coordinated to enhance 2 acres of beach mouse habitat. In addition, Gulf State Park is also habitat for the Loggerhead sea turtle (*Caretta caretta*), Kemp's ridley sea turtle (*Lepidochelys kempii*), and Green sea turtle (*Chelonia mydas*). Sea turtle nest identification and protection programs are hosted from the Gulf State Park Pier (see item #1 above).
5. **Conservation Awareness:** Providing opportunities for the public to access natural habitats is inherently beneficial to the ecosystem as a whole. The visitors to the Gulf State Park Pier will be afforded the opportunity to view sensitive dune habitats along with the marine habitats found in the Gulf of Mexico. Interactive environmental educational exhibits will be located along the pier to

inform the public on fish, birds, beach mice, sea turtles and other topics of coastal ecology (see Item #1). The experience will foster a sense of appreciation for the natural coastal environment, in turn building a conservation legacy for the users. Among those users, this pier will provide access to the natural coastal environment to those who cannot afford their own boat or a charter boat. This conservation will occur because the public will be afforded an opportunity to observe natural habitats and understand their importance to local wildlife populations and to the regional landscape. Increased exposure to these resources helps drive the development of public policies and programs which support natural resource conservation and benefit the natural coastal environment. Without this exposure people may become indifferent to coastal natural resource conservation which could negatively impact public policies and programs which support habitat conservation. The Gulf State Park Pier will provide a unique perspective and view of Alabama's developing coastline to visitors which will help to underscore the issues and challenges facing coastal resource managers.

Additionally, natural resource managers have long recognized the importance of balancing the conservation of public lands in a manner that protects the significant natural resources while providing the public opportunities to appreciate and utilize the resource. These public opportunities provide the hands-on knowledge and experience which forms a foundation in the public consciousness for conservation activities. This balance is best articulated in the stated goals of the DOI in which resource protection, responsible resource use, and recreation are identified as three of the five Departmental goals. Following the leadership set forth by the Department of Interior, the DCNR also recognizes the need to manage public land resources by conserving the natural area while also providing access to the public. The DCNR has worked cooperatively with the DOI to facilitate species conservation including designating a portion of the park as critical habitat for the Alabama Beach Mouse and three species of endangered sea turtles. Additionally, the DCNR has protected the dunes, created stewardship programs, and worked to re-establish prescribed fires within the forested area of the park. These activities occur concurrently with recreational activities offered at the park such as camping, bird watching, hiking, and swimming.

6. **Revenue Source for Marine Conservation Activities:** Revenues from the pier will benefit the natural coastal environment by providing needed funds for the DCNR for use in its mission of conserving Alabama's marine resources. Revenues generated from the sale of saltwater fishing licenses will be utilized for habitat and resource conservation by funding marine enforcement and biological activities. It is anticipated that more than 400,000 visitors will visit the pier annually. If just 60,000 of these visitors purchase a saltwater license (15,000 nonresident trip, 10,000 nonresident annual, 15,000 resident trip, and 20,000 resident annual), over \$1,320,000 in revenues would be generated to support marine conservation activities and protection of the natural coastal environment.

7. **Habitat Creation:** The former pier will be removed from its current location and recycled to create marine reefs. Large pieces of concrete from the old pier will be deployed to create habitat adjacent to Gulf State Park Pier. Recycling the old pier, along with the new pier, will provide substrate for marine organisms to attach and a refuge for smaller fish species. Further, the deployment of these materials will reduce the amount of debris to be placed in a permitted landfill.
  8. **Restrooms:** The restrooms will benefit the natural coastal environment by being connected to a public sewer system allowing for the waste to be treated at a permitted wastewater treatment facility. The associated sewer infrastructure will be designed to minimize spills, specifically during hazard events. In the absence of sanitary facilities, adjacent natural areas could be impacted negatively by overuse and pollution from the visitors to Gulf State Park. One of the twenty-five interactive exhibits will be located near the restrooms and will promote the importance of water quality protection and water conservation.
- o **Cost Sharing:** Cost sharing is not applicable to this project.
  - o **Partnering:** Other funding sources will be used to complete this project. The Emergency Disaster Recovery Program (EDRP) sponsored by NOAA will pay for the cost of the salt water intake structure on the pier (\$2,310,662.00). The remaining costs (approximately \$6,069,845.00) will be paid for using fund from the 2001 State Parks Improvement Bond Issue.

## 6. PROJECT DESCRIPTION

### GOALS OF THE CURRENT GRANT APPLICATION:

This grant application will have two tasks:

Task One will seek reimbursement of \$8,000,000.00 (FY 2007 CIAP allocation) of pre-award costs for the construction of the Gulf State Park Pier. In December of 2007, the construction of the Gulf State Park Pier was bid out in accordance with Alabama Competitive Bid Laws (Section 41-16-20, Code of Alabama, 1975). The construction contract included a sum of \$16,380,507.00. The goal of this grant application is to pay \$8,000,000.00 toward the construction costs (labor and materials) of the New Pier and Associated Construction Phase 1 and Phase 2. The construction consists of the following elements: pilings, pile caps, stringers, restrooms, and the wooden boardwalk. Other project costs such as mobilization, saltwater intake, parking lot construction, and the concession building will be paid for utilizing other funding sources.

Task Two will consist of the development, construction, and installation of the 25 interactive exhibits. After the construct of the Pier is complete, twenty-five (25) interactive and interpretative coastal conservation exhibits will be constructed along the length of the Pier as an additional means to provide the Pier's 400,000 annual visitors the coastal conservation message. Further, these exhibits will provide the DCNR an opportunity to highlight to the public a variety of coastal conservation and environmental issues including endangered species conservation (i.e. beach mouse, sea turtle), dune protection and ecology, water quality protection, and threats to marine mammals and the marine fishery. The exhibits will be developed and designed by natural resource professionals in order to most effectively engage the public's interest.

#### STATEMENT OF WORK:

**Task One:** Construction of the Gulf State Park Pier commenced in the spring of 2008. It is 20-feet wide and 1510-feet long with a concessions building, smaller octagon at the halfway point and a larger octagon at the end of the pier. The wooden boardwalk begins at 10-feet above mean sea level and is constructed due southward 280-feet to the concessions building. The concession building is 95-feet by 95-feet and will consist of a covered eating area on the eastern side and a heated and cooled covered area on the western side. The area also houses restrooms and a small eatery. The first octagon platform is construction at 900-feet. It is 65-feet by 65-feet at the widest dimensions. Further, final octagon platform is located at 1355-feet. It is 90-feet by 90-feet at the widest dimension. Three 24-inch square concrete pilings consist of one bent. The entire pier consists of a 46 bents and associated pile caps. The bents are spaced 35-feet apart. Stringers connect the pile caps and wooden decking is installed on top of the stringers. Construction drawings are included below Maps/Drawings portion of this grant application. The CIAP funds will be restricted to the following construction elements: pilings, pile caps, stringers, restrooms, wooden boardwalk, and labor costs associated with these items.

**Task Two:** Task Two will consist of the design, construction, and installation of 25 interactive exhibits on the Gulf State Park Pier.

The proposed project duration will be from May 31, 2009 to December 31, 2010.

#### SCHEDULE:

**Task One:** This grant will seek pre award costs only. At the time the grant is submitted, the construction of the pier is near complete.

**Task Two:** This project is expected to be completed within one year of the completion of construction of the Gulf State Park Pier (estimated 9/30/2009-12/31/2010).

#### Milestones for Task Two:

- 9/30/2009 – Construction of the Pier is complete
- 12/31/2009 – DCNR natural staff meet to discuss signage content
- 2/28/2010 – Draft Exhibits designed
- 3/31/2010 – Exhibits approved by Project Manager and competitive procurement of construction has begun
- 6/30/2010 – Construction of Exhibits complete
- 9/30/2010 – Exhibits installed on Gulf State Park Pier
- 12/31/2010 – Project Close-out.

#### PROJECT MANAGEMENT PLAN:

##### **Task One:**

Terry Boyd is the Chief Engineer of the Department of Conservation (DCNR) and Natural Resources. He oversees all construction projects in DCNR and works with the contractor to ensure project goals and deliverables are being met. Mr. Boyd coordinated selection the project engineers and worked closely to ensure the project was designed to meet sound engineering practices while minimizing impact to the natural coastal environment. After the project was designed and reviewed, Mr. Boyd coordinated the bidding of the project with the consulting engineers to make sure the Alabama competitive bid law was followed.

The construction of the Gulf State Park Pier began in December of 2007. A consulting engineering company (Thompson Engineering, Inc.) designed the pier and the design engineering fees included a line item for \$235,000.00 for construction inspection and oversight. Weekly reports were provided by the lead project engineer (Keith Howell) to the Chief Engineer (Terry Boyd) in order to apprise him of the progress of the construction. Please note these fees are not being requested as reimbursement using CIAP funds.

In addition to the construction inspection services provided by the project engineer, the Department of Conservation and Natural Resources (DCNR) provided staff (Conservation Construction Inspector -- Ronnie Smoke), to oversee the construction of the Gulf State Park Pier. Mr. Smoke was on-site 2-days per week during the 20-months construction period (approximately 1280 hours). Each week he provided an inspection report to the Chief Engineer. Mr. Smoke worked a total of 2 days per week for 20 months at an hourly wage of \$33.83 including fringe, resulting in \$43,300.61 of salary and fringe cost for construction inspection. Travel costs for Mr. Smoke include travel for 160 days (2 days per week for 4 weeks a month for 20 project months) at a cost of \$75.00 per day for the total travel cost of \$12,000.00. In sum, labor and travel costs for Mr. Smoke total \$55,300.61. Please note these fees are not being requested as reimbursement using CIAP funds.

The Chief Engineer (Terry Boyd) provided bi-monthly inspections of the project for a total of 160 hours (16 hours a month for 20 months). Mr. Boyd's hourly rate including fringe is approximately \$64.58, resulting in \$20,665.55 of project oversight costs. Mr. Boyd was required to travel 4 days per month for 20 months at a state overnight per diem rate of \$75.00 per day, resulting in \$6,000.00 of travel expenses. In sum, labor and travel costs for Mr. Boyd total \$26,665.55. Please note these fees are not being requested as reimbursement using CIAP funds.

In conclusion, the construction of the Gulf State Park pier was managed and approximately \$316,966.16 was spent for project oversight and management. Terry Boyd acted as the project manager and the QA/QC officer.

**Task Two:**

The design, construction and installation of the exhibits will be overseen by Forrest Bailey, Natural Resource Supervisor of the Department of Conservation and Natural Resources. Mr. Bailey will ensure project goals and deliverables are being met. He will dedicate 10 hours per month over the course of the project period, for a total of 180 project hours. His hourly wage including fringe is \$42.09. Therefore project management and quality assurance/quality control of task two will cost approximately \$7,576.90. Please note: these costs are not be sought for reimbursement. Task Two will pay for construction and installation costs of the interactive exhibits.

**DELIVERABLE:**

**Task One:** The deliverable of this project will be a copy of the construction contract and Certified Engineer approval of \$8,000,000.00 of construction costs.

**Task Two:** The deliverable of Task Two will be the design, construction and installation of 25 interactive exhibits on the Gulf State Park Pier.

**COMPATIBILITY/SYNERGY:**

The Gulf State Park Pier will enable DCNR natural resource managers to implement natural-resource education and research programs highlighting conservation of the coastal natural resources. The Pier will be used to host numerous educational programs, promote research, protect endangered species and provide public access to the coastal environment. Providing public access is an explicit goal of the Alabama Coastal Area Management Program. Further, the Mobile Bay National Estuary Program supports increased public access to coastal areas in its Coastal Comprehensive Management Plan. Both of these documents are fully endorsed by NOAA and EPA respectively. The construction of the Gulf State Park Pier will work closely to implement the goals of existing federal programs in coastal Alabama.

#### CONTROVERSY/SUPPORT:

There is a great deal of local support for this project. During the public meeting held in 2007 which announced the CIAP Plan, numerous attendees expressed their support to reconstruct the Pier. Since its destruction in 2004, the reconstruction of the Gulf State Park has been eagerly anticipated. Numerous articles in the local papers have expressed the public's anticipation have access once again to the Gulf of Mexico.

#### BUNDLING:

This project is not bundled. Only one project is being submitted in this grant application.

#### PROGRAM INCOME:

No program income will be generated during this project's period of performance.

#### MAPS/DRAWINGS:

5. Vicinity Map
6. Schematic
7. General Key Plan and Location Plan
8. General Plan Elevation
9. Typical Plan Cross-Section

# State of Alabama Coastal Impact Assistance Program Gulf State Park (AL-13)

0 0.25 0.5 1 1.5  
Miles



Claude Peteeet  
Mariculture Center  
(AL-19)

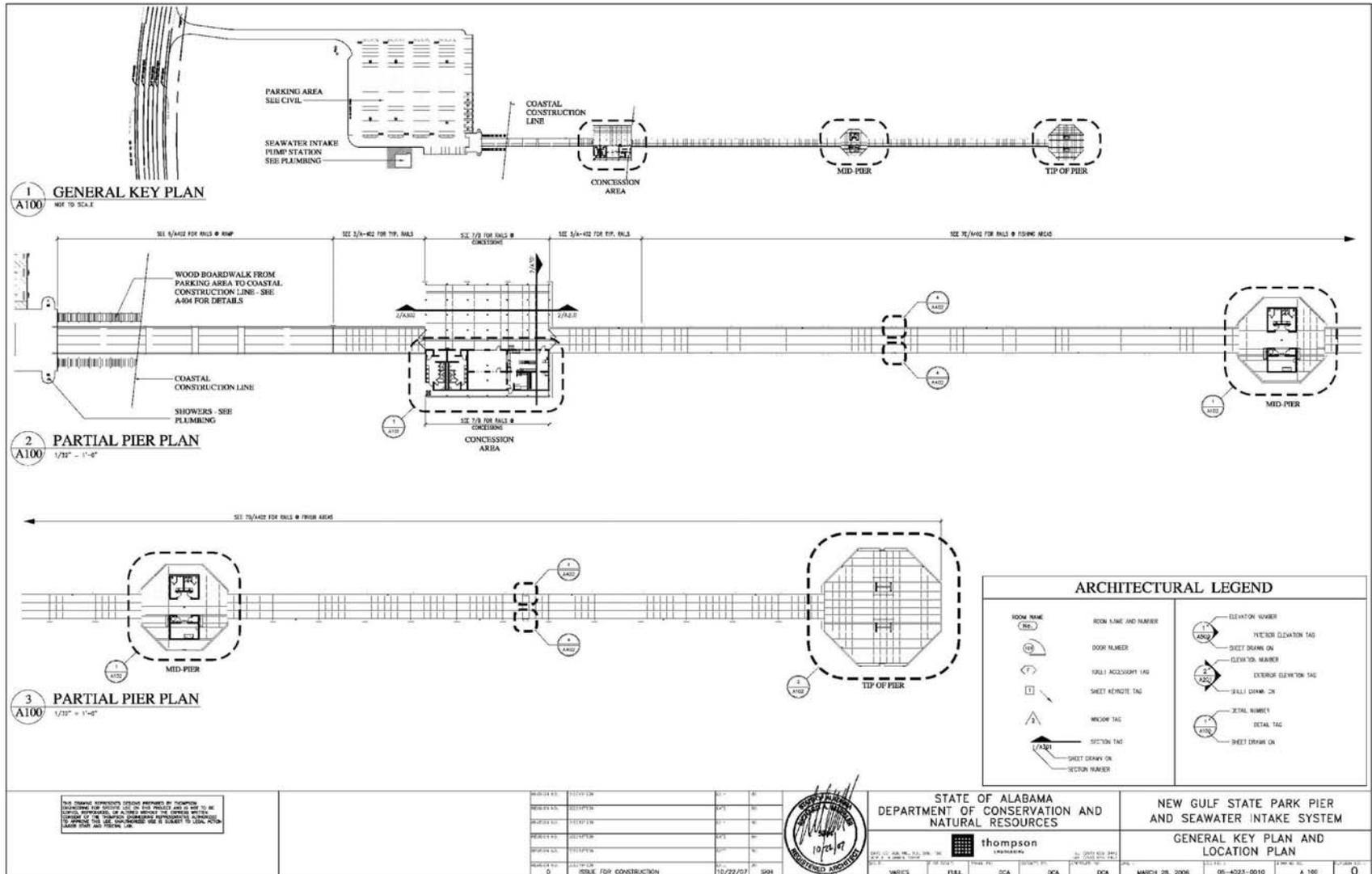
Gulf State Park Pier  
(AL-13)

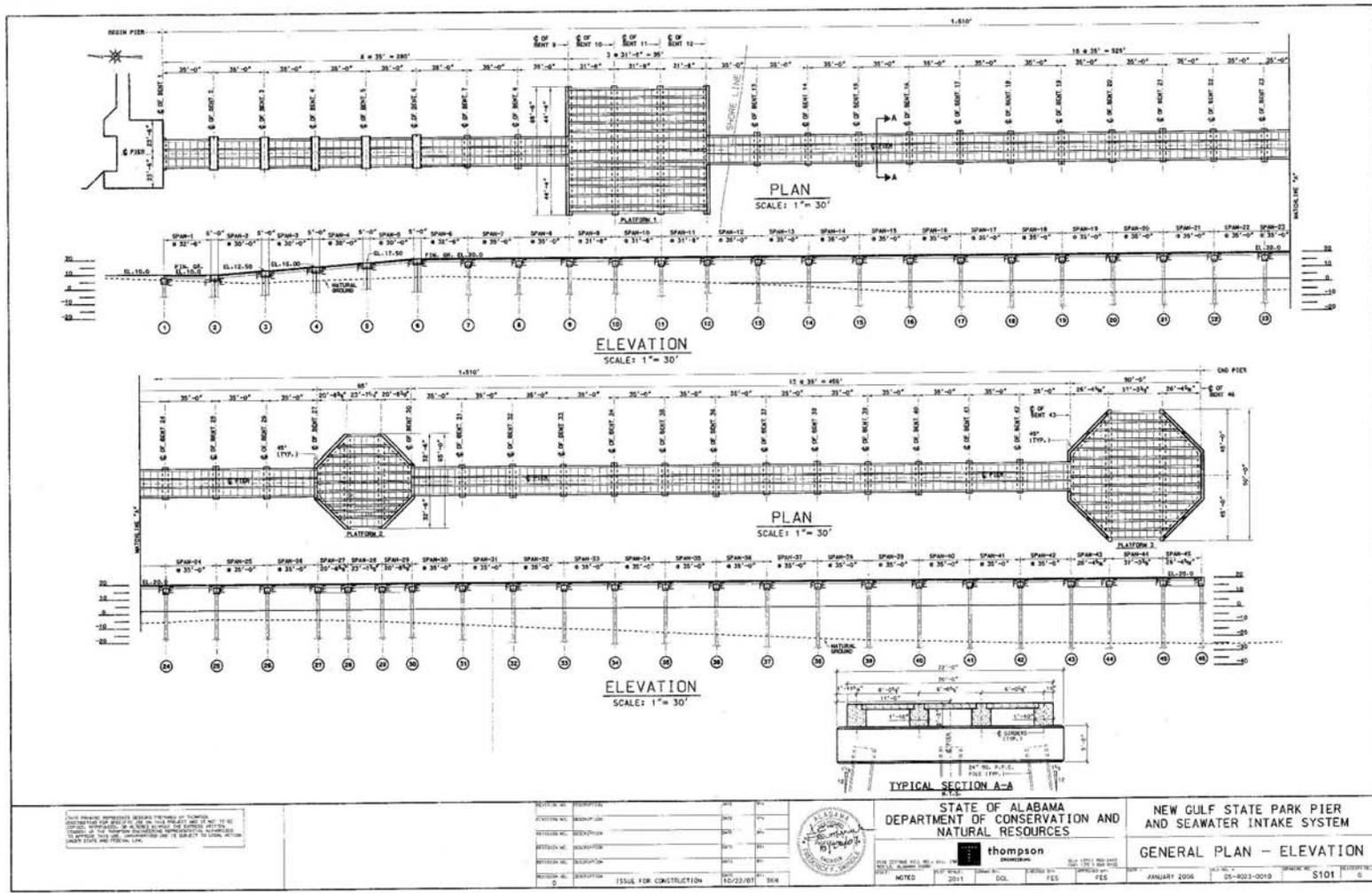
 Approximate Gulf State Park Boundary

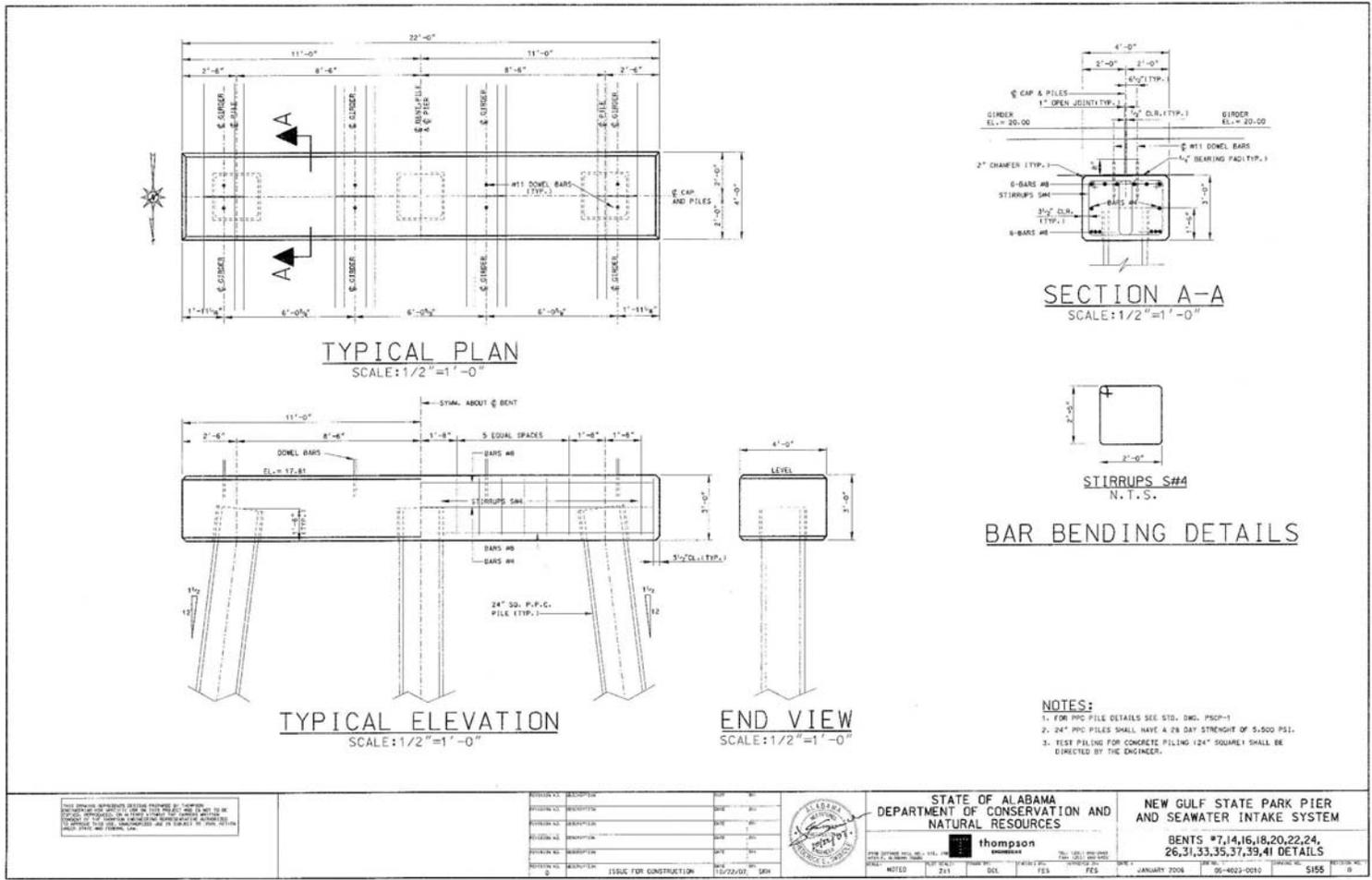
**Major Roads**

-  Interstates
-  Highways
-  Secondary Roads









## 9. DESCRIPTION OF ENVIRONMENTAL IMPACTS

On July 27, 2009, the United States Army Corps of Engineers issued a letter of permission to the Alabama Department of Conservation and Natural Resources (SAM-2006-612-JAM) to replace the hurricane damaged Gulf State Park Fishing Pier with a new pier extending into the Gulf of Mexico. Recommendations provided by the U.S. Fish and Wildlife Service were made mandatory conditions as part of the permit. The recommendations included compliance with the Habitat Conservation Plan (HCP) for Gulf State Park (modified February 7, 2005) and a resulting net gain of 2.65 acres of Alabama Beach Mouse habitat due a reconfigured layout of the Gulf State Park Pier, parking lots and beach pavilions. A copy of the letter of permission from the U.S. Army Corps of Engineers and associated U.S. Fish and Wildlife Permit are attached to this application.

The reconstruction of the Gulf State Park Pier will benefit natural coastal resources, facilitate natural resource based educational opportunities, enhance marine research activities and raise public awareness of coastal natural resources through the reconstruction of the Gulf State Park Pier in Gulf Shores Alabama. After construction is completed, Department of Conservation and Natural Resources (DCNR) naturalists will resume implementation of weekly natural resource-based education programs. Additionally, a minimum of twenty-five (25) interactive interpretive exhibits will be constructed along the length of the pier providing the public information regarding natural resource management issues such as endangered sea turtle protection, coastal erosion processes, marine mammal protection, dune habitat restoration, water quality protection, and many others.

## 14. RELATIONSHIP TO OTHER FEDERAL PROGRAMS

Public assistance from the Federal Emergency Management Agency (FEMA) was requested for the costs associated with the damage caused by Hurricane Ivan and Katrina. To date, FEMA has not reimbursed the State of Alabama. Further, funding for the saltwater pipeline intake system on the pier was provided by the Emergency Disaster Recovery Program (EDRP) administered by NOAA.

## 15. FEDERAL, STATE AND LOCAL AGENCIES

### Federal Agencies

- U.S. Army Corps of Engineers Mobile District  
Michael F. Malsom, Acting Team Leader  
PO Box 2288  
Mobile, AL 36628-0001  
T:(251) 471-5966

F: (251) 690-2660  
dll-cesam-rd-web@sam.usace.army.mil

- U.S. Fish and Wildlife Service  
Daphne Ecological Services Field Office  
Bill Pearson, Supervisor  
1208 B Main Street  
Daphne, Alabama 36524  
T:(251) 441-5181  
F: (251) -441-6222  
bill\_pearson@fws.gov

#### State Agencies

- Alabama Department of Environmental Management  
Mr. Scott Brown  
4171 Commanders Drive  
Mobile, Alabama 36615-1421  
T: (251) 432-6533  
F: (251) 432-6598  
coastal@adem.state.al.us

#### Local Agencies

The project is being constructed on State property, therefore no local agency has jurisdiction in these areas.

## 16. PROJECT INFORMATION QUESTIONS

### Environmental Review

- 7) Does the project require any Federal environmental review (e.g., environmental assessment, environmental impact statement, biological opinion)?  
 Yes  No
- 8) Does the project require any State environmental review (e.g. Consistency Determination, State Historic Preservation Office)?  
 Yes  No
- 9) Does the project require local environmental review (e.g., zoning)?  
 Yes  No

### Permits

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State of Alabama Final Coastal Impact Assistance Program Plan  
State of Alabama Tier One Project Descriptions

7) Does this project require any Federal permits?

**Yes**  **No**

a) Letter of Permission – U.S. Army Corps of Engineers

b) Federal Fish and Wildlife Permit – U.S. Fish and Wildlife Service

8) Does this project require and State permits?

**Yes**  **No**

9) Does this project require any local permits?

**Yes**  **No**

### **Legal Proceedings**

3) Are there any pending legal proceedings that have been taken against any of the permits or related environmental analyses required for the project?

**Yes**  **No**



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
MOBILE DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 2288  
MOBILE, AL 36628-0001

July 27, 2007

Coastal Branch  
Regulatory Division

SUBJECT: Letter of Permission, Department of the Army Permit Number SAM-2006-612-JAM, State of Alabama, Department of Conservation and Natural Resources.

State of Alabama,  
Department of Conservation and Natural Resources  
Attn: Mr. Terry Boyd  
64 N. Union St., Suite 479  
Montgomery, AL 36130

Dear Mr. Boyd:

Reference is made to your request for a Department of the Army permit to replace the hurricane damaged Gulf State Park fishing pier with a new pier extending into the Gulf of Mexico, in Gulf Shores, Baldwin County, Alabama.

Upon the recommendation of the Chief of Engineers and under the provisions of Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403), you are hereby authorized by the Secretary of the Army to perform this work in accordance with your submitted data and plans, the enclosed General Conditions and the following Special Conditions:

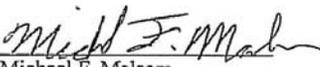
Compliance with Fish and Wildlife Service recommendations as defined in the Service's original Biological Opinion and as amended, 15 November, 2006, are mandatory conditions of this permit, in addition the permittee's **Proposed HCP Conservation Measures**, are also mandatory.

The District Engineer shall be notified in writing of the commencement and completion of the work. The enclosed cards may be used for that purpose. Also enclosed is Notice of Authorization which must be posted at the site during construction of the permitted work.

If the activity authorized herein is not completed on or before July 27, 2012, this permit, if not previously revoked or specifically extended, shall automatically expire.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

BYROM G. JORNS  
Colonel, Corps of Engineers  
District Commander

BY:   
Michael F. Malsom  
Acting, Team Leader

|  |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
|--|--|--|-----------------------------|--|--|--|-------------------------------|--|------------------------|--|-----------------|--|------------|--|--------------------|--------------------|---|---|-----------------------------|-----------------------------|--------------------|-------------------|------------|------------|
|  <p><b>DEPARTMENT OF THE INTERIOR<br/>U.S. FISH AND WILDLIFE SERVICE</b></p> <p><b>FEDERAL FISH AND WILDLIFE PERMIT</b></p>   |  | <p>3-201(1/97)</p> <table border="1"> <tr> <td colspan="2"><b>2 AUTHORITY-STATUTES</b></td> </tr> <tr> <td colspan="2">16 USC 1539(a) (1) (B)<br/>16 USC 703-712</td> </tr> <tr> <td colspan="2"><b>REGULATIONS (Attached)</b></td> </tr> <tr> <td colspan="2">50 CFR §§ 13, 17, &amp; 21</td> </tr> <tr> <td colspan="2"><b>3 NUMBER</b></td> </tr> <tr> <td colspan="2">TE072831-2</td> </tr> <tr> <td><b>4 RENEWABLE</b></td> <td><b>5. MAY COPY</b></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input checked="" type="checkbox"/> YES</td> </tr> <tr> <td><input type="checkbox"/> NO</td> <td><input type="checkbox"/> NO</td> </tr> <tr> <td><b>6 EFFECTIVE</b></td> <td><b>7. EXPIRES</b></td> </tr> <tr> <td>12/26/2006</td> <td>12/27/2034</td> </tr> </table> | <b>2 AUTHORITY-STATUTES</b> |  | 16 USC 1539(a) (1) (B)<br>16 USC 703-712 |  | <b>REGULATIONS (Attached)</b> |  | 50 CFR §§ 13, 17, & 21 |  | <b>3 NUMBER</b> |  | TE072831-2 |  | <b>4 RENEWABLE</b> | <b>5. MAY COPY</b> | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> NO | <b>6 EFFECTIVE</b> | <b>7. EXPIRES</b> | 12/26/2006 | 12/27/2034 |
| <b>2 AUTHORITY-STATUTES</b>  |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| 16 USC 1539(a) (1) (B)<br>16 USC 703-712   |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <b>REGULATIONS (Attached)</b>  |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| 50 CFR §§ 13, 17, & 21   |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <b>3 NUMBER</b>  |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| TE072831-2   |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <b>4 RENEWABLE</b>   | <b>5. MAY COPY</b>   |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <input checked="" type="checkbox"/> YES  | <input checked="" type="checkbox"/> YES  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <input type="checkbox"/> NO  | <input type="checkbox"/> NO  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <b>6 EFFECTIVE</b>   | <b>7. EXPIRES</b>  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| 12/26/2006   | 12/27/2034   |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <p><b>1 PERMITTEE</b></p> <p>Alabama Department of Conservation and Natural Resources<br/>64 North Union Street<br/>Montgomery, Alabama 36130</p>  |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <p><b>8. NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business)</b></p> <p>Mr. M. Barnett Lawley<br/>Commissioner</p>   |  | <p><b>9 TYPE OF PERMIT</b></p> <p>THREATENED SPECIES - INCIDENTAL TAKE</p>   |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <p><b>10 LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED</b></p> <p>GULF STATE PARK, BALDWIN COUNTY, ALABAMA</p>   |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <p><b>11. CONDITIONS AND AUTHORIZATIONS:</b></p> <p>A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.</p> <p>B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW.</p> <p>C. VALID FOR USE BY PERMITTEE NAMED ABOVE, AND AUTHORIZED AGENTS.</p> <p>D. ACCEPTANCE OF THIS PERMIT SERVES AS EVIDENCE THAT THE PERMITTEE AND ITS AUTHORIZED AGENTS UNDERSTAND AND AGREE TO ABIDE BY THE TERMS OF THIS PERMIT AND ALL SECTIONS OF TITLE 50 CODE OF FEDERAL REGULATIONS, PARTS 13 AND 17, PERTINENT TO ISSUED PERMITS. SECTION 11 OF THE ENDANGERED SPECIES ACT OF 1973, AS AMENDED, PROVIDES FOR CIVIL AND CRIMINAL PENALTIES FOR FAILURE TO COMPLY WITH PERMIT CONDITIONS.</p> <p><u>XX</u> BLOCK 11 OF THIS PERMIT CONSISTS OF ITEMS A - M (5 PAGES TOTAL).</p> |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <p><b>12. REPORTING REQUIREMENTS</b></p> <p>REPORTS WILL BE PROVIDED TO THE U.S. FISH AND WILDLIFE SERVICE OFFICES APPEARING IN CONDITIONS 11.L AND 11.M OF THIS PERMIT.</p>   |  |  |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |
| <p><b>ISSUED BY</b></p>   | <p><b>TITLE</b></p> <p>DEPUTY REGIONAL DIRECTOR,<br/>FWS, SOUTHEAST REGION</p> | <p><b>DATE</b></p> <p>12/22/06</p>   |                             |  |  |  |                               |  |                        |  |                 |  |            |  |                    |                    |   |   |                             |                             |                    |                   |            |            |

- E. The authorization granted by this permit is subject to compliance with, and implementation of, the Habitat Conservation Plan (HCP) for Gulf State Park Hotel/Convention Center and Pavilion, Gulf Shores, Baldwin County, Alabama. The HCP was modified on February 7, 2005, to include a shift eastward by the Beach Pavilion and reconfiguration of the parking lot footprint. The HCP was also modified on June 16, 2006, to include a shift in the fishing pier into the permit area and a reduced building footprint. This Permit and HCP are binding upon the Permittee, its officers and employees, authorized contractors, and other agents conducting covered activities.

The Permittee, and any authorized agents, are authorized to take the Alabama beach mouse within the Project area incidental to earth moving, grading, other land alteration and construction activities necessary to construct the Hotel/Convention Center and associated facilities as described in the Permittee's HCP, and as conditioned here. The Permittee, and any authorized agents, are authorized to take the Alabama beach mouse within the Project area incidental to on-going occupancy and usage of the Hotel/Convention Center and associated facilities. The Permittee, and any authorized agents, are authorized to take the Alabama beach mouse within the Project area incidental to habitat restoration activities. This permit does not authorize take of any covered species resulting from unlawful activities.

- F. The Permittee, with reasonable notice, must permit the contact office of the U.S. Fish and Wildlife Service personnel identified in Condition 11.M, below, or other properly permitted and qualified persons designated by the U.S. Fish and Wildlife Service, to enter the Project area boundaries at reasonable hours and times for the general purposes specified in Title 50 Code of Federal Regulations § 13.21(e)(2).
- G. The Permittee must implement the following measures to ensure that the covered species take is minimized and fully mitigated: All measures outlined in the HCP will be implemented. The reconfigured layout of the Beach Pavilion and attendant parking lots submitted on February 7, 2005, will be implemented resulting in a net gain of 2.65 acres of ABM habitat. The reconfigured location of the Fishing Pier submitted on June 16, 2006, will be implemented resulting in a net gain of 4.9 acres of ABM habitat. With these two modifications, the total ABM restored on site would total 22.7 acres.
- H. The Permittee and the U.S. Fish and Wildlife Service agree that modification and amendments to the Permittee's HCP and this Permit may occur through its effective term. The Permit is based upon the Permittee's expected compliance

Continued...

with the provisions and commitments established in the submitted HCP and the Permit's stated terms and conditions identified herein. Where a conflict occurs between the HCP and this Permit, the Permit will control. The following procedures will govern the modification and amendment process:

1. Either the Permittee or the U.S. Fish and Wildlife Service may propose modifications and/or amendments to the HCP or this Permit by providing written notice. Such notice must include a statement of the reason for the proposed modification and an analysis of its environmental effects, including its effects on operations under the HCP and on the covered species. This analysis will be conducted jointly between the Permittee and the contact office of the U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service or the Permittee will use best efforts to respond to a proposed modification or amendment within sixty (60) days of receipt of such notice. Absent any objection from the U.S. Fish and Wildlife Service or the Permittee, the proposed modification and/or amendment will be determined as minor and will become effective upon written approval by the U.S. Fish and Wildlife Service or the Permittee. If, for any reason, a receiving party objects to a proposed amendment or modification, it must be processed in accordance with Condition 11.H.3, below.
2. The U.S. Fish and Wildlife Service will not propose or approve minor modifications or amendments to the HCP or this Permit if the U.S. Fish and Wildlife Service determines that such modifications would result in operations under the HCP and Permit that are significantly different from those analyzed in connection with the original HCP, adverse effects on the environment that are new or significantly different from those analyzed in connection with the original HCP or additional take of the covered species not analyzed in connection with the original HCP.
3. Any amendment or modification shall conform with all applicable legal requirements, including but not limited to the Endangered Species Act, the National Environmental Policy Act, and the U.S. Fish and Wildlife Service's permit regulations at 50 C.F.R. §13 and §17.
4. The Permittee will submit an annual report, due by the following January 31 for each year the permit is in effect, to the U. S. Fish and Wildlife Service offices listed in Condition 11. L and 11. M of this Permit. The first report will be due on or before January 31, 2006. The annual report must also include the certification required in condition 11.I.

Continued...

Alabama Department of  
Conservation and Natural Resources  
64 Union Street  
Montgomery, Alabama 36130  
Telephone 334/242-3486  
TE-072831-2

Page 4 of 5

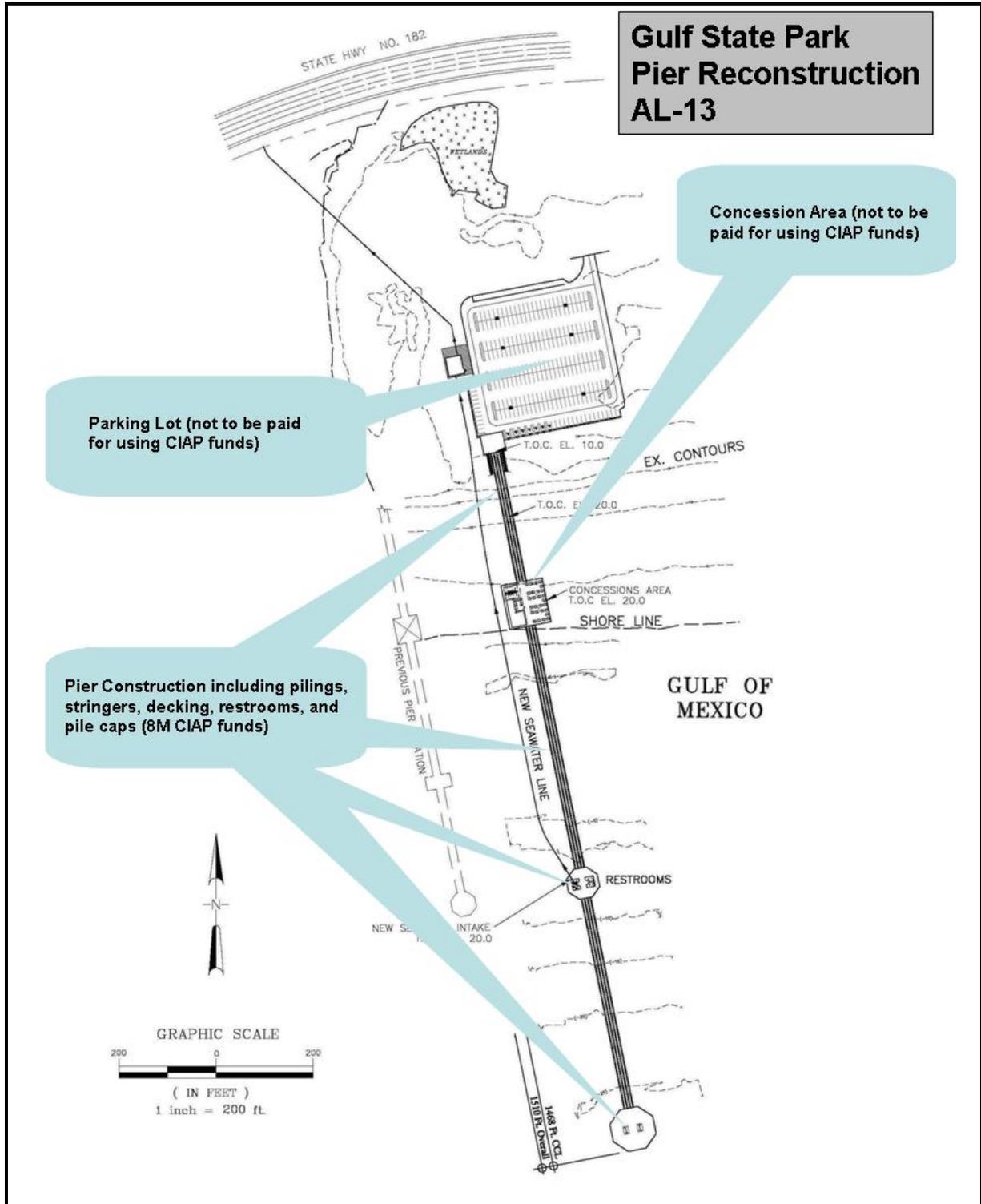
- I. The report required by Condition 11.G.4, above will include the following certification from a responsible official who supervised or directed the preparation of the report:

Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete.

- J. The Permittee and the U.S. Fish and Wildlife Service acknowledge that even with the above detailed provisions for mitigating and/or minimizing impacts to the covered species, changes in circumstances could arise which were not fully anticipated by this permit and which may result in substantial and adverse change in the status of the covered species. The U.S. Fish and Wildlife Service's policy on changed and unforeseen circumstances is contained in the final "No Surprises" rule published on February 23, 1998, (63 Fed. Reg. 8859) and codified at 50 C.F.R. Part §17.

Unforeseen and/or changed circumstances may become apparent either to the Permittee, authorized agents, or to personnel of the U.S. Fish and Wildlife Service. For purposes of implementation of this condition, unforeseen circumstances are defined as changes in circumstances affecting a species or geographic area covered by the HCP that could not reasonably have been anticipated by the HCP developers and the U.S. Fish and Wildlife Service at the time of the HCP's negotiation and development, and that result in a substantial and adverse change in the status of the covered species. Changed circumstances are defined as changes in circumstances affecting a species or geographic area covered by the HCP that can reasonably be anticipated by HCP developers and the U.S. Fish and Wildlife Service, and that can be planned for. Should either unforeseen or changed circumstances arise, the Permittee and the contact office of the U.S. Fish and Wildlife Service must meet within twenty (20) working days following notice. The U.S. Fish and Wildlife Service and Permittee must together agree upon appropriate and reasonable measures for addressing such circumstances, within the rule of applicable law, and the Permittee will implement appropriate and reasonable measures within an additional thirty (30) working days, unless a longer period of time is agreed to by the U.S. Fish and Wildlife Service.

Continued...



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Gulf State Park Environmental Education Center**

PROJECT NUMBER: **AL-14**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Forrest Bailey, Chief, Natural Resource Section  |
| Address   | Alabama State Lands Division                     | Alabama State Parks Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3901                                   |
| Fax       | (251) 621-1331                                   | (334) 242-2137                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | forrest.bailey@dcnr.alabama.gov                  |

### PROJECT SUMMARY

LOCATION: **Gulf State Park, Gulf Shores, Alabama**

DURATION: **Two Years**

ESTIMATED COST:

| AL-14              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 2,000,000.00 |
| FY 2007            | \$ -            |
| FY 2008            | \$ 2,000,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-14 |                 |
|-------|-----------------|
| 2008  | \$ 250,000.00   |
| 2009  | \$ 1,750,000.00 |
| 2010  | \$ -            |
| 2011  | \$ -            |

**GOAL:** The goal of the State of Alabama CIAP is to conserve and protect Alabama’s designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Weeks Bay, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) by raising the public awareness of these areas through the construction of natural resource-based educational facilities.

**OBJECTIVE:** The objective of this project is to construct an environmental education center at Gulf State Park to accommodate at least 4,000 visitors and 20 school groups per year by providing hands-on environmental education exhibits and programs.

The objective of this project is to construct an Environmental Education Center within the boundaries of Gulf State Park which will serve as a vehicle to highlight the Park’s coastal ecology. This facility will be managed by the naturalist on staff at the Gulf State Park. Consistent with the park’s mission, the naturalist strives to extend the public’s knowledge, understanding, respect and appreciation of the coastal environment through a wide variety of public environmental education opportunities, programs, activities, and events.

The goal of this project is to increase public awareness of conservation and protection of coastal Alabama’s designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) through the construction of natural resource-based educational facilities. The objective of this project is to construct an environmental education center at Gulf State Park which will facilitate at least 6 environmental programs per week and will provide hands-on education for at least 4,000 visitors per year. In addition, the facility will host 20 school groups per year. The facility will create 10 hands-on exhibits focusing on marine species, fresh and saltwater fish and associated habitat, saltwater marshes, local fauna including nocturnal and diurnal animals, bird of prey, migratory birds, reptiles, amphibians, and local flora. This facility will also highlight ongoing conservation efforts associated with other CIAP projects including AL-13, AL-15, AL-16, and AL-17.

In addition to environmental exhibits, the center will facilitate at least four (4) volunteer programs including Share the Beach (sea turtle protection), Dune Restoration Protection Day, Coastal Cleanup, and Volunteer Day. The first step of the project will consist of designing and engineering a low impact structure which will minimize the impact to the natural area of the park. After engineering plans are reviewed and approved, the construction of the building will be bid out according to State bid procedures. Additional details describing the education center are not available at this time. The building

will be designed by a licensed architect and professional engineer prior to construction. This design phase will be Phase One of this project. Park managers envision the building to have a large audio-visual room, classrooms, and interactive exhibit space.

Appendix G-8 contains a map depicting the proposed location (30° 15' 9.44", 87° 39' 19.55"W).

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will construct a building which will provide conservation education to thousands of visitors and students annually. Gulf State Park is part of Alabama's State Park System, consists of more than 6,000 areas of beaches, dunes, maritime forests, salt marshes, freshwater lakes, bogs, and pine savannas. An environmental education center at the park will highlight the park's characteristics through conservation education. This building will host numerous educational programs which will raise awareness of, and support for, current and future conservation activities in coastal Alabama. This project will provide environmental educational activities for school groups and the general public.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Restoration of Gulf State Park Campground Vegetation**

PROJECT NUMBER: **AL-15**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Forrest Bailey, Chief, Natural Resource Section  |
| Address   | Alabama State Lands Division                     | Alabama State Parks Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3901                                   |
| Fax       | (251) 621-1331                                   | (334) 242-2137                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | forrest.bailey@dcnr.alabama.gov                  |

**PROJECT SUMMARY**

**LOCATION: Gulf State Park, Gulf Shores, Alabama**

**DURATION: Four Years**

**ESTIMATED COST:**

| AL-15              |               |
|--------------------|---------------|
| Total Project Cost | \$ 245,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 245,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-15 |              |
|-------|--------------|
| 2008  | \$ 98,000.00 |
| 2009  | \$ 49,000.00 |
| 2010  | \$ 49,000.00 |
| 2011  | \$ 49,000.00 |

**GOAL:** The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to re-vegetate 76 acres within Gulf State Park campground with native trees and shrubs.

This project will consist of re-vegetating 76 acres within the Gulf State Park campground (30° 15' 49.39" N, 87° 38' 37.76"W) with native trees and shrubs. As a result of storm surge associated with Hurricanes Ivan and Katrina, and subsequent salt water intrusion, all plant communities including mature trees have been damaged or killed within the campground. This project is designed to replant 19 acres per year over a five year period using native, endemic trees, shrubs and plants. This project will improve aesthetics, provide shade for campers, and enhance wildlife by providing food and habitat cover. Acreage impacted will be campsites, roadside right of way and border zones between travel corridors. The time line associated will be one planting cycle per year for five years. The first phase was completed in April 2007. Subsequent planting will plant 19 acres annually for the remaining project period. The campground is depicted in Appendix G-8.

**AUTHORIZED USES**

- This project meets the criteria set forth in Authorized Use #2: mitigation of damage to fish, wildlife, or natural resources.
- Justification This project meets Authorized Use #2 because it mitigates damage to native vegetation caused by storm surge and saltwater intrusion directly caused by Hurricanes Ivan and Katrina.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Longleaf Pine Restoration at Gulf State Park**

PROJECT NUMBER: **AL-16**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Forrest Bailey, Chief, Natural Resource Section  |
| Address   | Alabama State Lands Division                     | Alabama State Parks Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 625-0814                                   | (334) 242-3901                                   |
| Fax       | (251) 625-0864                                   | (334) 242-2137                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | forrest.bailey@dcnr.alabama.gov                  |

### PROJECT SUMMARY

LOCATION: **Gulf State Park, Gulf Shores, Alabama**

DURATION: **Four Years**

ESTIMATED COST:

| AL-16              |               |
|--------------------|---------------|
| Total Project Cost | \$ 420,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 420,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-16 |               |
|-------|---------------|
| 2008  | \$ 105,000.00 |
| 2009  | \$ 105,000.00 |
| 2010  | \$ 105,000.00 |
| 2011  | \$ 105,000.00 |

**GOAL:** The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to restore 228 acres of longleaf pine habitat within Gulf State Park.

Gulf State Park consists of more than 6,000 areas of coastal habitat located directly adjacent to the Gulf of Mexico between the cities of Gulf Shores and Orange Beach. A combination of hurricane impacts, the absence of a regular prescribed burning regime, the introduction of exotic invasive species, and an absence of silvicultural management have resulted, over time, in the undesirable species composition which comprises natural forested areas of the park. The goal of this project is to restore 228 acres within park to its original longleaf pine/wiregrass community. Specifically, this project will remove fallen timber as a result of the recent hurricanes. Restoration efforts will include mechanical removal of non desirable species, herbicide application, site preparation, and planting of native vegetation. Prescribed burning will be implemented as well. This project will enhance plant and animal species of State Special Concern and federal protection following the guidelines of the Alabama Comprehensive Wildlife Conservation Strategy (CWCS). Implementation of this project will also allow the State Parks Division to further enhance a former red cockaded woodpecker zone in the northeast portion of the park. Two phases of the project will be implemented: Appendix G-8 contains a map depicting the longleaf areas to be restored. This project will restore approximately 57 acres of longleaf pine habitat per project year.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will restore areas to native longleaf pine communities Gulf State Park.
- Cost Sharing: Cost sharing is not applicable to the project.
- Partnering: Funding from a National Fish and Wildlife Foundation grant (\$64,000.00) and a State Wildlife grant (\$25,000.00) were utilized to fund recently completed longleaf pine restoration activities in the Gulf State Park.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Gulf State Park Land Management Program**

PROJECT NUMBER: **AL-17**

PROJECT CONTACT (S):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Forrest Bailey, Chief, Natural Resource Section  |
| Address   | Alabama State Lands Division                     | Alabama State Parks Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3901                                   |
| Fax       | (251) 621-1331                                   | (334) 242-2137                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | forrest.bailey@dcnr.alabama.gov                  |

**PROJECT SUMMARY**

**LOCATION: Gulf State Park, Gulf Shores, Alabama**

**DURATION: Four Years**

**ESTIMATED COST:**

| AL-17              |               |
|--------------------|---------------|
| Total Project Cost | \$ 750,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 750,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-17 |               |
|-------|---------------|
| 2008  | \$ 187,500.00 |
| 2009  | \$ 187,500.00 |
| 2010  | \$ 187,500.00 |
| 2011  | \$ 187,500.00 |

**GOAL:** The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to construct seven (7) miles of management access corridors in Gulf State Park.

Gulf State Park consists of over 6,000 areas of coastal habitat located directly adjacent to the Gulf of Mexico between the cities of Gulf Shores and Orange Beach. A combination of hurricane impacts, the absence of a regular prescribed burning regime, the introduction of exotic invasive species, and an absence of silvicultural management have resulted in habitat degradation in the remote areas of the park. The goal of this project is to construct seven (7) miles of management access corridors into inaccessible areas of Gulf State Park (See Appendix G-8). The road locations on this map are approximations and more specific locations of the management corridors will be submitted in the grant application after analysis by land management officials.

Phase 1 of this project will locate suitable locations for the roads in areas to minimize impact to wetlands and sensitive upland habitats. These corridors will provide the means to implement long term natural resource management activities within previously unmanaged park areas. Most of these areas are inaccessible due to fallen timber as a result of Hurricanes Ivan and Katrina. Phase 2 of this project will construct the corridors in an environmentally-sensitive manner which will serve natural resource functions and benefits including enhanced wildlife protection management. The corridors will be approximately 10-foot wide. Most of the areas have not been accessible by park staff and increased accessibility will aid in management of fish, plant and wildlife species. This project will augment research and restoration of threatened species and species of conservation concern. These roads will serve as fire breaks and aid in wildfire suppression and prescribed burning. If needed, these roads will provide access for fire equipment during an emergency. Last, this project will create opportunities for environmental education in the remote areas of the park via field-based natural resource education programs. The corridors will be located in areas that will have the least impact on the natural conditions of the remote areas of the park and will not be open to the general public and will be controlled via gated access points. Costs associated with this project include labor, materials and use of heavy equipment. It is estimated 1.75 miles of road will be constructed per year.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will aid land managers in the restoration of Gulf State's Park remote areas that have been degraded from fallen timber from hurricanes and overall habitat degradation.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Freshwater Mollusk and Fish Enhancement and Restoration in Coastal  
River Systems**

PROJECT NUMBER: **AL-18**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                  |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Dr. Paul Johnson, Program Supervisor               |
| Address   | Alabama State Lands Division                     | Alabama Wildlife and Freshwater Fisheries Division |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources   |
|           | Five Rivers Alabama's Delta Resource Center      | Alabama Aquatic Biodiversity Center                |
|           | 30945 Five Rivers Boulevard                      | Route 3, Box 86                                    |
|           | Spanish Fort, Alabama 36527                      | Marion, AL 36756                                   |
| Telephone | (251) 621-1238                                   | (334) 683-5000                                     |
| Fax       | (251) 621-1331                                   | (334) 683-5082                                     |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | paul.johnson@dcnr.alabama.gov                      |

### PROJECT SUMMARY

**LOCATION: Alabama Aquatic Biodiversity Center, Marion, Alabama, and field locations in Baldwin and Mobile counties.**

**DURATION: Four Years**

ESTIMATED COST:

| AL-18              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,000,000.00 |
| FY 2007            | \$ -            |
| FY 2008            | \$ 1,000,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-18 |               |
|-------|---------------|
| 2008  | \$ 100,000.00 |
| 2009  | \$ 600,000.00 |
| 2010  | \$ 150,000.00 |
| 2011  | \$ 150,000.00 |

GOAL: The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

OBJECTIVE: This project will undertake large-scale recovery activities for freshwater mussel and other aquatic species populations in the Gulf Coastal drainages of Baldwin and Mobile counties

This project will undertake large-scale recovery activities for freshwater mussels, fishes and other aquatic species populations in the Gulf Coastal drainages of Baldwin and Mobile counties. The four-year (4) effort seeks to augment and reintroduce freshwater mollusk species in these systems parallel to other statewide mollusk restoration efforts. These activities would be completed through the expansion of artificial propagation programs at the Alabama Aquatic Biodiversity Center (AABC) in Marion, Alabama. This project seeks to provide additional culture infrastructure support at the AABC to accommodate expanded propagation activities. This would include renovating holding ponds for increased host fish support and propagation, construction of additional culture systems, purchase of additional laboratory and field support equipment, and expanded travel budgets. The funds will also be used to support additional full-time personnel required to perform the work both at the AABC and in the field. This project will not reverse a 100-year trend of declining populations of freshwater species in a 2-year period. Species restoration efforts are inherently a long term commitment, and no program could restore any species in 2 years. The funding from this project will be used to initiate these programs by constructing the facilities, developing the culture techniques, and identifying potential reintroduction habitats that will make species restoration efforts possible. There will be other funding available to continue restoration efforts into the future. However, the restoration process cannot start unless the facilities are in place to initiate the work.

The Alabama Aquatic Biodiversity Center is located near the City of Marion, in rural Perry County, Alabama. The facility is a complex of 4 buildings on 36 acres of property near the Cahaba River. The program was initiated in late 2004 with a \$2 million dollar State Wildlife Grant. These monies are being used to renovate and construct facilities to support on the ground recovery efforts with non-game freshwater species. The property include 2 culture buildings with 5,600 square feet of culture space under roof, a 5,500 square foot culture pad, a 4,300 square foot administration building with office and laboratory space, and approximately 30 surface acres of culture ponds. Renovations of the facilities have been ongoing since 2005, with a projected operational date of spring 2008. In addition to State Wildlife Grant support, the AABC has begun receiving federal grants (FWS) and other long-term support is expected as part of ongoing hydroelectric project re-licensing efforts. Other monies will be available through recovery funds being established by the Tennessee Valley Authority. Recovery programs will initially focus on freshwater mollusks (mussels and snails) with activities to support non-game fishes and other aquatic species to follow.

Alabama has already lost 67 species of freshwater snails and mussels to extinction and an additional 17 species historically found in the Alabama's waters are now extirpated. Alabama has 54 species of mussels and snails considered Threatened or Endangered by the U.S. Fish and Wildlife Service. The state also has an additional 13 species fish considered Threatened or Endangered by the U.S. Fish and Wildlife Service. A dozen species of fishes historically found in state waters are now missing and 2 species are considered extinct. The recently completed Alabama Comprehensive Wildlife Conservation Strategy has identified 147 of mussels, snails, and fish that are of conservation concern. Historically, Alabama has the greatest species richness freshwater mussels (176), snails (180), freshwater fishes (308), and crayfishes (84) of any state in the nation. For mussels, snails, and crayfishes, the region contains the highest species richness on the planet. The AABC mission statement is, "the mission of the Alabama Aquatic Biodiversity Center is to promote the conservation and restoration of rare freshwater species in Alabama waters".

CIAP funding will be used to assist the AABC fish recovery program in the development of facilities, protocols and techniques that would be directly applied to freshwater fish species of conservation concern indigenous to the freshwater systems of Mobile and Baldwin Counties in Alabama. As the AABC occupies a facility that had been vacant for 10 years, many repairs and new construction are now underway to begin full operations. Facilities have been under renovation for 3 years, and have focused primarily on developing culture infrastructure needs for mollusks. Additional facilities will be required if the Center will undertake recovery programs with Sturgeon (either Alabama or Gulf). Therefore CIAP monies would be used in part to design and construct culture systems used for these long-term recovery programs. The last 2 years would focus on stocking efforts in the lower Mobile Delta, and possibly the Perdido and Escatawpa rivers in Baldwin and Mobile Counties. If sturgeon efforts are successfully initiated, this would be a long-term program and stocking efforts would take place after the completion of this grant.

The proposed facility development funded through AL-18 could more than double the size of fish culture space under-roof at the AABC. The facilities as planned would allow the AABC to develop a number of recovery programs for imperiled fish species (for this project and in the future). Although the design of these facilities isn't set (construction blueprints would be developed in the first year), a conceptual draft of the building is follows:

- The main metal building would have the approximate dimensions 40' x 100' x 20' (4,000 sq. ft.).
- A 40'awning will be constructed around the north wall and 20' awning attached to the east wall (an additional 4,000 sq. ft. under roof).
- Two large 80' x 12'x 4' concrete raceways placed under the awning on the north side of the building.
- Two different water supplies will be connected to the building (well & surface supply water) to support a variety of culture applications
- An effluent handling system that will capture animal feed and waste and send to an onsite package plant to reduce waste.
- The project would also support refit efforts to construct a large recirculation pond for capture and re-use of water.

The main building will support the following husbandry facilities:

- Well water, pond water, and aeration supply lines to each tank
- A filter and pump room to better distribute pond water throughout the facility
- Chilled water supplied to selected holding tanks
- A room to complete diagnostic and culture development work for small fishes
- An aeration tower to provide both saturate water with O2 and provide head pressure for running the facility

Draft work plan:

Year 1:

Facilities planning and completion of engineering drawings required to initiate bids for construction will take place during the first year. In addition, a complete program and habitat evaluation for fish and mussel species to be released into freshwater systems of Mobile and Baldwin counties will also take place. Laboratory and field equipment will be purchased (\$100,000.00).

Year 2:

Construction of new fish culture support facilities. The development work to determine culture techniques for Alabama Shad, Blackmouth Shiner, Ironcolor Shiner, and Brighteyed Darter. Completion of brood stock acquisition efforts for Gulf Sturgeon in the Perdido River and evaluation of release sites for stocking efforts. Purchase of additional field and laboratory equipment to support culture efforts (600 K). Completion of culture efforts for the Mobile Basin Black Sandshell and Alabama Heelsplitter if brood stock can be located (\$600,000.00).

Year 3:

Culture program will focus on Sturgeon, Southern Walleye, Alabama Shad, Blackmouth Shiner, Ironcolor Shiner and possibly Brighteyed Darter for release at various localities in the Mobile, Perdido & Escatawpa Rivers. Culture of the Black Sandshell, Alabama Heelsplitter, Alabama Hickorynut and Rayed Creekshell, if mussel brood stock can be successfully located. Additional mussel species may be attempted, if adequate brood stock and be located (\$150,000.00).

Year 4:

Continuation of culture programs for Sturgeon, Southern Walleye, Alabama Shad, Ironcolor Shiner and possibly Brighteyed Darter for release at various localities in the Mobile, Perdido & Escatawpa Rivers. Culture of the Black Sandshell, Alabama Heelsplitter, Alabama Hickorynut and Rayed Creekshell, if mussel brood stock can be successfully located. Additional mussel species may be attempted, if adequate brood stock and be located (\$150,000.00).

The species list provided represents candidate freshwater species that are presently being considered for restoration efforts through utilization of CIAP funding. This list has been condensed somewhat from the initial list that was distributed in order to better reflect realistic expectations of which higher priority species are most in need of attention that otherwise would be neglected under the present funding that is available to the AABC.

**Candidate Species Lists:**

| <b>Mussel Species</b>         | <b>Common Name</b>   | <b>Basin/System</b> |
|-------------------------------|----------------------|---------------------|
| <i>Anodontooides radiatus</i> | Rayed Creekshell     | Mobile              |
| <i>Ligumia recta</i>          | Black Sandshell      | Mobile              |
| <i>Obovaria unicolor</i>      | Alabama Hickorynut   | Mobile              |
| <i>Pleurobema perovatum</i>   | Ovate Clubshell      | Mobile              |
| <i>Pleurobema taitianum</i>   | Heavy Pigtoe         | Mobile              |
| <i>Potamilus inflatus</i>     | Alabama Heelsplitter | Mobile              |
| <i>Quadrula metanevera</i>    | Monkeyface           | Mobile              |

| <b>Fish Species</b>                 | <b>Common Name</b> | <b>Basin/System</b> |
|-------------------------------------|--------------------|---------------------|
| <i>Acipenser oxyrinchus desotoi</i> | Gulf sturgeon      | Tensaw and Perdido  |
| <i>Alosa alabamae</i>               | Alabama Shad       | Mobile              |
| <i>Etheostoma lynceum</i>           | Brighteye Darter   | Escatawpa           |
| <i>Lepisosteus spatula</i>          | Alligator Gar      | Mobile-Tensaw       |
| <i>Notropis chalybaeus</i>          | Ironcolor Shiner   | Perdido & Escatawpa |

|                               |                                |                       |
|-------------------------------|--------------------------------|-----------------------|
| <i>Sander vitreus</i>         | Gulf Coast Walleye             | Mobile, Mobile-Tensaw |
| <i>Scaphirynchus suttkusi</i> | Alabama Sturgeon<br>Endangered | Mobile                |
| <i>Notropis meianostomus</i>  | Blackmouth Shiner              | Bay Minette Creek     |

Funds provided to the AABC through the CIAP will be oriented to the development of species propagation and restoration programs in the following freshwater systems in Baldwin and Mobile Counties: The Mobile-Tensaw Delta, including the Blakeley River and Bay Minette Basin; The Perdido-Styx River basin; The Escatawpa River and its tributaries in Mobile County; Suitable freshwater habitats in the Fish, Fowl and Dog River drainages that flow into Mobile Bay. At this time it is premature to estimate the numbers of individual animals and/or the scope of potential releases of propagated animals that will be undertaken through this project. This is due to the fact that the highest priorities, once this grant is obtained, will be the development of new animal propagation facilities and protocols and a comprehensive survey of suitable habitat sites for species augmentation or restoration efforts.

The CIAP funding requested would develop husbandry facilities to direct AABC efforts for fishes beyond the 4-year term covered in this grant. The proposed building would take a year to plan and a year to construct, with initial recovery programs beginning in Mobile and Baldwin Counties in years 3 & 4. The AABC, as presently funded, should be operational by fall 2008, but the majority of facilities put in place at this time will support the recovery needs of freshwater mollusks (mussels & snails). Conservation status for mollusks in Alabama is staggering (51 species listed by the USFWS, 9 species proposed for listing, 118 additional species on the state list). By contrast conservation status for fishes includes 14 federally listed species, 2 federal candidate species, and an additional 33 species on the state list. These monies would allow us to put in place the infrastructure that will be used for decades to achieve recovery objectives for fishes. These monies will not be used to modify current facilities, since other funds are now dedicated for that task. Also through other funding the AABC will be initiating internship programs in cooperation with higher education facilities in the state. This program will house interns (several per semester) at facilities on site. In this fashion, as this program begins to take shape more effort could be placed on the rearing of fishes for recovery efforts.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it restores native populations of mussel and fish species in rivers and streams in coastal Alabama. Restored populations of these species will help create healthier aquatic communities.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.

## STATE OF ALABAMA

### COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Improvements to the Marine Resources Division's facilities at Claude  
Petet Mariculture Center in Gulf Shores, Alabama**

PROJECT NUMBER: **AL-19**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Stevens R. Heath, Chief Marine Biologist         |
| Address   | Alabama State Lands Division                     | Alabama Marine Resources Division                |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | PO Drawer 458                                    |
|           | 30945 Five Rivers Boulevard                      | Gulf Shores, Alabama 36547                       |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (251) 968-7576                                   |
| Fax       | (251) 621-1331                                   | (251) 968-6307                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | steve.heath@dcnr.alabama.gov                     |

#### PROJECT SUMMARY

LOCATION: **Gulf Shores, Alabama**

DURATION: **Three Years**

ESTIMATED COST:

| AL-19              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 4,500,000.00 |
| FY 2007            | \$ -            |
| FY 2008            | \$ 4,500,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-19 |                 |
|-------|-----------------|
| 2008  | \$ 500,000.00   |
| 2009  | \$ 2,000,000.00 |
| 2010  | \$ 2,000,000.00 |
| 2011  | \$ -            |

GOAL: The goal of this project is to facilitate management research of Alabama's coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

OBJECTIVE: The objective of this project is to upgrade the Claude Petet Mariculture Center in Gulf Shores, Alabama through the renovation of the laboratory and farm facilities, drainage upgrades, construction of a boat basin on the Intercoastal Canal, and repair of the salt water pipeline from the Gulf State Park Pier.

The Marine Resources Division (MRD) of the Alabama Department of Conservation and Natural Resources owns and manages the Claude Petet Mariculture Center (CPMC) in Gulf Shores, Alabama (30° 17' 1.97" N 87° 39' 53.39" W). This facility features 35 quarter-acre lined ponds, a wet laboratory, and greenhouses with re-circulating culture systems. In addition, there are a wood-framed office building and license sales facility which provide offices to approximately 25 employees of MRD, including administrative staff, biological staff, and enforcement officers. The CPMC property fronts the Gulf Intracoastal Waterway, and draws much of the water used for culture activities at the station from the waterway and Gulf of Mexico.

Research that has been conducted at Claude Petet Mariculture Center (CPMC) and anticipated to be conducted in the future includes the following:

- The spawning and rearing of marine finfish can be used in restocking and tagging studies to gain more information about site fidelity, age and growth and population dynamics of wild fish stocks. Larval fish hatched and raised at CPMC have been provided to a variety of institutions (Auburn University, Marine Environmental Science Consortium, Gulf Coast Research Laboratory, etc.) for use in research.
- Bait fish and bait shrimp have been cultured to investigate the economic viability of pond raised products. This research could prove beneficial to wild fish and invertebrate stocks by leading to reduced fishing effort in the bait fish fishery and in turn, reducing bycatch mortality. Reductions in the bait fish fishery may also contribute to rejuvenated growth of valuable marine habitat potentially disturbed by traditional bait fishing gears.
- Research addressing the effects of the cold water effluent from open-loop, offshore liquefied natural gas (LNG) terminals on larval fish and eggs has been scheduled to begin in 2009. This study will be used to estimate potential impacts of open-loop systems on marine plankton in the waters adjacent to the proposed terminals.
- The inadvertent production of sea grasses has been observed at Claude Petet. Future needs may call for the production of sea grasses which could be used to seed coastal areas identified for habitat restoration.
- Much of the planned research and production is dependent on the re-establishment of the Gulf saltwater pipeline and completion of the Gulf State Park Pier. Research and production associated with high saline adapted organisms has been limited since Hurricane Ivan due to limited supplies of high salinity water.

The goal of this project is to facilitate management research of Alabama's coastal environment and fisheries stock enhancement through improved data collection systems, enhanced research infrastructure, and upgrades of research tools. The objective of this project is to upgrade the Claude Petet Mariculture Center in Gulf Shores, Alabama through the renovation of the laboratory and farm facilities, drainage upgrades, construction of a boat basin on the Intercoastal Canal, and repair of the salt water pipeline from the Gulf State Park Pier. When renovated, this will provide needed information about the life histories and ecologic interactions of various important fish species. In addition, animals will be raised to enhance wild stocks. Further, members of the public will be given tours and lectured on the importance of conservation to the future of fisheries. The boat basin will facilitate more rapid response of enforcement personnel and data collection for fish stocks and habitat. This facility therefore will benefit the marine resources directly and indirectly.

First, MRD proposes to use CIAP funds to replace several of the critical buildings and facilities at the CPMC. The proposal includes the construction of a new laboratory facility, replacing and combining the old wet laboratory and the greenhouses with a single new structure and new culture equipment. The new laboratory and research facility is estimated to cover 25,000 square feet (100 ft X 250 ft) and should adequately replace deteriorated existing structures. Second, the farm portion of the property will be renovated. This activity will include the replacement of aged valves, pumps, pond piers, outbuildings (feed shed and tool barn), and covered boat storage. There are 35 ponds at CPMC that require maintenance and/or repairs to existing access piers (one per pond) and plumbing. The pipes and valves supplying water to each pond require refurbishment or replace to maintain research activities. This infrastructure is in critical need of renovation to enable the continuation of production and research to enhance and manage Alabama's fisheries stocks that constitute an important part of the overall ecology in

Alabama's estuarine and marine habitat. Drainage upgrades are also needed to handle stormwater from adjacent property which currently causes flooding during large rain events. The exact square footage of the building and specific upgrades will be determined prior to submittal of a grant for this project. The estimated budget for this project is \$3,500,000.00 of CIAP funds.

Second, this project will renovate and expand an existing boat basin at the CPMC on the Intercoastal Canal which is no longer functional. This project will create a safe place to access and store boats. At this time, biologists and enforcement officers must trailer their boats to a launch on the south side of the Canal. This is problematic during search and rescue operations when quick access to the water is imperative. Preliminary plans of the CPMC call for refurbishing an existing boat basin of approximately 8,500 square feet (100 ft X 85 ft) to be maintained at a depth not to exceed 8 feet deep below mean low tide. The basin will be stabilized by the use of steel sheet piling. In addition to improving the basin, this project will construct covered boat stalls with lifts, a fuel facility, and boat launching ramp. The project will consist of a parking lot, boat ramp, and four 40-foot by 14-foot boat slips. There will be 4 covered 14 ft X 40 ft boat stalls on the east end of the basin separated by 4 floating finger piers approximately 6 ft in width. The covered area will encompass approximately 3,825 square feet (45'x 85 ft). The perimeter of the boat basin will be lined with a 5 ft wide floating dock. Along the western side of the basin there will be a 20-foot wide launching ramp and a 5,600 square feet (80 ft X 70ft) parking area will be built adjacent to the eastern side of the basin. An access road to the site will be improved and extended so as to access the launching ramp. All necessary utilities (electricity, water, etc) will be extended to the site. Chain link fencing and lighting will be added to increase the security of this area. This basin will drastically improve the response time for enforcement activities in the area of south Baldwin County, Alabama and make biological sampling in this area more efficient and thorough. This portion of the project is estimated to cost \$500,000.00.

Last, sea water for the research applications at CPMC must be piped in via a pipeline from the Gulf of Mexico at the Gulf State Park Pier. Most of this pipeline, as well the Pier, was destroyed by Hurricane Ivan. The pipeline will need to be relocated to a less vulnerable location, as it was located immediately adjacent to an area that receives repeat damage from storm surge. While most of the cost of this specific effort is being paid for by FEMA, FEMA however, will not pay for the added cost (\$500,000.00) to relocate the line. This project will supplement the existing FEMA funds to locate the pipeline to a less vulnerable location. This project will be constructed in conjunction with AL-9 (Gulf State Park Pier). A map of the CPMC is included in Appendix G-9.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1; projects and activities for the conservation, protection, or restoration of coastal areas, included wetland..
- Justification: This project meets Authorized Use #1 because it benefits the natural coastal environment by improving marine research facilities and improving safety conditions in the coastal area of Alabama.
- Cost sharing: Cost sharing is not applicable to this project.

- Partnering: This project will utilize 100% CIAP funding.
- Benefits to Natural Coastal Environment: The improved facilities at the CPMC resulting from this project will expand and enhance research of fisheries in coastal Alabama. The research will focus on developing successful management strategies for the fisheries. Efficient and effective fishery management will improve, enhance, and conserve the natural coastal environment. The refurbishment of the boat basin at CPMC will provide secure vessel access and storage of MRD equipment in a central location between the main two estuaries in Alabama (Perdido Bay and Mobile Bay). Costs and energy savings are anticipated due to decreased travel time to distant launching ramps via trailers currently required by both Biological and Enforcement Sections. Response time for accessing fish kills or other biological hazards, as well as emergency search and rescue efforts by enforcement personnel, is expected to be reduced. Additionally, these docks will provide an onsite water access location at which biological specimens collected for research at CPMC can be quickly transported to the lab with minimum stress to the animals. The stormwater facility will treat excess runoff from the research ponds and adjacent properties. During extreme rain events in the past, untreated runoff from the research facility drained into the Intercoastal Canal. Treating the quality and quantity of stormwater runoff will directly benefit the Intercoastal Canal. The other aspects of the boat basin refurbishment (roads, parking lots, utilities, fuel facility, and security fencing) are essential components of the Marine Resource Division facilities. Completion of these items will allow the MRD to serve their overall mission to conserve and protect Alabama's marine resources, thus benefitting the natural coastal environment.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Improvements to Marine Resource Division's facilities on Dauphin Island, Alabama**

PROJECT NUMBER: **AL-20**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Stevens R. Heath, Chief Marine Biologist         |
| Address   | Alabama State Lands Division                     | Alabama Marine Resources Division                |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | PO Drawer 458                                    |
|           | 30945 Five Rivers Boulevard                      | Gulf Shores, Alabama 36547                       |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (251) 968-7576                                   |
| Fax       | (251) 621-1331                                   | (251) 968-6307                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | steve.heath@dcnr.alabama.gov                     |

### PROJECT SUMMARY

LOCATION: **Dauphin Island, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| AL-20              |               |
|--------------------|---------------|
| Total Project Cost | \$ 550,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 550,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-20 |               |
|-------|---------------|
| 2008  | \$ 550,000.00 |
| 2009  | \$ -          |
| 2010  | \$ -          |
| 2011  | \$ -          |

**GOAL:** The goal of this project is to facilitate management research of Alabama's coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

**OBJECTIVE:** The objective of this project is to upgrade the Marine Resource's Division facilities on Dauphin Island, Alabama through the construction of a cover, bulkhead, and net shed at the boat facility.

The Marine Resources Division (MRD) of the Alabama Department of Conservation and Natural Resources is located in south Mobile County on Dauphin Island (30° 15' 35.65" N 88° 6' 23.75" W). This is a multi-function site serving as the Mobile County base of field operations for the MRD's enforcement and biological sections. The facility includes the main headquarters office, a mechanical shop and two docking facilities – a primary boatslip as well as new dockage utilized by the enforcement section. All Mobile County biological field sampling operations, including fisheries assessment and monitoring are based out of this facility. Also, it serves as primary office space for the MRD's Mobile County administrative personnel. Overall, the facilities need specific upgrades in order to aid the research function of MRD. The building, originally constructed in 1961, and its supporting infrastructure received heavy damage from both Hurricanes Ivan in 2004 and Katrina in 2005. Some renovation has already occurred since the storm.

The goal of this project is to facilitate management research of Alabama's coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools. The objective of this project is to upgrade the Marine Resource's Division facilities on Dauphin Island, Alabama through the construction of a cover, bulkhead, and net shed at the boat facility.

In 2006, MRD was able to partially complete the new boat docking facility located on the adjacent Dauphin Island shoreline of the property. The facility serves as the primary boat storage for the enforcement section and the Alabama Department of Public Health Seafood Safety Division. However, there was not enough funding at this time to cover the facility. The first phase of this project is to construct a cover for this facility (\$100,000.00). Seven existing boat slips located on the east side of the Dauphin Island facility will be covered to provide elemental protection to vessels stored there. The area to be covered is approximately 4,240 square ft (106 ft X 40 ft).

Next, the primary boatslip and its adjacent concrete dock have significantly deteriorated. The concrete sheet pilings and caps display severe cracking leading to erosion and undermining of the decking, the sheet piling tiebacks are failing and the concrete decking has been severely undermined and the condition of the bulkhead has become a safety issue. CIAP funds will be used to restore this boatslip to its original condition for a cost of \$300,000.00. Renovations to the existing northern boat basin (17,550 square feet) will consist of replacing a deteriorating 630 ft seawall, replacing the associated tie back system, and dredging the existing basin. Seven existing boat lifts and covers will be required to be removed for work to be conducted and replaced once completed. The repairs are necessary for the stabilization the northern foundation of the primary Dauphin Island facility as well as maintaining a functional boat basin used daily during Divisional operations.

Also, a 16'X 32' sampling net and gear storage building will be constructed for a cost of \$150,000.00. This shed will store all field equipment and will make biological sampling trips more efficient. The shed to be reconstructed will be approximately 300 square feet and will be required to meet hurricane building codes. As this building will be used store sampling equipment, it will be imperative that is it will be able to withstand hurricane force winds and flood waters.

Appendix G-10 includes a map of the MRD facility on Dauphin Island.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1; projects and activities for the conservation, protection, or restoration of coastal areas, included wetland..
- Justification: This project meets Authorized Use #1 because it benefits the natural coastal environment through the development of successful fisheries management of Alabama's coastal resources.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.
- Benefits to Natural Coastal Environment: The improved facilities at the Dauphin Island facility as a result of this project will increase research of fisheries in coastal Alabama. The research will aid in the development of successful management strategies of the fishery. Efficient and effective fishery management will improve, enhance, and conserve the natural coastal environment.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama**

PROJECT NUMBER: **AL-21**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Stevens R. Heath, Chief Marine Biologist         |
| Address   | Alabama State Lands Division                     | Alabama Marine Resources Division                |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | PO Drawer 458                                    |
|           | 30945 Five Rivers Boulevard                      | Gulf Shores, Alabama 36547                       |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (251) 968-7576                                   |
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**PROJECT SUMMARY**

LOCATION: **Coastal Alabama**

DURATION: **One Year**

ESTIMATED COST:

| AL-21              |               |
|--------------------|---------------|
| Total Project Cost | \$ 100,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 100,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT  
DURATION:

| AL-21 |               |
|-------|---------------|
| 2008  | \$ 100,000.00 |
| 2009  | \$ -          |
| 2010  | \$ -          |
| 2011  | \$ -          |

**GOAL:** The goal of this project is to facilitate management research of Alabama’s coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

**OBJECTIVE:** The objective of this project is to contribute CIAP funding to purchase and install a continuous and real-time weather and water quality recording station in Bon Secour Bay.

It is a priority of the State of Alabama CIAP to support coastal observing systems as these systems provide much-needed data to understand and manage complex estuarine systems. The collection of continuous, real-time observations in coastal Alabama began with support of the first CIAP program, administered by NOAA in 2001. Since then, Dauphin Island Sea Lab and the Mobile Bay National Estuary Program have partnered with the University of South Alabama, Weeks Bay National Estuarine Research Reserve, the Alabama Department of Conservation and Natural Resources, State Land Division, Coastal Programs, EPA’s Gulf of Mexico Program and the Alabama Lighthouse Association to provide real-time data at four sites in the Mobile Bay area. Parameters being monitored at these sites include wind speed, wind direction, air temperature, barometric pressure, photosynthetically active radiation, precipitation, water temperature, dissolved oxygen, water height, and salinity. Real-time data are available in a user-friendly format at [www.mymobilebay.com](http://www.mymobilebay.com). This informative website describes and graphs each parameter. Researchers may download the data in a spreadsheet format any time for further analysis. Data from these stations can also be accessed through the National Data Buoy Center at [http://www.ndbc.noaa.gov/maps/Alabama\\_inset.shtml](http://www.ndbc.noaa.gov/maps/Alabama_inset.shtml).

Through a partnership among the State of Alabama, Baldwin County, and Mobile County monitoring sites will be added to complete an east-west transect in the coastal area of Alabama (AL-21, BC-9 and MC-9). This project will construct data collection devices and support the operation of the network for two years. The costs associated with the implementation of each monitor include salaries (data manager, technician, and project manager), boat and vehicle expenses, and other expendables. The State of Alabama will contribute CIAP funding to purchase, install and support operation of a monitor in Bon Secour Bay, partnering with funding from NOAA (30° 17’ 23.06” N 87°47’ 46.7” W). Baldwin County will fund the purchase, installation and operation of a monitor in Perdido Bay (30° 19’ 52.01” N 87° 28’

58.47" W), and Mobile County will purchase, install, and support the operation of a monitor in the Mississippi Sound/Portersville Area (30° 17' 47.33" N 88° 16' 50.24" W). The State of Alabama, Baldwin County, and Mobile County will each submit a separate grant application for their respective CIAP project and will administer a separate contract with the Dauphin Island Sea Lab. Appendix G-11 contains a map depicting the proposed monitor locations. The map also depicts the locations of the existing funded monitors.

The data collected from the Continuous and Real-time Recording Station of Meteorological and Hydrological Parameters have been used and will be used for a numerous coastal conservation, protection and restoration projects. For example, the Dauphin Island Sea Lab's technical support group has been maintaining, a real-time water quality monitoring station at the Middle Bay Light in Mobile Bay, Alabama since fall 2004. At the Middle Bay Light station, current conditions have been served at a website (<http://cast-net.disl.org/monitoringdata/StationInfoBmiddlebay.asp?jday=&property=&chartyear=&StationID=188>) for meteorological (air temperature, relative humidity, wind speed and direction, barometric pressure, precipitation, and photosynthetically active radiation) and hydrographic (water level, temperature, salinity, and dissolved oxygen) parameters. The hydrographic parameters, in particular, are collected by a vertical profiler, which gives hourly vertical profiles at a 0.5 m interval.

The University of South Alabama, Department of Marine Resources has completed extensive research using the data from the Middle Bay Lighthouse station. This research has recently developed a hydrodynamic model that simulates physical transport processes in Mobile Bay. The dredged ship channel serves as a conduit through which salty seawater intrudes upriver, thereby significantly affecting horizontal salinity gradient (baroclinic forcing). The data from the Middle Bay Light station are invaluable in detecting and characterizing the intrusion events. We have observed the presence of strong vertical stratification along the ship channel, which can be destratified during the times of high energy events such as strong winds and high freshwater discharges. Stratification/destratification plays an important role in the formation of hypoxic bottom water in the ship channel. It also affects the water in the nearby shallow areas where strong stratification and hypoxic bottom waters have also been observed during summer. Therefore, vertical profiles of density (salinity and temperature) and dissolved oxygen recorded by a vertical profiler at the Middle Bay Light are invaluable in studying temporal and spatial patterns and variations of stratification and bottom hypoxia.

Other research included the study of the development of a larval transport model for Eastern Oyster, funded by Alabama Oyster Reef Restoration Program. One key component of this project is to study the characteristics of larval transport and spat distribution in the lower Mobile Bay and eastern Mississippi Sound using the model under various environmental conditions. Characterization of various environmental conditions (i.e. design of scenario runs from the standpoint of model) is critical, which has to be based on the data of meteorological (e.g. wind) and hydrographic (e.g. salinity) parameters. The data from the Middle Bay Light will certainly be used for this purpose.

An additional application of the data included the collection of data over the long term which can be used for designating water use criteria and providing baseline readings for 303(d) improvements. Specifically, Mobile Bay (AL/03160205-010-01-1998) Fish and Wildlife, Shellfish Harvesting and Swimming Waters have been 303(d) listed for low dissolved oxygen as a result of urban runoff and storm sewers. Currently

there are a limited number of water monitoring stations in Mobile Bay which provide data suitable for designated water use criteria.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will obtain data necessary for scientific research and investigation of coastal areas. These data are necessary in providing the baseline information for all projects which conserve, protect, and restore complex coastal ecosystems.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: The State of Alabama, Baldwin County, and Mobile County (AL-21, BC-9, and MC-9) will partner to create an east-west transect of continuous and real-time weather and water quality recording stations along southern coastal Alabama. Funding from NOAA (\$50,000.00) will be used to complement the CIAP funds to construct and implement a monitor in Bon Secour Bay (State of Alabama portion). This funding will pay for the start-up costs along with one year of data collection. The CIAP portion will be used to upgrade the Bon Secour site to a full meteorological station and will be used to fund at least one additional year of data collection.

This project contains many partners in addition to CIAP. Specifically, the Dauphin Island Sea Lab, Mobile Bay National Estuary Program, University of South Alabama, Weeks Bay National Estuarine Research Reserve, the Alabama Department of Conservation, State Land Division, Coastal Program, EPA's Gulf of Mexico Program and the Alabama Lighthouse Association have all contributed to the implementation of these systems in coastal waters. Additional funding from the Emergency Disaster Response Fund (EDRF) is being utilized to purchase and maintain monitors in the Mississippi Sound, near the western boundary of Mobile County.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Research Equipment and Software for Artificial Reef and Coastal  
Resource Management**

PROJECT NUMBER: **AL-22**

PROJECT CONTACT (s):

|           | Primary Contact  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner                    | Stevens R. Heath, Chief Marine Biologist         |
| Address   | Alabama State Lands Division                               | Alabama Marine Resources Division                |
|           | Department of Conservation and Natural Resources           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center                | PO Drawer 458                                    |
|           | 30945 Five Rivers Boulevard<br>Spanish Fort, Alabama 36527 | Gulf Shores, Alabama 36547                       |
| Telephone | (251) 621-1238   | (251) 968-7576                                   |
| Fax       | (251) 621-1331   | (251) 968-6307                                   |
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**PROJECT SUMMARY**

**LOCATION: Gulf Shores and Dauphin Island, Alabama**

**DURATION: Two Years**

**ESTIMATED COST:**

| AL--22             |               |
|--------------------|---------------|
| Total Project Cost | \$ 330,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 330,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-22 |               |
|-------|---------------|
| 2008  | \$ 200,000.00 |
| 2009  | \$ 130,000.00 |
| 2010  | \$ -          |
| 2011  | \$ -          |

GOAL: The goal of this project is to facilitate management research of Alabama’s coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

OBJECTIVE: The objective of this project is to purchase a research boat (26-28 feet in length) to implement artificial reef research. Also, this project fund development of a full geographic information system at MRD facilities in Gulf Shores and Dauphin Island. Costs associated with this system include equipment (computers and GPS units), site licenses, printers, and training.

The Marine Resources Division (MRD) of the Alabama Department of Conservation and Natural Resources conducts fishery habitat enhancements such as oyster bed restoration and artificial reef construction. A sampling boat (26-28 feet) will be purchased and maintained in Baldwin County for artificial reef research. The boat will be used by research staff to monitor and improve all coastal reefs. The estimated budget for a boat, trailer, electronics and motor is \$220,000.00. A monitoring schedule has not been developed as needed equipment has not been available to conduct this task. However, the new boat and equipment could be used five to seven days per month to conduct inshore and offshore monitoring activities. Research and monitoring activities conducted to support this project include the identification, quantification, and assessment of marine and coastal habitats. These tasks are currently being conducted on a very limited basis as suitable equipment is unavailable. The vessel will be used to conduct offshore sampling activities potentially using such gears as a side-scan sonar, a ROV (remote operated vehicle), and sediment sampling equipment as well as possibly performing as a dive platform for underwater construction/observation of artificial reefs. CIAP funds will not be used for to purchase side-scan sonar, ROV and sediment sampling equipment.

A complete geographic information system (GIS) of coastal Alabama's fishery enhancements will aid MRD research staff to better manage offshore restoration projects. In addition, this system will aid in education and assessment of coastal resources. Using the remaining funding (\$110,000.00), phase one of this project will identify computer equipment, GPS units, licenses, printers, and necessary training needed to implement a complete GIS at MRD facilities in Gulf Shores and Dauphin Island. Phase Two of this project will purchase the items identified in Phase One including one GPS unit and one plotter/printer capable of printing large documents. MRD computers operating GIS software will be licensed through a blanket license agreement negotiated through the Department of Conservation and Natural Resources. Layers to be developed through this activity will include inshore and offshore artificial reefs, inshore oyster reefs and sea grass habitats.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will obtain tools to improve research of offshore fishery enhancements. First, a boat will be used to monitor and implement artificial reef research. A new vessel is required as a suitable vessel is not available in the biological section to conduct monitoring activities. Vessel(s) which might be possible candidates for retrofitting equipment are assigned to the MRD enforcement section and are used in routine patrols. A spatial database (GIS) will aid researchers and resource managers in conserving, protecting, and restoring complex coastal ecosystems. GIS will assist MRD staff in the identification of areas which may degrade over time through sedimentation (oyster reefs) or structural failure (artificial reefs). Damages and losses to habitat resulting from hurricanes and storms will be mapped. Losses within affected areas can be measured to determine scale and scope of remedial action. In sum, in order to protect and conserve the coastal environment, it is imperative for natural resource managers to utilize necessary conservation tools.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



## STATE OF ALABAMA

### COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **External Audit of Marine Resource Division's Biological Sampling and Analysis Programs**

PROJECT NUMBER: **AL-23**

PROJECT CONTACT (S):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Stevens R. Heath, Chief Marine Biologist         |
| Address   | Alabama State Lands Division                     | Alabama Marine Resources Division                |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | PO Drawer 458                                    |
|           | 30945 Five Rivers Boulevard                      | Gulf Shores, Alabama 36547                       |
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| Fax       | (251) 621-1331                                   | (251) 968-6307                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | steve.heath@dcnr.alabama.gov                     |

#### PROJECT SUMMARY

LOCATION: **Coastal Alabama**

DURATION: **One Year**

ESTIMATED COST:

| AL-23              |               |
|--------------------|---------------|
| Total Project Cost | \$ 200,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 200,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-23 |               |
|-------|---------------|
| 2008  | \$ 200,000.00 |
| 2009  | \$ -          |
| 2010  | \$ -          |
| 2011  | \$ -          |

GOAL: The goal of this project is to facilitate management research of Alabama's coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

OBJECTIVE: The objective of this project is to audit the Marine Resource Division's biological sampling and analysis programs to ensure currency, accuracy, precision, efficiency and effectiveness resulting in an audit report.

In the interest of responsible use of public funds, it is crucial to periodically evaluate the efficiency and effectiveness of biological data acquisition and analysis methods employed by natural resources management agencies. The Marine Resources Division (MRD) of the Alabama Department of Conservation and Natural Resources uses intensive fishery-dependent and fishery-independent sampling to assess fish and shellfish stock condition. The MRD proposes to utilize CIAP funds to conduct an outside audit of all biological sampling and analysis programs to ensure currency, accuracy, precision, efficiency, and effectiveness. This audit will be conducted by a multi-disciplinary team of scientists. The objective of this project is to conduct a full review of the effectiveness and efficiency of MRD's research activities. This project will result in an audit report of the findings.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will improve provide information to improve research of Alabama's marine environment. The results of effective management will conserve, protect, and restore the coastal area of Alabama. For example, the audit report might identify an improper sampling technique. Remediation of this problem will result in better research and subsequent understanding of the coastal environment. Improved understanding of the resources provides the foundation for improved management which will conserve, protect and restore the coastal areas of Alabama
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Acquisition of Sensitive Waterfront Property, Dauphin Island**

PROJECT NUMBER: **AL-24**

PROJECT CONTACT:

|           | Primary Contact                                     |
|-----------|---|
| Name      | Will Brantley, State Lands Manager                  |
| Address   | Alabama State Lands Division                        |
|           | Department of Conservation and<br>Natural Resources |
|           | 64 North Union Street                               |
|           | Montgomery, Alabama 36130                           |
| Telephone | (334) 242-3484                                      |
| Fax       | (334) 242-0999                                      |
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**PROJECT SUMMARY**

LOCATION: **Dauphin Island, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| AL-24                    |                 |
|--------------------------|-----------------|
| Total Project Cost       | \$ 2,000,000.00 |
| State of Alabama FY 2007 | \$ -            |
| State of Alabama FY 2008 | \$ 1,000,000.00 |
| Mobile County FY 2007    | \$ -            |
| Mobile County FY 2008    | \$ 1,000,000.00 |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL-24 |                 |
|-------|-----------------|
| 2008  | \$ 1,000,000.00 |
| 2009  | \$ -            |
| 2010  | \$ -            |
| 2011  | \$ -            |

**GOAL:** Using CIAP funding, the State of Alabama and Mobile County will partner to protect and acquire sensitive waterfront habitat on Dauphin Island.

**OBJECTIVE:** The objective of this project is to acquire waterfront property on Dauphin Island at a cost not to exceed \$2,000,000.00. The State of Alabama and the Mobile County Commission will split the cost of acquisition evenly with each entity providing up to \$1,000,00.00.

## PROJECT BACKGROUND

Dauphin Island, Alabama (30° 15' 8.34" N, 88° 66' 32.98" W) is a coastal barrier island located at the southern tip of Mobile County, Alabama. The island is surrounded by many bodies of water including the Gulf of Mexico, Mississippi Sound, and Mobile Bay. The island is composed of beaches and dunes, maritime forests, and wetlands on approximately 6.1 square miles. According to the 2000 Census data, the full-time population on the island is 1,212. Conservation-oriented outdoor activities on the island include fishing, camping, and bird watching. There are many conservation destinations on the island including the Dauphin Island Sea Lab Estuarium, Historic Fort Gaines, and the Audubon Bird Sanctuary.

The shoreline habitats of Dauphin Island provide many ecological benefits, including shoreline stabilization and productive nesting and foraging areas for fish and wildlife. Many of these important and rare waterfront areas are privately-owned on Dauphin Island, threatening adverse impacts from development. Furthermore, waterfront sites for the public to participate in low impact natural resource-based educational activities are in great demand.

Using CIAP funding, the State of Alabama and Mobile County will partner to protect and acquire sensitive waterfront habitat on Dauphin Island. The objective of this project is to acquire waterfront property on Dauphin Island at a cost not to exceed \$2,000,000.00. Phase 1 of this project will identify a suitable parcel and obtain an appraisal. Phase 2 of this project will purchase the property. The State of Alabama and the Mobile County Commission (MC-13) will split the cost of acquisition evenly with each entity providing up to \$1,000,00.00. At this time, the specific acreage of the acquired tract is unknown. Through a partnership, the cost of the acquired land will be split equally between the State of

Alabama and the Mobile County Commission (MC-13). Per program guidelines, the land acquisition will follow the Uniform Appraisal Standards for Federal Land Acquisitions. The parcel will be available for public use and at least three (3) natural resource-based educational signage will be installed. The title of the property will be held by the Town of Dauphin Island and the deed will be restricted according to CIAP requirements.

This site will provide public access to the waterways of southern Alabama for natural resource-based educational activities such as birding and research. The parcel will be used as a main exit and entry point for the Coastal Kayaking Trail (AL-5), which will create a water-based trail linking Alabama's coastal communities and ecosystems. In addition, the site may be a candidate for inclusion in the Alabama Coastal Birding Trail ([www.alabamacoastalbirdingtrail.com](http://www.alabamacoastalbirdingtrail.com)). This trail, among other things, serves as a means to educate users about coastal Alabama's abundant natural resources. During spring and fall migrations, Dauphin Island can be one of the best birding locations along the entire Gulf Coast and has hosted nationally-recognized birding events. Future projects at the acquired property could include restoration of near shore intertidal habitat and construction of low impact public facilities to complement the goal of this project. Future site improvements will be funded through sources other than CIAP and will first be submitted to the MMS for approval.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas including wetland.
- Justification: This project meets Authorized Use #1 because it involves the acquisition of sensitive land for conservation within the coastal area of Alabama. The deed will be restricted according to CIAP requirements.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: The State of Alabama will contribute \$1,000,000.00 of CIAP funding to this project. The Mobile County Commission will contribute \$1,000,000.00 of CIAP funding to this project.



b. Baldwin County Tier One Project Descriptions

| Project Number  | Project Title  | Project Cost   | Page Number |
|---|--|----------------|-------------|
| BC-1  | Wetland and Waterway Protection  | \$900,000.00   | 161         |
| BC-2  | Acquisition of Property for Conservation & Public Access   | \$2,094,094.64 | 167         |
| BC-3  | Administration of the Coastal Impact Assistance Program  | \$250,000.00   | 171         |
| BC-4  | Magnolia Landfill Gas Collection System  | \$650,000.00   | 173         |
| BC-5  | Comprehensive Land Use Plan Development  | \$300,000.00   | 177         |
| BC-6  | Exotic Plant Species Management  | \$100,000.00   | 181         |
| BC-7  | Coastal Dune Restoration   | \$240,000.00   | 185         |
| BC-8  | Shoreline/Habitat Restoration  | \$200,000.00   | 189         |
| BC-9  | Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama | \$250,000.00   | 195         |
| BC-10   | Acquisition of Property for Boating Access   | \$2,000,000.00 | 199         |
| Total *   |  | \$6,984,094.64 |             |
| <p>* NOTE: The total FY 2007 and FY 2008 allocation for Baldwin County is \$7,984,094.64. Future CIAP Plans and/or Plan amendments will propose projects to spend the remaining \$1,000,000.00.</p> |  |                |             |



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Wetland and Waterway Protection**

PROJECT NUMBER: **BC-1**

PROJECT CONTACT:

|           |   |
|-----------|---|
|           | Primary Contact                                       |
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner |
| Address   | Baldwin County Commission                             |
|           | Baldwin County Planning & Zoning Department           |
|           | 312 Courthouse Square, Suite 18                       |
|           | Bay Minette, AL 36507                                 |
| Telephone | (251) 580-1655  |
| Fax       | (251) 937-0293  |
| E-mail    | jbatchelor@co.baldwin.al.us                           |

**PROJECT SUMMARY**

LOCATION: **Baldwin County, Alabama**

DURATION: **Two Years**

ESTIMATED COST:

| BC-1               |               |
|--------------------|---------------|
| Total Project Cost | \$ 900,000.00 |
| FY 2007            | \$ 822,952.68 |
| FY 2008            | \$ 77,047.32  |

**SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:**

| BC-1 |               |
|------|---------------|
| 2008 | \$ 450,000.00 |
| 2009 | \$ 450,000.00 |
| 2010 | \$ -          |
| 2011 | \$ -          |

**GOAL:** The goal of this initiative is the protection of coastal areas, including wetlands, by reducing the amount of material that leaves the roadbeds.

**OBJECTIVE:** The objective is to provide roadway stabilization through paving and drainage stabilization to approximately 6 miles of roadway. The paving and ditch stabilization of these dirt roads will reduce the amount of sediment in the surrounding wetlands and waterways by approximately 4,000 cubic yards or 160 dump truck loads.

| Road Name                   | Miles to be Paved | Latitude                | Longitude               |
|-----------------------------|-------------------|-------------------------|-------------------------|
| <b>Burnt Car Road</b>       | <b>1.9 miles</b>  | <b>87° 47' 44.41" W</b> | <b>31° 10' 24.45" N</b> |
| <b>Bryants Landing Road</b> | <b>0.7 miles</b>  | <b>87° 50' 47.72" W</b> | <b>31° 1' 8.41" N</b>   |
| <b>Barrineau Park Road</b>  | <b>0.5 miles</b>  | <b>87° 28' 24.42" W</b> | <b>30° 40' 14.87" N</b> |
| <b>Nolte Creek Drive</b>    | <b>0.9 miles</b>  | <b>87° 47' 41.25" W</b> | <b>30° 22' 50.84" N</b> |
| <b>Baudin Lane</b>          | <b>0.8 miles</b>  | <b>87° 49' 8.71" W</b>  | <b>30° 22' 43.19" N</b> |
| <b>Woodhaven Dairy Road</b> | <b>0.8 miles</b>  | <b>87° 47' 49.08" W</b> | <b>30° 29' 32.32" N</b> |

Baldwin County has approximately 300,000 acres of wetlands within the County. Baldwin County has approximately 300 miles of dirt roads that are controlled and maintained by the Baldwin County Highway Department. Many of these dirt roads cross these wetland areas. The Highway Department performs regular maintenance on these roads to include placement of sand and clay material, road grading, shoulder work, and maintenance of drainage ditches. Even with proper maintenance, these dirt roads still have a detrimental impact and contribute sediment to the wetlands on surrounding waters. This initiative will provide for the paving and stabilization of portions of environmentally sensitive dirt roads where impacts are occurring. The Baldwin County Highway Department has identified roads throughout the County which are having a detrimental effect on the wetlands and waterways surrounding them. This initiative is

similar to a project that was implemented in the first CIAP plan. Through that project the County was able to pave several miles of roadway in the County that had been identified as environmentally sensitive.

The goal of this initiative is the protection of coastal areas, including wetlands, by reducing the amount of material that leaves the roadbeds. When the sand and clay material is washed from the roadbed into the wetlands serious environmental impacts can occur. Sedimentation impacts to wetland ecosystems include increased turbidity that reduces the depth of the photic zone and increases sediment fallout which may cover primary producers and invertebrates. Excessive sediment input thus potentially alters aquatic food webs as well as basic wetland functions related to water quality improvement, nutrient cycling, and other biogenic processes that transform and impound pollutants. Moreover, basins totally filled with sediment provide no natural wetland functions. In addition to wetland degradation, sedimentation is identified as the second largest contributor to pollution in rivers and streams in Alabama (EPA National Assessment Database). Sedimentation can severely impact coastal ecosystems by smothering bottom-dwelling fish, animals and aquatic plants. This can lead to a disruption in the food chain, impairment of in-stream cover, increase of water temperature, etc.

The Highway Department applies approximately 650 cubic yards of material to each mile of dirt road in the County each year. This is equal to 26 dump truck loads per mile. This is indicative of the amount of sediment that is being washed into the wetlands and waterways because the roads are not paved. The objective is to provide roadway stabilization through paving and drainage stabilization to approximately 6 miles of roadway. Without paving and drainage improvements to provide permanent stabilization on these roads, sediment will continue to erode into these wetlands, creeks, and rivers.

Staff from the Highway Department have identified dirt roadways maintained by the County that have the greatest need for paving based on their proximity to wetlands and waterways and the amount of maintenance needed. Staff will continue to review and update the status of the dirt roadways and will make a final decision on the most critical once funding is approved. Some of the highest priority roadways are listed below along with criteria that placed them in this category. Appendix G-13, G-14, G-15 and G-16 include maps and photography related to this project. This is not a phased approach for study and then construction.

#### **Burnt Car Road**

- Surrounded by wetlands
- Runs adjacent to Holley Creek and is located in the northern portion of the Mobile/Tensaw Delta
- Tons of silt, sand, and clay are washed into Holley Creek and surrounding wetlands each year from this road

#### **Bryants Landing Road**

- Runs immediately adjacent to Tensaw Lake within the Mobile/Tensaw Delta
- Tons of silt, sand, and clay are washed into Tensaw Lake from this road each year

#### **Barrineau Park Road**

- Road traverses through highly erodible silt and fine sand areas adjacent to Perdido River
- Hundreds of tons of silt and sediment are eroded into Perdido River and surrounding wetlands each year from this road
- Large amounts of sediment being washed into surrounding wetlands threaten the dense stands of Atlantic White Cedar, a wetland species that has a limited habitat that is increasingly rare due to coastal development

#### **Nolte Creek Drive**

- Road is adjacent to Nolte Creek, the Magnolia River and Weeks Bay. Large amounts of red clay are washed into these waters every year during times of heavy rains.

#### **Baudin Lane**

- Road is constructed through extremely sensitive wetlands adjacent to Weeks Bay and the Magnolia River.
- Tons of silt and sediment are washed into these waters each year from the exposed sand, silt, and clay on this road.

#### **Woodhaven Dairy Road**

- This road runs parallel with pristine Polecat Creek.
- Tons of sand, silt, and clay are washed into this creek every year due to the unstabilized dirt road bed.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: The Wetland and Waterway Protection initiative meets Authorized Use #1 because it provides for the protection to coastal waters and wetlands by reducing erosion along dirt roads. This erosion causes sediment to enter the streams and creeks causing detrimental effects to wetland habitat and species. An example is the Atlantic White Cedar, a nationally protected tree. These trees have a limited coastal habitat that is increasingly threatened by development and sedimentation.

Sedimentation impacts to wetland ecosystems include increased turbidity that reduces the depth of the photic zone and increases sediment fallout which may cover primary producers and invertebrates. Excessive sediment input thus potentially alters aquatic food webs as well as basic wetland functions related to water quality improvement, nutrient cycling, and other biogenic processes that transform and impound pollutants. Moreover, basins totally filled with sediment provide no natural wetland functions. In addition to wetland degradation, sedimentation is identified as the second largest contributor to pollution in rivers and streams in Alabama (EPA National Assessment Database). Sedimentation can severely impact coastal ecosystems by smothering bottom-dwelling fish, animals and aquatic plants. This can lead to a disruption in the food chain, impairment of in-stream cover, increase of water temperature, etc.

The paving and ditch stabilization of these dirt roads will reduce the amount of sediment in the surrounding wetlands and waterways by approximately 4,000 cubic yards or 160 dump truck loads.

- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: This project will be administered using CIAP funds with the Baldwin County Highway Department providing equipment and labor to implement the project.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Acquisition of Property for Conservation & Public Access**

PROJECT NUMBER: **BC-2**

PROJECT CONTACT:

|           | Primary Contact                                       |
|-----------|---|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner |
| Address   | Baldwin County Commission                             |
|           | Baldwin County Planning & Zoning Department           |
|           | 312 Courthouse Square, Suite 18                       |
|           | Bay Minette, AL 36507                                 |
| Telephone | (251) 580-1655  |
| Fax       | (251) 937-0293  |
| E-mail    | jbatchelor@co.baldwin.al.us                           |

**PROJECT SUMMARY**

**LOCATION: Baldwin County, Alabama**

**Property #1- Fish River**

**Latitude: 87° 48' 23.36" W**

**Longitude: 30° 31' 46.07" N**

**Additional property will be determined at the grant phase**

**DURATION: Two Years**

**ESTIMATED COST:**

| BC-2               |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 2,094,094.64 |
| FY 2007            | \$ 2,094,094.64 |
| FY 2008            | \$ -            |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC-2 |                 |
|------|-----------------|
| 2008 | \$ 890,000.00   |
| 2009 | \$ 1,204,094.64 |
| 2010 | \$ -            |
| 2011 | \$ -            |

**GOAL:** The goal is to acquire space that would provide areas for many types of outdoor recreation such as canoeing, kayaking, fishing, nature walks, biking and hiking while also preserving and protecting sensitive wetland areas and wildlife habitat.

**OBJECTIVE:** The objective is to acquire at least two (2) pieces of property at a minimum of ten (10) acres each.

The purpose of this project is to allow the county to secure areas of land that are environmentally sensitive and would benefit the citizens of Baldwin County. With the rapid growth in Baldwin County, sensitive areas located along rivers, streams, and bays are quickly being bought and developed into subdivisions or commercial property. There is great concern that this will lead to degradation of water quality due to increased stormwater runoff, and also to the quality of life. The Baldwin County Commission would like to ensure that these areas are protected for present and future use by the citizens and visitors of Baldwin County.

The goal is to acquire space that would provide areas for many types of outdoor recreation such as canoeing, kayaking, fishing, nature walks, biking and hiking while also preserving and protecting sensitive wetland areas and wildlife habitat. Trails will be placed on properties to protect sensitive areas by creating controlled public access. Controlled access to natural resource land manages the degree of impact to the natural environment and provides an opportunity to educate the public on the value of our natural resources.

It is important to be selective in the choice of lands. The approach is to identify potential tracts based on current use and environmental conditions of a property in combination with beneficial public access qualities. The objective is to acquire at least two (2) pieces of property at a minimum of ten (10) acres each. This is strictly a land acquisition project.

The County has identified and purchased one piece of property (Please see Appendix G-17 and G-18 for maps and photography related to this project.) It consists of approximately 30 acres located along the Fish River. The property has approximately 2,700 feet of river frontage and approximately 14 acres of wetlands. The cost of this property was \$890,000. The purchase price was negotiated based on a recent appraisal by the property owner for \$1,100,000. A yellow book appraisal will be performed by the County.

Property along the river is in great demand for development purposes. The purchase of this property provides protection and conservation of the property from commercial or subdivision development.

Other properties along various waterways in the county, including the Perdido and Styx Rivers and Wolf Creek, have been identified for possible acquisition. Specific sites will be determined at the grant phase of the project.

All property purchased using CIAP funds will have a deed restriction for conservation.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: The Acquisition of Property for Conservation and Public Access initiative meets Authorized Use #1 because it allows the county to protect and conserve environmentally sensitive land, including wetlands. The purchase of these environmentally sensitive properties not only limits development in these areas, but also provides numerous opportunities for education and awareness for the public as they gain access to these properties. There is a great demand in the county for access to public land, especially land that borders waterways. The rapid growth rate of the county and the large tourism population continues to put a strain on the present infrastructure.

Since the beginning of the conservation movement in the early 1900's, natural resource managers have recognized the importance of balancing the protection of public lands in a manner that preserves the flora and fauna while providing the public opportunities to appreciate the resource. These public opportunities provide the hands-on knowledge and experience which forms a foundation in the public consciousness for conservation activities. This balance is clearly described in the mission statement of the Department of Interior in which resource protection, responsible resource use, and recreation are identified as three of the five departmental goals. Furthermore, the Department of Interior National Park Service's mission is "... to promote and regulate the use of the ... national parks...which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner... as will leave them unimpaired for the enjoyment of future generations".

- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Administration of the Coastal Impact Assistance Program**

PROJECT NUMBER: **BC-3**

PROJECT CONTACT:

|           | Primary Contact                                       |
|-----------|---|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner |
| Address   | Baldwin County Commission                             |
|           | Baldwin County Planning & Zoning Department           |
|           | 312 Courthouse Square, Suite 18                       |
|           | Bay Minette, AL 36507                                 |
| Telephone | (251) 580-1655  |
| Fax       | (251) 937-0293  |
| E-mail    | jbatchelor@co.baldwin.al.us                           |

PROJECT SUMMARY

LOCATION: **Baldwin County, Alabama**

DURATION: **Two Years**

ESTIMATED COST:

| BC-3               |               |
|--------------------|---------------|
| Total Project Cost | \$ 250,000.00 |
| FY 2007            | \$ 125,000.00 |
| FY 2008            | \$ 125,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC-3 |               |
|------|---------------|
| 2008 | \$ 125,000.00 |
| 2009 | \$ 125,000.00 |
| 2010 | \$ -          |
| 2011 | \$ -          |

GOAL: The goal is to provide financial assistance to the Baldwin County Commission to manage and implement Baldwin County's CIAP.

OBJECTIVE: The objective is to utilize staff from various County departments to administer the CIAP program.

The project will provide financial assistance to the Baldwin County Commission to manage and implement Baldwin County's CIAP. The objective is to utilize staff from various County departments to administer the CIAP program. The administration will include attending training related to the implementation of the program, grant application preparation and submittal, and the planning and management of the CIAP program.

#### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #3: planning assistance and the administrative costs of complying with CIAP.
- Justification: The Administration of the Coastal Impact Assistance Program initiative meets the definition of the Authorized Use.
- Cost Sharing: Cost sharing is not applicable to this project. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.

## STATE OF ALABAMA

### COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Magnolia Landfill Gas Collection System**

PROJECT NUMBER: **BC-4**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | James Ransom, Jr.                        |
| Address   | Baldwin County Commission                |
|           | Baldwin County Solid Waste<br>Department |
|           | 15140 County Road 19                     |
|           | Summerdale, Alabama 36580                |
| Telephone | (251) 972-6826                           |
| Fax       | (251) 972-6827                           |
| E-mail    | jransom@co.baldwin.al.us                 |

#### PROJECT SUMMARY

LOCATION: **Magnolia Sanitary Landfill, Summerdale, Alabama**

Latitude: **87° 46' 24.54" W**

Longitude: **30° 26' 36.71" N**

DURATION: **One Year**

ESTIMATED COST:

| BC-4               |               |
|--------------------|---------------|
| Total Project Cost | \$ 650,000.00 |
| FY 2007            | \$ 650,000.00 |
| FY 2008            | \$ -          |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC-4 |               |
|------|---------------|
| 2008 | \$ 650,000.00 |
| 2009 | \$ -          |
| 2010 | \$ -          |
| 2011 | \$ -          |

GOAL: The goal of this project is to decrease NMOCs in the air surrounding the landfill by 98 percent.

OBJECTIVE: The objective is to install a landfill gas collection system that will collect and burn landfill gas from the Magnolia Sanitary Landfill.

The Magnolia Sanitary Landfill is located in Summerdale, Alabama approximately three miles north of U.S. Highway 98 and five miles west of State Highway 59. The Magnolia Landfill is located approximately eight miles from Weeks Bay (Appendix G-19 and G-20 included maps and photography related to this project). The Landfill is owned and operated by the Baldwin County Commission. Applicable permits for the landfill are managed through the Alabama Department of Public Health (ADPH) and the Alabama Department of Environmental Management (ADEM). The mission of the Magnolia Landfill is to furnish a safe, sanitary, and properly managed disposal site for Municipal Solid Waste (MSW) and Construction Debris (C&D) for Baldwin County. In addition, recycling, composting, and biosolid operations are performed at the Landfill site. The Magnolia Landfill is site #19 on the Alabama Coastal Birding Trail. In April 2005 a Tier II air emissions test was performed at the landfill to determine the amount of Non Methane Organic Compounds (NMOCs) contained in the landfill gas emitted from decomposing waste materials. The Tier II test revealed that levels of NMOCs in the landfill gas exceeded Clean Air Act requirements. NMOCs may consist of Hazardous Air Pollutants (HAPs) such as vinyl chloride, toluene, benzene, and up to 100 other materials. Studies indicate that emissions of landfill gas containing NMOCs at certain levels have adverse effects on public health. In addition, HAPs such as NMOCs in the Alabama coastal counties may contribute to atmospheric deposition in the watersheds that may cause increased pollutant loading. As a result, water quality may be reduced, possibly endangering fish and wildlife in wetland areas.

The goal of this project is to decrease NMOCs in the air surrounding the landfill by 98 percent.

The objective is to install a landfill gas collection system that will collect and burn landfill gas from the Magnolia Sanitary Landfill (Appendix G-19 and G-20 includes maps and photography related to this project). The landfill gas collection system includes a system of 7 wells, approximately 1,000 linear feet of piping, and a flare to burn the landfill gas. The landfill gas collection wells are drilled into the waste buried

in the landfill, and connected to a series of pipes leading to the flare. A series of 2 air blowers creates a draft that pulls the landfill gas from the landfill and blows the gas into the flare, where the gas is burned. Burning the landfill gas will reduce NMOCs by 98 percent, thus substantially reducing pollutant loading that can have a harmful effect on the surrounding environment. This reduction of NMOCs will be verified by monthly monitoring reports that will be sent to the Alabama Department of Environmental Management.

As a site on the Alabama Coastal Birding Trail, the Magnolia Landfill receives more than 100 visitors each year to view the numerous varieties of birds that can be seen at the landfill. In addition, visitors will now have the opportunity to learn more about the detrimental environmental impacts of landfill gases and how the Magnolia Landfill is seeking to reduce these impacts by collecting and burning the landfill gas. Signage explaining the landfill gas system will be placed near the viewing decks used by bird watchers and other visitors to the landfill. This information will also be shared with school groups that visit the landfill throughout the year.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #4, implementation of a federally approved marine, coastal, or comprehensive conservation management plan.
- Justification: The Landfill Gas Collection System initiative meets Authorized Use #4 because it addresses the issue of hazardous air pollutants that contribute to the atmospheric deposition in the surrounding watersheds. By decreasing the amount of NMOCs contained in the landfill gases, the pollutant loading may be reduced thus protecting fish and wildlife habitat. This provides protection to the natural coastal environment. The management program policy statement of the Alabama Coastal Area Management Plan (ACAMP) is as follows: “It is the policy of the Coastal Area Management Program to encourage all sources of air pollution in Alabama’s coastal area meet or exceed all applicable emission standards.”(pages. 28-29). In addition, ACAMP states that “The quality of the air in the Alabama coastal area affects many aspects of the environment that directly relate to the quality of life on the coastal area.....the known hazardous air pollutants produced in the Alabama coastal counties contribute to the atmospheric deposition in the watersheds that, in turn, may increase pollutant loading that results in reduced water quality.”
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: Partnering is not applicable to this project.
- Benefit to Natural Coastal Environment: This project benefits the natural coastal environment because it decreases the amount of NMOCs contained in the landfill gases, thus reducing the pollutant loading in the air that damages fish and wildlife habitat.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Comprehensive Land Use Plan Development**

PROJECT NUMBER: **BC-5**

PROJECT CONTACT:

|           | Primary Contact                                       |
|-----------|---|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner |
| Address   | Baldwin County Commission                             |
|           | Baldwin County Planning & Zoning Department           |
|           | 312 Courthouse Square, Suite 18                       |
|           | Bay Minette, AL 36507                                 |
| Telephone | (251) 580-1655  |
| Fax       | (251) 937-0293  |
| E-mail    | jbatchelor@co.baldwin.al.us                           |

PROJECT SUMMARY

LOCATION: **Baldwin County, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| BC-5               |               |
|--------------------|---------------|
| Total Project Cost | \$ 300,000.00 |
| FY 2007            | \$ 300,000.00 |
| FY 2008            |               |

**SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:**

| BC-5 |               |
|------|---------------|
| 2008 | \$ 300,000.00 |
| 2009 | \$ -          |
| 2010 | \$ -          |
| 2011 | \$ -          |

**GOAL:** The goal of this initiative is to develop a comprehensive land use management plan that will guide the growth and manage the development of Baldwin County.

**OBJECTIVE:** The objective of this initiative is to develop a document with goals and objectives that will aid the county in the conservation and protection of its natural resources such as water quality, wetlands, estuarine marshes, beaches, flood plains, fisheries and marine habitats.

This initiative will provide guidance to county officials and personnel in the development of a comprehensive land use plan. One objective in the Baldwin County Strategic Plan 2006-2016 is that “Countywide development and growth over the next 10 years will be guided through the adoption in 2008 of a policy-based comprehensive plan.” Population estimates released by the U.S. Census Bureau show that Baldwin County’s population increased to 169,162 in 2006; a 20 percent increase from the 2000 Census. Baldwin County is the second fastest growing county in Alabama and the county’s population is projected to reach almost 250,000 by the year 2025. This accelerated growth could be potentially detrimental to the natural environment -- negative impacts on water quality, wildlife habitats and open space areas are inevitable without proper guidance. Strategies outlined in the plan will aid the county in the conservation and protection of natural resources such as water quality, wetlands, estuarine marshes, beaches, flood plains, fisheries and marine habitats. Furthermore, the plan will help mitigate potential degradation of the shoreline and flora and fauna habitats by guiding growth to areas best suited for development.

| Baldwin County Population 2000 and Projections 2005-2025 |             |         |         |         |         |                     |         |
|--|-------------|---------|---------|---------|---------|---------------------|---------|
| Census<br>2000   | Projections |         |         |         |         | Change<br>2000-2025 |         |
|  | 2005        | 2010    | 2015    | 2020    | 2025    | Number              | Percent |
| 140,415  | 162,314     | 184,375 | 206,251 | 227,727 | 248,436 | 108,021             | 76.90%  |

*Source: The Alabama State Data Center, the University of Alabama*

Many of the current environmental issues stem from the lack of smart growth in the past. The absence of a comprehensive plan promotes sprawl, which consumes even more of our natural resources and habitat. Growth is inevitable, but the Comprehensive Land Use Plan will provide a framework for managed development while continuing to preserve our natural resources.

The Comprehensive Land Use Plan will address the conservation, use and protection of Baldwin County's natural resources, including our water quality, wetlands, estuarine marshes, beaches, flood plains, fisheries and marine habitats. The plan will involve a review and update of existing zoning ordinances to ensure compatibility with all aspects of the new land use plan, as well as address the need to provide open space and public access for the citizens of Baldwin County.

The goal of this initiative is to develop a comprehensive land use management plan that will guide the growth and manage the development of Baldwin County. The objective of this initiative is to develop a document with goals and objectives that will aid the county in the conservation and protection of its natural resources such as water quality, wetlands, estuarine marshes, beaches, flood plains, fisheries and marine habitats. Land use policies will be developed in accordance with this plan and existing zoning ordinances will be carefully reviewed to ensure their compatibility.

The county has hired the consulting firm, Genesis Group, Inc., to develop and prepare a Comprehensive Land Use Plan. One important aspect in the development of the plan involves public input. In September 2007, a series of public meetings were held throughout the county to allow citizens an opportunity to provide input on the issues they felt were the most important and critical to Baldwin County. Meetings were also held for officials of municipalities within the county, representatives of various governmental agencies, Chambers of Commerce, School Board members and County officials to address the consultants regarding their concerns. Additional public meetings will be held once a draft plan has been completed.

The Comprehensive Land Use Plan for Baldwin County will reconcile known resources and established development patterns and contain a forecast of changes needed. The plan will describe and examine the County's natural and man-made resources, including climate, soils, topography, drainage, transportation, community facilities and housing. Forecasts of the population and economy with implications for future expansion and development will also be presented. In addition, the plan will examine the major classifications of urban land use while giving due consideration to present uses; desired future patterns of development; the needs and desires of citizens; the interaction of natural features and the opportunities for improving quality of life.

Please see Appendix G-21 for the estimated schedule and deliverables for Baldwin County's comprehensive plan.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #4, implementation of a federally approved marine, coastal or comprehensive conservation management plan.
- Justification: The Comprehensive Land Use Plan Development initiative meets Authorized Use #4 because Action HU-A1: Develop and Implement a Comprehensive Land Use Plan in the Mobile Bay National Estuary Program (MBNEP) Comprehensive Management Plan (CCMP) addresses using smart growth to control sprawl and the loss of open space (page 63 CCMP). The Mobile Bay National Estuary Program's CCMP was approved by the Environmental Protection Agency in April 2002. This action encourages the development and implementation of land use planning to address development issues that can cause detrimental effects to the environment. The development of the Comprehensive Land Use Plan will assist the county in identifying those areas that are environmentally sensitive and require greater protection. It will also provide information that can be used to identify wildlife corridors and greenways to reduce habitat fragmentation. A key component of the development of this plan is the coordination and input from other agencies and local governments, as well as the general public. Agencies such as the South Alabama Regional Planning Commission, Mobile Bay National Estuary Program, Alabama Department of Conservation and Natural Resources, U.S. Fish and Wildlife Services, Alabama Gulf Coast Convention and Visitors Bureau and Alabama Gulf Coast Chamber of Commerce will all play a vital role in the preparation of this plan.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This initiative will be administered using CIAP funds, NOAA Coastal Zone Management Funds (\$25,000.00) and Baldwin County matching funds (\$25,000.000)
- Benefit to Natural Coastal Environment: This project benefits the natural coastal environment by providing a Comprehensive Plan to be used in land use planning to address development issues that can cause detrimental effects to the environment.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Exotic Plant Species Management**

PROJECT NUMBER: **BC-6**

PROJECT CONTACT:

|           | Primary Contact                                       |
|-----------|---|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner |
| Address   | Baldwin County Commission                             |
|           | Baldwin County Planning & Zoning Department           |
|           | 312 Courthouse Square, Suite 18                       |
|           | Bay Minette, AL 36507                                 |
| Telephone | (251) 580-1655  |
| Fax       | (251) 937-0293  |
| E-mail    | jbatchelor@co.baldwin.al.us                           |

PROJECT SUMMARY

LOCATION: **Baldwin County, Alabama**

DURATION: **Two Years**

ESTIMATED COST:

| BC-6               |               |
|--------------------|---------------|
| Total Project Cost | \$ 100,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 100,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC-6 |              |
|------|--------------|
| 2008 | \$ 50,000.00 |
| 2009 | \$ 50,000.00 |
| 2010 | \$ -         |
| 2011 | \$ -         |

GOAL: The goal of this initiative is to manage the threat of invasive exotic plant species in Baldwin County parks and along County right-of-ways.

OBJECTIVE: The objectives to accomplish the goal of this initiative are to provide education and training to county personnel and the purchase of equipment and supplies needed to manage these invasive plant species.

This initiative will provide education, training, equipment, and supplies to Baldwin County personnel for the management of invasive exotic plant species. Invasive exotic plants reproduce rapidly crowding out native species, damaging natural areas, and altering ecosystems. Mechanical removal and non-chemical methods should be used to control these invasive species whenever possible. Herbicides may be used where mechanical methods are ineffective.

Many of these plant species were introduced as ornamentals, erosion control methods, and forage. Since there are no natural predators for these plants they dominate the landscape; therefore suppressing native vegetation. The presence of these exotic plants results in loss of suitable habitat for native species, which can be detrimental to species already in decline. Below is a list of common exotics in Baldwin County that have been identified by The Nature Conservancy as the most problematic.

**SHRUBS**

- **Chinese Privet:** Member of the ash family; Most invasive of creek and river bottoms; Stands can become so dense that they suppress native vegetation; Density makes it very difficult for man and wildlife to move through them; Spread by bird-dispersed seeds

**TREES**

- **Popcorn Tree (Tallow Tree):** Invasive of stream bottoms; Spread by bird dispersed seeds and floodwater in stream bottoms; Flood and fire resistant; Herbicides used for control
- **Mimosa Tree (Silk Tree):** Member of the legume family; Spread by seeds or root sprouts; Thick stands will quickly invade idle land; Herbicides can be used, but large stands will require mechanical removal

**GRASSES/ WEEDS**

- **Cogongrass:** Colony-forming dense erect perennial grass; Branching rhizomes form dense mat that suppress native vegetation; Aggressively invades right-of-ways, forests, pastures, etc.; Destroys wildlife habitat; Spread by wind dispersed seeds; Poses severe fire hazard

## VINES

- **Japanese Climbing Fern:** Perennial vine-like fern; Spread by wind dispersed spores; Found along highway right-of-ways around bridges; Can invade streams and swamps; Generally scattered in timber stands, but can increase in cover to form mats that smother native shrubs and trees; Dead vines provide trellis for reestablishment
- **Kudzu:** Perennial vine; Can be found along edges of forests, pastures, right-of-ways, and around cities and towns; Introduced for forage and erosion control; Herbicides, overgrazing, and mechanical root removal have proven to be effective in controlling this vine.

Selective herbicide methods include foliar sprays, stem injection, cut-tree, basal sprays, and soil spots. Herbicide application from direct foliar sprays is the most cost effective method. Other methods provide an integrated approach, such as hand-pulling and prescribed burns.

The goal of this initiative is to manage the threat of invasive exotic plant species in Baldwin County parks and along County right-of-ways.

The objectives to accomplish the goal of this initiative are to provide education and training to county personnel and the purchase of equipment and supplies needed to manage these invasive plant species. Education and training will be provided to approximately twenty personnel from the Parks Department and the Highway Department. This would involve two 4-hour classes of training to identify the most common and prolific species in Baldwin County and discussion of methods of treatment. An additional two 4-hour classes will be held to discuss the more technical aspects, such as the proper mix ratios of chemical treatment methods and demonstration methods on treatment of invasive plants. Approximately six staff members will also attend additional training required to be licensed as a Certified Herbicide Applicator.

Equipment to be purchased includes four backpack sprayers and an all-terrain vehicle with a 25-gallon mounted sprayer for use by the Parks Department in their application of chemical herbicides. The Highway Department will purchase three 350 gallon truck mounted herbicide sprayers. In addition, the purchase of chemical herbicides and surfactants, which can be as much as \$100 per 2 ½ gallon jugs, will be another component of the objective. A nuisance species management guide book will be produced to provide personnel with assistance in the proper treatment of the most common species. After the training seminars, Parks Department personnel will identify sites within County parks and on right-of-ways that are threatened by invasive exotic species. The sites will then be treated following the treatment guidelines outlined in the guidebook. The construction of two secure, well-ventilated buildings with approximately 200 square feet of storage for the herbicide is an additional need that will be addressed by this initiative.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: The Exotic Plant Species Management initiative meets Authorized Use #1 because the removal of these invasive exotic species will protect native flora and fauna habitats while aiding in the restoration of areas to their native natural state.
- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Coastal Dune Restoration**

PROJECT NUMBER: **BC-7**

PROJECT CONTACT:

|           | Primary Contact                                       |
|-----------|---|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner |
| Address   | Baldwin County Commission                             |
|           | Baldwin County Planning & Zoning Department           |
|           | 312 Courthouse Square, Suite 18                       |
|           | Bay Minette, AL 36507                                 |
| Telephone | (251) 580-1655  |
| Fax       | (251) 937-0293  |
| E-mail    | jbatchelor@co.baldwin.al.us                           |

**PROJECT SUMMARY**

**LOCATION: Fort Morgan Peninsula, Baldwin County, Alabama**

**Latitude: 87° 59' 10.86" W**

**Longitude: 30° 13' 41.53" N**

**Additional restoration sites will be determined at the grant phase.**

**DURATION: One Year**

**ESTIMATED COST:**

| BC-7               |               |
|--------------------|---------------|
| Total Project Cost | \$ 240,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 240,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC-7 |               |
|------|---------------|
| 2008 | \$ -          |
| 2009 | \$ 240,000.00 |
| 2010 | \$ -          |
| 2011 | \$ -          |

GOAL: The goal of this initiative is to reduce the loss of dune habitat along the coastal shoreline.

OBJECTIVE: The objective is to stabilize and restore coastal dunes in coastal Baldwin County.

The goal of this initiative is to reduce the loss of dune habitat along the coastal shoreline. The objective is to stabilize and restore coastal dunes in coastal Baldwin County. One area that has been identified for dune restoration is approximately 7 acres of county-owned land along the Fort Morgan Peninsula. Appendix G-22 includes a map of the area. In addition to the Ft. Morgan Peninsula project, other restoration locations will be determined at the grant phase. There is a potential opportunity to coordinate with local municipalities to restore dunes on other public properties along the coastline. This initiative will serve as a demonstration project for private landowners and conservation organizations who want to help in the restoration of coastal dunes and protecting threatened and endangered species. This initiative will be coordinated with ongoing efforts by the U.S. Fish and Wildlife Service and the Baldwin County Soil and Water Conservation District's efforts. Their program is designed to target homeowners who would like to plant native vegetation to restore natural dune habitat and reduce coastal erosion on their property.

Sand dunes provide a first line of defense against storm surges and waves. Dunes act as flexible barriers to protect low-lying backshore and help preserve low barrier islands. In addition, they provide a habitat for many animals, including migratory birds. Dunes protect structures, such as roads and buildings, by absorbing waves and blocking high winds. Dunes also minimize the impact of erosion by supplying sand to the beach areas. Hurricane events of the past several years have left many of our coastal areas bare of vegetation and vulnerable to accelerated erosion. Vegetation is critical to dune formation and stabilization. Without vegetation, blowing sand will migrate inland. Restoring coastal dunes will provide natural habitats for threatened and endangered species, such as the Alabama Beach Mouse, sea turtles, and migratory birds. Once the vegetation is established, dunes will start to form naturally and at an accelerated rate. As sand accumulates, plants adapted to the beach environment emerge, stabilizing the surface and promoting further dune formation.

Native vegetation and sand fencing will be used to to promote dune formation on the Gulf Coast of Baldwin County. The vegetation will be planted 12 - 18 inches, in several rows where the crest of the

dune is to be located. Native vegetation, such as sea oats, beach morning glory, and panic grass will be used in combination to promote dune formation. Sea oats are deeply rooted where as beach morning glory is a ground cover that spreads along the surface holding the sand captured by taller plants in place. . Planting these together is the most effective way to promote dune formations. Sand fence is constructed from evenly spaced thin wooden vertical slats connected with a twisted wire, of 4-feet in height. Wooden posts are 3-inches round. Sand fencing will aid in dune formation by capturing wind blown sand. Since coastal Alabama has recently experienced active hurricane seasons minor debris removal will take place before each planting as needed.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: The Coastal Dune Restoration initiative meets Authorized Use #1 because it will aid in the restoration of coastal dune areas to their natural state. It will also provide protection to the natural habitats of threatened and endangered species, such as the Alabama Beach Mouse, sea turtles, and migratory birds.
- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Shoreline/Habitat Restoration**

PROJECT NUMBER: **BC-8**

PROJECT CONTACT:

|           | Primary Contact                                       |
|-----------|---|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner |
| Address   | Baldwin County Commission                             |
|           | Baldwin County Planning & Zoning Department           |
|           | 312 Courthouse Square, Suite 18                       |
|           | Bay Minette, AL 36507                                 |
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| Fax       | (251) 937-0293  |
| E-mail    | jbatchelor@co.baldwin.al.us                           |

**PROJECT SUMMARY**

**LOCATION: Perdido Bay, Baldwin County**  
**Latitude: 87° 27' 29.07" W**  
**Longitude: 30° 18' 2.7" N**

**DURATION: Four Years**

**ESTIMATED COST:**

| BC-8               |               |
|--------------------|---------------|
| Total Project Cost | \$ 200,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 200,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC-8 |              |
|------|--------------|
| 2008 | \$ 60,000.00 |
| 2009 | \$ 60,000.00 |
| 2010 | \$ 40,000.00 |
| 2011 | \$ 40,000.00 |

GOAL: The goal of this project is to identify areas in Baldwin County that experience heavy boat traffic and have suffered major prop scarring, and within these sites conduct restoration, protection and education that will help restore and maintain the critical functions of healthy seagrass beds.

OBJECTIVE: The objectives of this project include:

- Pursuing methods to close the most heavily damaged seagrass beds to motorized boat traffic, similar to that which was recently passed to protect the Robinson Island seagrass beds in lower Perdido Bay. Such beds exist near the eastern end of Ono and Rabbit Islands;
- Using signage to mark the boundaries of the seagrass bed;
- Installing bird roosting stakes in selected propeller scars to attract birds. This will add additional nutrients to these beds, especially phosphorus, via fecal deposits. This can lead to the enhancement of natural regeneration of seagrasses in the manner that has been successful at Robinson Island;
- Monitoring seagrass regeneration in these scarred areas for a period of two years after the placement of signage and bird roosting stakes; and
- Installing educational signage on Rabbit Island and at other appropriate recreation boating ramps in the area.

Baldwin County is almost completely surrounded by water, with rivers on the northwestern side, bays on the east and west and the Gulf to the South. A vital component of this diverse aquatic environment is the seagrass beds found in shallow estuarine waters throughout the county. Healthy seagrasses play a critical role in Baldwin County's ecological and environmental health. Seagrasses provide food and shelter for the young of a variety of ecologically important fish species such as brown shrimp, blue crabs, scallops, redfish, speckled trout, and several snapper and grouper species. They also play an active role in maintaining water quality, because of their ability to absorb excess nutrients from the water column. In addition, healthy seagrasses decrease wave action and their roots and rhizomes hold sediments in place, thereby protecting shorelines from erosion.

Despite the variety of important benefits provided by healthy seagrass beds, seagrasses are declining at an increasing rate. In the Gulf of Mexico, every state has experienced large losses of seagrasses. In Alabama coastal waters records are few, but it is clear that tremendous losses have occurred, with more than 50% of the submerged vegetation lost from Mobile Bay since 1981, and in Perdido Bay around 75% of the area covered by seagrasses has been lost since 1940 (USGS 2004). Many factors contribute to seagrass decline, including the addition of wastewater and excess nutrients to coastal waters, dredging, coastal construction and direct damage caused by boat propellers. Motorized boats often run aground in the shallow waters where seagrass beds are located and leave propeller scars that are readily visible in recent aerial photography. In many areas, including several in Baldwin County, AL, the number of scars is large and the damage to the seagrass beds is extensive (Please see Appendix G-23 and G-24 for map and photography).

In 2006 a seagrass education and restoration project was conducted on Robinson Island in the vicinity of Perdido Pass in Alabama through a partnership with the Alabama Department of Conservation and Natural Resources, the City of Orange Beach, the Dauphin Island Sea Lab, funded through the Gulf of Mexico Foundation. In the one year post-implementation, the project has been successful in protecting the area from any new damage, and it appears that the regeneration of the seagrasses is more rapid in the scarred beds that contain bird stakes.

The goal of this project is to identify areas in Baldwin County that experience heavy boat traffic and have suffered major prop scarring, and within these sites conduct restoration, protection and education that will help restore and maintain the critical functions of healthy seagrass beds. The selection of project sites will be guided using the results from the Mobile Bay National Estuary Program seagrass survey and with the help of local seagrass experts from the Dauphin Island Sea Lab. The waters of Baldwin County are ideal for this type of project due to the presence of expansive and threatened seagrass beds and the large number of individuals using the waters for recreational purposes lending to high visibility for educational purposes.

The objectives of this project include:

- Pursuing methods to close the most heavily damaged seagrass beds to motorized boat traffic, similar to that which was recently passed to protect the Robinson Island seagrass beds in lower Perdido Bay. Such beds exist near the eastern end of Ono and Rabbit Islands;
- Using signage to mark the boundaries of the seagrass bed;
- Installing bird roosting stakes in selected propeller scars to attract birds. This will add additional nutrients to these beds, especially phosphorus, via fecal deposits. This can lead to the enhancement of natural regeneration of seagrasses in the manner that has been successful at Robinson Island;
- Monitoring seagrass regeneration in these scarred areas for a period of two years after the placement of signage and bird roosting stakes; and
- Installing educational signage on Rabbit Island and at other appropriate recreation boating ramps in the area.

It is estimated that CIAP funding would allow for the project to include as much as several hundred acres of seagrass beds, depending on the extent of the current damage, and require approximately 75 bird stakes

and 50-60 seagrass marking signs. The funding for this project would also support the placement of educational signage at 2 county boat ramps in areas of the county where seagrass could be impacted, in the same manner as the Robinson Island project.

Similar to the monitoring protocol that was established at Robinson Island, this plan involves monitoring the recovery of seagrass into the prop scars by assessing seagrass coverage using the non-destructive Braun-Blanquet technique. This technique allows for a quick and accurate assessment of benthic vegetation cover (seagrass and macroalgae) using a categorical scoring method, where a score of 1 indicates 1-5% coverage of the area within the quadrat and 5 indicated 75- 100% coverage. Observations of seagrass and macroalgal cover will be made within permanently established quadrats at two (2) meter increments along the length of the prop scar. Seagrass and macroalgal cover on either side of the prop scar will be recorded for comparison. Seagrass monitoring will occur once a month from April to October during each of the two monitoring years. At the end of each October, two small core samples will be taken next to the permanent quadrats within and adjacent to the scar to assess the above and below ground biomass of the seagrass present. Standard statistical methods will be used to compare seagrass coverage and biomass between restored and control prop scars.

To verify that avian fauna are utilizing the bird stakes to roost, surveys will be conducted monthly by identifying and enumerating the birds roosting on the bird stakes every 10 minutes during an 1 ½ hour time period, 3 times during the day.

To determine whether additional nutrients, especially phosphorus, has been taken up by the seagrass recolonizing the prop scars, the above and below ground tissue taken from the core samples will be used to measure the concentration of nitrogen and phosphorus in seagrass leaves using standard analytical protocols. Initial seagrass cores (i.e., at the start of the restoration) will be taken next to each prop scar to determine time zero nutrient concentrations. By measuring tissue nutrient composition before, during and at the end of the experiment it will be evident as to whether the nutrient enrichment provided by the bird feces is being utilized by the plants.

Finally, observation will be taken of the regularly spaced transects across the meadow to observe whether new prop scars have been made during the study period. As noted above, this is not expected to occur but will make these observations at monthly intervals to verify that the warning signs are protecting the meadow from further damage.

Protecting and improving the health of Baldwin County's seagrass beds will benefit the county's shoreline by the lessening of wave action and stabilizing sediments provided by seagrass meadows. Baldwin County will work closely with non-profit conservation groups to identify project sites and implementation strategies.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.

- Justification: The Shoreline/Habitat Restoration initiative is consistent with CIAP Authorized Use #1 because it provides a means of protection and restoration to the seagrass beds and shorelines in parts of Baldwin County.
- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama**

PROJECT NUMBER: **BC-9**

PROJECT CONTACT:

|           | Primary Contact  |
|-----------|--|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner    |
| Address   | Baldwin County Commission                                |
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PROJECT SUMMARY

LOCATION: **Perdido Bay, Baldwin County, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| BC-9               |               |
|--------------------|---------------|
| Total Project Cost | \$ 250,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 250,000.00 |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC-9 |               |
|------|---------------|
| 2008 | \$ -          |
| 2009 | \$ 250,000.00 |
| 2010 | \$ -          |
| 2011 | \$ -          |

**GOAL:** The goal of this project is to facilitate management research of Alabama's coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

**OBJECTIVE:** The objective of this project is to contribute \$250,000.00 of CIAP funding to purchase, install, and support the operation of a real-time weather and water quality recording station in Perdido Bay.

It is a priority of the State of Alabama CIAP to support coastal observing systems as these systems provide much-needed data to understand and manage complex estuarine systems. The collection of continuous, real-time observations in coastal Alabama began with support of the first CIAP program, administered by NOAA in 2001. Since then, Dauphin Island Sea Lab and the Mobile Bay National Estuary Program have partnered with the University of South Alabama, Weeks Bay National Estuarine Research Reserve, the Alabama Department of Conservation, State Land Division, Coastal Programs, EPA's Gulf of Mexico Program and the Alabama Lighthouse Association to provide real-time data at four sites in the Mobile Bay area. Parameters being monitored at these sites include wind speed, wind direction, air temperature, barometric pressure, photosynthetically active radiation, precipitation, water temperature, dissolved oxygen, water height, and salinity. Real-time data are available in a user-friendly format at [www.mymobilebay.com](http://www.mymobilebay.com). This informative website describes and graphs each parameter. Researchers may download the data in a spreadsheet format any time for further analysis. Data from these stations can also be accessed through the National Data Buoy Center at:

[http://www.ndbc.noaa.gov/maps/Alabama\\_inset.shtml](http://www.ndbc.noaa.gov/maps/Alabama_inset.shtml).

Through a partnership, the State of Alabama, Baldwin County, and Mobile County will add monitoring sites to complete an east-west transect in the coastal area of Alabama (AL-21, BC-9 and MC-9). This project will construct data collection devices and support the implementation and operation of the network for two years. The costs associated with the implementation of each monitor include salaries (data manager, technician, and project manager), boat and vehicle expenses, and other expendables. The State of Alabama will contribute CIAP funding to purchase, install and implement a monitor in Bon Secour Bay, partnering with funding from NOAA. Baldwin County will fund the purchase, installation and implementation of a monitor in Perdido Bay, and the Mobile County will purchase, install, and implement a monitor in the Mississippi Sound/Portersville Area. The State of Alabama, Baldwin County, and Mobile

County will each submit a separate grant application for their respective project within this grant. Appendix G-11 contains a map depicting the proposed monitor locations. The map also depicts the locations of the existing funded monitors.

The data collected from the Continuous and Real-time Recording Station of Meteorological and Hydrological Parameters have been used and will be used for a numerous coastal conservation, protection and restoration projects. For example, the Dauphin Island Sea Lab's technical support group has been maintaining a real-time water quality monitoring station at the Middle Bay Light in Mobile Bay, Alabama since fall 2004. At the Middle Bay Light station, current conditions have been served at a website (<http://cast-net.disl.org/monitoringdata/StationInfoBmiddlebay.asp?jday=&property=&chartyear=&StationID=188>) for meteorological (air temperature, relative humidity, wind speed and direction, barometric pressure, precipitation, and photosynthetically active radiation) and hydrographic (water level, temperature, salinity, and dissolved oxygen) parameters. The hydrographic parameters, in particular, are collected by a vertical profiler, which gives hourly vertical profiles at a 0.5 m interval.

The University of South Alabama, Department of Marine Resources has completed extensive research using the data from the Middle Bay Lighthouse station. This research has recently developed a hydrodynamic model that simulates physical transport processes in Mobile Bay. The dredged ship channel serves as a conduit through which salty seawater intrudes upriver, thereby significantly affecting horizontal salinity gradient (baroclinic forcing). The data from the Middle Bay Light station are invaluable in detecting and characterizing the intrusion events. We have observed the presence of strong vertical stratification along the ship channel, which can be destratified during the times of high energy events such as strong winds and high freshwater discharges. Stratification/destratification plays an important role in the formation of hypoxic bottom water in the ship channel. It also affects the water in the nearby shallow areas where strong stratification and hypoxic bottom waters have also been observed during summer. Therefore, vertical profiles of density (salinity and temperature) and dissolved oxygen recorded by a vertical profiler at the Middle Bay Light are invaluable in studying temporal and spatial patterns and variations of stratification and bottom hypoxia.

Other research included the study of the development of a larval transport model for Eastern Oyster, funded by Alabama Oyster Reef Restoration Program. One key component of this project is to study the characteristics of larval transport and spat distribution in the lower Mobile Bay and eastern Mississippi Sound using the model under various environmental conditions. Characterization of various environmental conditions (i.e. design of scenario runs from the standpoint of model) is critical, which has to be based on the data of meteorological (e.g. wind) and hydrographic (e.g. salinity) parameters. The data from the Middle Bay Light will certainly be used for this purpose.

An additional application of the data included the collection of data over the long term which can be used for designating water use criteria and providing baseline readings for 303(d) improvements. Specifically, Mobile Bay (AL/03160205-010-01-1998) Fish and Wildlife, Shellfish Harvesting and Swimming Waters have been 303(d) listed for low dissolved oxygen as a result of urban runoff and storm sewers. Currently there are a limited number of water monitoring stations in Mobile Bay which provide data suitable for designated water use criteria.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will obtain data necessary for scientific research and investigation of coastal areas. These data are necessary in providing the baseline information for all projects which conserve, protect, and restore complex coastal ecosystems.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: The State of Alabama, Baldwin County, and Mobile County (AL-21, BC-9, and MC-9) will partner to create an east-west transect of continuous and real-time weather and water quality recording stations along southern coastal Alabama. Funding from NOAA will be used to complement the CIAP funds to construct and implement a monitor in Bon Secour Bay (State of Alabama portion).

This project contains many partners in addition to CIAP. Specifically, the Dauphin Island Sea Lab, Mobile Bay National Estuary Program, University of South Alabama, Weeks Bay National Estuarine Research Reserve, the Alabama Department of Conservation, State Land Division, Coastal Program, EPA's Gulf of Mexico Program and the Alabama Lighthouse Association have all contributed to the implementation of these systems in coastal waters. Additional funding from the Emergency Disaster Response Fund (EDRF) is being utilized to purchase and maintain monitors in the Mississippi Sound, near the western boundary of Mobile County.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Acquisition of Property for Boating Access**

PROJECT NUMBER: **BC-10**

PROJECT CONTACT:

|           | Primary Contact                                       |
|-----------|---|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner |
| Address   | Baldwin County Commission                             |
|           | Baldwin County Planning & Zoning Department           |
|           | 312 Courthouse Square, Suite 18                       |
|           | Bay Minette, AL 36507                                 |
| Telephone | (251) 580-1655  |
| Fax       | (251) 937-0293  |
| E-mail    | jbatchelor@co.baldwin.al.us                           |

**PROJECT SUMMARY**

LOCATION: **Perdido Bay, Baldwin County**

DURATION: **One Year**

ESTIMATED COST:

| BC-10              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 2,000,000.00 |
| FY 2007            | \$ -            |
| FY 2008            | \$ 2,000,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC-10 |                 |
|-------|-----------------|
| 2008  | \$ 2,000,000.00 |
| 2009  | \$ -            |
| 2010  | \$ -            |
| 2011  | \$ -            |

GOAL: The goal of this initiative is to address the lack of public access that can support a public boating facility in the Perdido Bay area of coastal Baldwin County.

OBJECTIVE: The objective is to purchase at least one piece of property, two to ten acres in size, that will provide boating access to the northern portion of Perdido Bay.

The goal of this initiative is to address the lack of public access that can support a public boating facility in the Perdido Bay area of coastal Baldwin County. The objective is to purchase at least one piece of property, two to ten acres in size, which will provide boating access to the northern portion of Perdido Bay. Perdido Bay is located on the Alabama- Florida border. The bay is a small estuarine system fed by the Perdido River which eventually drains into the Gulf of Mexico. This estuary serves as a transition zone between fresh and saltwater, creating an environment which provides safe nursery grounds for an abundance of aquatic life. Providing access to Perdido Bay allows the public to experience this unique natural resource.

Baldwin County owns undeveloped parcels of land in the Perdido Bay area; however none of the properties can support a facility that will be beneficial to the public. Currently, the only public facility located on this water body is at the southern-most portion of Perdido Bay, approximately 12 nautical miles from the mouth of the Perdido River. The proposed boating facility will offer access to local wetland and swamp areas which will provide educational opportunities for those interested in wetlands and marine science. It will also provide access that will benefit research opportunities for groups such as The Nature Conservancy and Dauphin Island Sea Lab. This project could potentially become part of the Alabama Coastal Kayaking Trail initiative proposed by the State of Alabama (AL-5).

This area of coastline is rapidly developing. Available land is very limited and expensive. County staff has spent much time researching coastal properties in this area. Properties that are best suited for a public boating facility have been carefully evaluated and availability determined. Some of the criteria that were used in the selection process included the presence of wetlands, topography, water depth, size and cost of the parcel and the willingness of the owner to sell. At the present time, the County has narrowed the possibilities to several available pieces of property (Appendix G-26 includes a map of the area). Currently, staff is performing additional evaluations on these properties to determine the best overall value. Additional properties may become available as we are awaiting final plan approval. All options will be fully

researched to ensure that the best available site is chosen. This project will be phased. Phase 1 will involve the evaluation of properties for suitability. Phase 2 will be the purchase of the property.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification The Acquisition of Property for Boating Access meets Authorized Use #1 because it indirectly benefits the natural coastal environment by initiating the first step in providing the public access to the Perdido Bay waterway. Since the beginning of the conservation movement in the early 1900's, natural resource managers have recognized the importance of balancing the protection of public lands in a manner that preserves the flora and fauna while providing the public opportunities to appreciate the resource. These public opportunities provide the hands-on knowledge and experience which forms a foundation in the public consciousness for conservation activities. This balance is clearly described in the mission statement of the Department of Interior in which resource protection, responsible resource use, and recreation are identified as three of the five departmental goals. Furthermore, the Department of Interior National Park Service's mission is "... to promote and regulate the use of the ... national parks...which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner ... as will leave them unimpaired for the enjoyment of future generations". With the addition of a boat launch in the area, the public will have a greater opportunity to interact with the natural resources in this area. In turn, this will increase the awareness of environmental issues and promote understanding and participation in conservation and stewardship activities.
- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.
- Indirect Benefit to Natural Coastal Environment: The proposed boating facility will indirectly benefit the natural coastal environment because it offers access to local wetland and swamp areas, such as the Lillian Swamp. This approximately 2,700 acre coastal swamp borders the Perdido River. It provides habitat for over 63 listed and rare species such as the gopher tortoise, black bear and bald eagles. Access to these areas will provide educational opportunities for those interested in wetlands and marine science and will open up research opportunities. This project could potentially become part of the Alabama Coastal Kayaking Trail (AL-5) initiative proposed by the State of Alabama. Without access to water resources, the concern of protection, enhancement and restoration of the natural coastal environment by the public is lost. By providing designated access points to these resources, the public's understanding of their interconnectedness with the natural coastal environment is established and enhanced. These designated access points also diminish the damage done by the public in making their own access points. This leads to damage of wetland areas and increased erosion along shorelines. The County anticipates hundreds of visitors each month will benefit from

the use of this boat launch. The boat launch will allow easy access to educational sites such as the Lillian Swamp. The intent of the educational opportunities reflects the use of the proposed boat launch by entities such as the University of South Alabama, Dauphin Island Sea Lab, Alabama Marine Resources Division and other institutions to conduct research and educational activities. These could include water quality monitoring, submerged aquatic vegetation studies, benthic communities analysis, and Creel surveys.

c. Mobile County Tier One Project Descriptions

| Project Number | Project Title  | Project Cost    | Page Number |
|----------------|--|-----------------|-------------|
| MC-1           | Administration of the Coastal Impact Assistance Program  | \$ 362,030.28   | 205         |
| MC-2           | Mobile County River Delta Tourism and Welcome Center Property Acquisition and Improvements                   | \$ 1,527,000.00 | 207         |
| MC-3           | Heron Bay Cut-Off Access Improvements  | \$ 725,000.00   | 211         |
| MC-4           | Dauphin Island Campground Improvements   | \$ 200,000.00   | 215         |
| MC-5           | Dauphin Island Bicycle Trail Repair  | \$ 95,000.00    | 219         |
| MC-6           | Establishment of a Mobile County Recycling Facility  | \$ 775,000.00   | 227         |
| MC-7           | Mobile County Greenprint Project   | \$ 73,000.00    | 231         |
| MC-8           | Sensitive Habitat Restoration and Enhancement of County-owned Property                                       | \$ 1,000,000.00 | 235         |
| MC-9           | Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama | \$ 250,000.00   | 239         |
| MC-10          | North Mobile County Wastewater Facilities  | \$ 1,500,000.00 | 243         |
| MC-11          | Coastal Research Weather Stations  | \$ 145,000.00   | 247         |
| MC-12          | West Mobile County Conservation Property Acquisition   | \$ 2,250,000.00 | 251         |
| MC-13          | Acquisition of Sensitive Waterfront Property, Dauphin Island   | \$ 1,000,000.00 | 255         |
| Total          |  | \$ 9,902,030.28 |             |



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Administration of the Coastal Impact Assistance Program**

PROJECT NUMBER: **MC-1**

PROJECT CONTACT:

|           |   |
|-----------|---|
| Name      | Bill Melton P.E., Environmental Services Director |
| Address   | Mobile County Public Works                        |
|           | Mobile County Commission                          |
|           | 205 Government Street                             |
|           | Mobile, AL 36644                                  |
| Telephone | (251) 574-3229                                    |
| Fax       | (251) 574-4722                                    |
| E-mail    | bmelton@mobilecounty.net                          |

### PROJECT SUMMARY

LOCATION: **Mobile County, Alabama**

DURATION: **Four Years**

ESTIMATED COST:

| MC-1               |               |
|--------------------|---------------|
| Total Project Cost | \$ 362,030.28 |
| FY 2007            | \$ 181,015.14 |
| FY 2008            | \$ 181,015.14 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-1 |              |
|------|--------------|
| 2008 | \$ 90,507.57 |
| 2009 | \$ 90,507.57 |
| 2010 | \$ 90,507.57 |
| 2011 | \$ 90,507.57 |

GOAL: The goal of this project is to effectively and efficiently administer the Coastal Impact Assistance Program (CIAP).

OBJECTIVE: The objective of this project is to utilize both Mobile County Commission staff and contracted assistance to administer the CIAP program. The Mobile County Commission staff has attended CIAP workshops held by MMS aimed toward the development and administration of a CIAP. Administration will include attendance at grant management training workshops, development of the CIAP plan, training and education, and managing the CIAP program.

AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #3: planning assistance and the administrative costs of complying with CIAP.
- Justification: Administrative costs meet the definition of the Authorized Use.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: Partnering is not applicable to this project.
- Benefit to the Natural Coastal Environment: This is not applicable to this project.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Mobile County River Delta Tourism and Welcome Center Property Acquisition and Improvements**

PROJECT NUMBER: **MC-2**

PROJECT CONTACT:

|           |   |
|-----------|---|
| Name      | Bill Melton P.E., Environmental Services Director |
| Address   | Mobile County Public Works                        |
|           | Mobile County Commission                          |
|           | 205 Government Street                             |
|           | Mobile, AL 36644                                  |
| Telephone | (251) 574-3229                                    |
| Fax       | (251) 574-4722                                    |
| E-mail    | bmelton@mobilecounty.net                          |

**PROJECT SUMMARY**

LOCATION: **Mobile County River Delta Tourism and Welcome Center, Creola, Alabama (30° 54' 21.34" N 87° 58' 46.98" W)  
2350 Dead Lake Road, Creola, Alabama 36525**

DURATION: **Two Years**

ESTIMATED COST:

| MC-2               |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,527,000.00 |
| FY 2007            | \$ 1,000,000.00 |
| FY 2008            | \$ 527,000.00   |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-2 |               |
|------|---------------|
| 2008 | \$ 777,000.00 |
| 2009 | \$ 750,000.00 |
| 2010 | \$ -          |
| 2011 | \$ -          |

**GOAL:** The goal of this Mobile County River Delta Tourism and Welcome Center Property Acquisition and Improvement project is to conserve and protect the natural resources surrounding the access to the Mobile River Delta. This project will enhance public access, foster positive environmental stewardship and promote the goals of the U.S. Department of the Interior by providing access to a natural resource and providing recreational opportunities for the public.

**OBJECTIVE:** The objective of this project is to acquire and preserve adjacent property, restore park property that was storm damaged, stabilize shoreline, and construct facilities and infrastructure at the park in order to enhance the visitors' experience and promote responsible use when accessing Mobile-Tensaw Delta.

The Mobile-Tensaw Delta (MTD) encompasses approximately 200,000 acres at the base of the 43,600 square mile Mobile River Basin and it is the second largest river delta in the United States. It is recognized as being Alabama's largest National Natural Landmark (National Park Service designation). The Alabama Department of Conservation and Natural Resources State Lands Division and the Forever Wild Land Trust acquired almost 48,000 acres of bottomland hardwood swamp in the late 1990's. This landmark acquisition was followed by the acquisition of another 7,000 acres of the MTD with the support of other federal land acquisition programs.

In parallel with the goals of the National Park Service, the Mobile County Commission acquired the Dead Lake Waterfront RV Park using 2001 CIAP funds. This acquisition provided a much needed controlled public access to the Mobile Delta's swamps, rivers, bogs, bayous, and marshes. After some minimal improvements, the 22-acre park was renamed the Mobile County River Delta Tourism and Welcome Center. The park provides the only controlled and public access to the Delta in northern Mobile County and is located with easy access to Interstate 65 and U.S. 43 (30° 54' 21.34" N 87° 58' 46.98" W). The existing facility contains a campground, cabins, a boat launch, boat storage and docking, and a ranger station. According to Mobile County records, 12,000 people visit the park annually and the number of visitors has increased every year since the acquisition of the park. The park is a site on the Alabama Coastal Birding Trail and will be a key entry and access point of the southern extension of the Bartram Canoe Trail.

The goal of the Mobile County River Delta Tourism and Welcome Center Acquisition and Improvement project is to acquire adjacent property for preservation, restore damaged areas and facilities, enhance public access while facilitating the opportunity to minimize the uncontrolled access found throughout the north Mobile County delta area, and provide educational amenities to enhance the Park's visitor's

awareness of the ecological benefit of the area. The objective of this project is to acquire and preserve adjacent property, restore park property that was storm damaged, stabilize shoreline, and construct facilities and infrastructure at the park in order to enhance the visitors' experience and promote responsible use when accessing Mobile-Tensaw Delta.

This project will be developed in a phased approach. Phase I will include planning and design activities to better define and detail the proposed project. Phase II will include project implementation. The project will remove deteriorating creosote boat storage structures and construct a 28-stall environmentally friendly boat storage facility. There is no access to fuel for marine vessels in the area so boaters hand carry and refuel their vessels manually. A fuel station will be added to provide better controls with best management practices for refueling vessels, and double the number of existing log cabins (four new cabins 20ft x 15ft in size). The main office is an original structure and is in disrepair. Approximately 2000 sq ft of the structure is in need of renovation. The structure serves to highlight elements of the park and the area with both written information and from staff that operate from the building. This facility attracts visitors and will be renovated to serve as a Ranger Station/Nature Center. Educational signage will be constructed throughout the facility to educate the public on the ecological importance of the Delta. All signage or kiosks used will be about three feet square in size. The shoreline has been subject to continuous erosion because the existing bulkhead has deteriorated and therefore will be stabilized with the replacement of 700 ft of bulkhead and walkway. Although it is not possible to accurately anticipate how many people will be served by these additions, it is estimated that at least 12,000 persons annually will use them. The facility lacks the ability to manage any activities on the water. Spill response, debris removal, water quality sampling, monitoring marine vessel best management practices are elements absent from the park and therefore a 25 ft aluminum work boat will be procured to manage activities and conduct water quality sampling along this part of the river and other county owned public access facilities. Ten acres of storm damaged property that had not been a maintained portion of the park will be restored by replanting cypress trees and removing damaged trees. The project includes acquisition of 25 acres of adjacent property for preservation. A sanitary sewer system will be extended to the boat storage area to facilitate proper sewage disposal from the larger boats. Appendix G-29 includes a map of the Mobile County River Delta Welcome Center.

## AUTHORIZED USES

This project meets the criteria set forth in Authorized Use # 1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland

- o Justification: This project meets Authorized Use #1 because it provides for the protection and preservation of this coastal project area and secures the preservation of additional property from encroaching development. This project will restore the integrity of shoreline protection that has failed from age and other environmental elements attributed to its deterioration.
  
- o Cost Sharing: Cost sharing is not applicable to this project. Other funding sources have sought for this project, however, no funding has been made available.
  
- o Partnering: This project will utilize 100% CIAP funding.

- Benefit to Natural Coastal Environment: This project will benefit the natural coastal environment by protecting and preserving an additional 25 acres from encroaching development and providing a controlled and publicly maintained access to the Mobile-Tensaw Delta, either via a day trip or an extended stay at the campground. In addition to educational signage, the facility will contain proper trash disposal facilities, on-site sewage system, and a fish cleaning station to reduce the pollution entering the waterways. Other indirect benefits provided by this project are realized bringing to the area best management practices for refueling, fish handling, marine vessel storage, removal of creosote materials from the marine environment, shoreline stabilization, the fostering and education of natural environment stewardship, and the preservation of coastal property. The park will facilitate a large number of visitors and coastal residents access to the Mobile-Tensaw Delta, a National Natural landmark. Over 50% (107,000 acres) of the land area of the Mobile-Tensaw Delta is owned by public agencies. By providing a mechanism for the public to learn about the natural resource, it allows the park visitor to connect to the Delta's resources and an interest will be sparked in protection and conserving publicly-owned natural resources. Subsequently, this interest will foster a sense of ownership and land stewardship for future generations. Last, the Mobile County River Delta Tourism and Welcome Center provides a publicly managed access point into the Delta. In absence of these facilities, unmanaged privately owned access locations degrade the natural area by illegal dumping, can become a haven for other illicit activities, or become inaccessible for the general public. A public facility provides everyone a safe means to learn about the ecological significance of the Mobile-Tensaw Delta.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Heron Bay Cut-Off Access Improvements**

PROJECT NUMBER: **MC-3**

PROJECT CONTACT:

|           |   |
|-----------|---|
| Name      | Bill Melton P.E., Environmental Services Director |
| Address   | Mobile County Public Works                        |
|           | Mobile County Commission                          |
|           | 205 Government Street                             |
|           | Mobile, AL 36644                                  |
| Telephone | (251) 574-3229                                    |
| Fax       | (251) 574-4722                                    |
| E-mail    | bmelton@mobilecounty.net                          |

**PROJECT SUMMARY**

**LOCATION: Dauphin Island Parkway, Mobile County, Alabama  
(30° 20' 12.8" N, 87° 58' 43.8" W)**

**DURATION: Two Years**

**ESTIMATED COST:**

| MC-3               |               |
|--------------------|---------------|
| Total Project Cost | \$ 725,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 725,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-3 |               |
|------|---------------|
| 2008 | \$ 325,000.00 |
| 2009 | \$ 400,000.00 |
| 2010 | \$ -          |
| 2011 | \$ -          |

**GOAL:** The goal of this project is to enhance public access infrastructure at the Heron Bay Cut-Off to minimize damage to fragile coastal environments.

**OBJECTIVE:** The objective of this project is prevent and abate long-term damage to seagrasses and substrate due to uncontrolled access to the sensitive habitats within the project site by enhancing public access infrastructure and stabilizing the shoreline to prevent future degradation of wetlands.

Heron Bay Cut-Off is located on Dauphin Island Parkway just north of the Dauphin Island Bridge in southern Mobile County. It is a linear area park located parallel to the Alabama Department of Transportation (ALDOT) right-of-way. Thousands of people regularly use this aging access point as it is near the Cedar Point oyster beds, the Mississippi Sound, as well as Mobile Pass and Pelican Pass. Abundant fringe Juncus marsh and sea grass beds line the entire site providing productive spawning grounds for many varieties of fish and mollusk species. Uncontrolled public access at this site has impacted these fragile habitats. For example, boats are launched through the marsh digging up the seagrasses and substrate causing long term damage to these habitats.

The goal of this project is to enhance infrastructure at the Heron Bay Cut-Off to minimize damage to fragile coastal environments. The project will consist of the construction of a boat ramp, in a location chosen to minimize impact to sensitive wetlands. The dimensions of the boat ramp will be 39' by 70' and will contain two ramps and one center pile-supported wooden pier that is 5' wide x 58' with a 5' X 50' cross section on the end that will be constructed to provide the public a view of the habitats. Five (5) signs will be constructed on the pier to educate the public on seagrass habitats, protection of wetlands, and environmentally-friendly boating practices. Also, 200'± of shoreline will be stabilized to prevent further degradation of the wetlands. As this park is located adjacent to the roadway, guard rails and additional lighting will also be installed to provide for the public safety. Appendix G-30 includes a map of the Heron Bay Cut-Off.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1,, projects and activities for the conservation, protection, or restoration of coastal areas.
- Justification: This project meets Authorized Use #1 because it addresses the problems of shoreline erosion and wetland damage that has occurred as a result of uncontrolled access and will provide for management of this coastal resource for the public to enjoy and cherish as an aesthetic area for recreation while protecting the sensitive habitat against future damage.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: There will be no partnering with this project.
- Benefit to the Natural Coastal Environment: The development of amenities that support and improve natural resource based activities encourage a sense of ownership and stewardship of public land, thus protecting the natural coastal environment. These sites highlight land conservation, and demonstrate successful protection and management of coastal natural resources. Providing the public a place to experience natural resource conservation, protection, and management enhances their appreciation of the natural coastal environment. As a result, this appreciation reinforces a sense of ownership providing benefit to the natural coastal environment.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Dauphin Island Campground Improvements**

PROJECT NUMBER: **MC-4**

PROJECT CONTACT:

|           |   |
|-----------|---|
| Name      | Bill Melton P.E., Environmental Services Director |
| Address   | Mobile County Public Works                        |
|           | Mobile County Commission                          |
|           | 205 Government Street                             |
|           | Mobile, AL 36644                                  |
| Telephone | (251) 574-3229                                    |
| Fax       | (251) 574-4722                                    |
| E-mail    | bmelton@mobilecounty.net                          |

### PROJECT SUMMARY

LOCATION: **109 Bienville Blvd., E., Dauphin Island, Alabama**  
**(30° 15' 0.1" N, 88° 4' 50.9" W)**

DURATION: **One Year**

ESTIMATED COST:

| MC-4               |               |
|--------------------|---------------|
| Total Project Cost | \$ 200,000.00 |
| FY 2007            | \$ -          |
| FY 2008            | \$ 200,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-4 |               |
|------|---------------|
| 2008 | \$ 200,000.00 |
| 2009 | \$ -          |
| 2010 | \$ -          |
| 2011 | \$ -          |

GOAL: The goal of the Dauphin Island Campground Access Improvement project is to improve the physical condition of the campground.

OBJECTIVE: The objective of the project is to restore 30% of the campground sites to usable conditions by engaging activities that will improve drainage conditions, improve sanitary sewer connections and improve the electrical connections.

The Dauphin Island Campground is the only campground on Dauphin Island with over 18,000 visitors each year and is the single largest source of tourism lodging in the community. The campground is adjacent to the Audubon Bird Sanctuary and the Billy Goat Hole Boat Ramp. Due to its location, it is popular with beachgoers, birdwatchers, and boaters. It is operated by the Dauphin Island Park and Beach Board, a non profit, locally controlled entity. The goal of the Dauphin Island Campground Access Improvement project is to improve 30% of the physical conditions of the campground. A portion of the campground lies within topographically a depressed area and needs a drainage system constructed to alleviate flooding of the campsites and the sewer system. The electrical connections in the same area are old and antiquated and need to be replaced at higher amperage. The objective of this project is to restore 30% of the campground sites to usable conditions by engaging activities that will improve drainage conditions, improve sanitary sewer, and improve the electrical connections. The project will include an open channel drainage system from the depressed portion of the campground interior areas to the main road right of way. Also included in this project will be repairs to the electrical system. A major portion of the electrical services to individual camp sites are in disrepair due to age and overuse, and often fail from overload. The underground conductors will be replaced and additional service connections will be upgraded from 30 amp service to 50 amp service. Wastewater service is not available to approximately half of the camp sites and approximately 75 new services will be constructed to meet the needs of these existing sites. Appendix G-30 includes a map of the Dauphin Island Campground.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands.
- Justification: This project meets Authorized Use #1 as it because the improvement to the facilities will ensure the integrity of the sensitive coastal environment.

- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: There will be no partnering with this project.
- Benefit to Natural Coastal Environment: Improvements to the facilities at the campground will ensure that the integrity of this ecologically sensitive coastal environment is not compromised by deteriorating infrastructure such as wastewater facilities that receive heavy use by campers and day visitors alike.

Over time, poor drainage from interior areas of the campground to the right of way have eroded away wildlife habitat and contributed to erosion problems. Once hydraulic improvements to these areas are complete, improvements in wildlife habitat, reduced weed infestation, and reduced algae growth are expected to provide tangible improvements to the environment and will maintain adequate drainage for the area.

This project will indirectly benefit the natural coastal environment by providing a controlled and publicly maintained access to the resources of Dauphin Island, either via a day trip or an extended stay at the campground. Flood conditions which present an environmental hazard will be alleviated. Additionally, fees collected from campers are the single largest source of income for funding restoration and maintenance projects at the adjacent beach and Audubon Bird Sanctuary, including funding to rebuilding coastal dunes, vegetation plantings, sand fencing to control erosion and interpretive signage. Without adequate facilities for campers, revenue will decline and this once stable funding source for off-site restoration projects will be lost. In absence of these facilities, unmanaged privately owned access locations degrade the natural area with illegal dumping, can become a haven for other illicit activities, or become inaccessible for the general public. A public facility provides everyone a safe means to learn about the ecological significance of Dauphin Island. By providing a mechanism for the public to enjoy the natural resource of the Island, it allows the visitor to connect to the Island's resources and an interest will be sparked in protection and conserving publicly-owned natural resources. Subsequently, this interest will promote responsible use, foster a sense of ownership and land stewardship for future generations.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Dauphin Island Bicycle Trail Repair**

PROJECT NUMBER: **MC-5**

PROJECT CONTACT:

|           |   |
|-----------|---|
| Name      | Bill Melton P.E., Environmental Services Director |
| Address   | Mobile County Public Works                        |
|           | Mobile County Commission                          |
|           | 205 Government Street                             |
|           | Mobile, AL 36644                                  |
| Telephone | (251) 574-3229                                    |
| Fax       | (251) 574-4722                                    |
| E-mail    | bmelton@mobilecounty.net                          |

**PROJECT SUMMARY**

LOCATION: **Dauphin Island, Alabama**  
(30° 15' 9.0" N, 88° 6' 10.8" W, approximate midpoint of trail)

DURATION: **One Year**

ESTIMATED COST:

| MC-5               |              |
|--------------------|--------------|
| Total Project Cost | \$ 95,000.00 |
| FY 2007            | \$ -         |
| FY 2008            | \$ 95,000.00 |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-5 |              |
|------|--------------|
| 2008 | \$ 95,000.00 |
| 2009 | \$ -         |
| 2010 | \$ -         |
| 2011 | \$ -         |

**GOAL:** The goal of the Dauphin Island Bicycle Trail Repair project is to provide a safe and well-maintained bike trail. The Dauphin Island Bike Trail offers safe, non-invasive access to numerous wetlands, marshes, and coastal area.

**OBJECTIVE:** The objective of the project is to identify areas that are damaged and to select the most appropriate measures to restore the trail and to provide for the management of Dauphin Island's coastal resources while allowing an opportunity for the public to enjoy the area's natural resources.

The Town of Dauphin Island constructed an approximately 4 mile bike trail along the main road that connects Fort Gaines, the Audubon Bird Sanctuary, Cadillac Square, Salt Creek Park, and the Main Beach area to promote public access for birdwatchers and beachgoers. There are areas of the trail that have been damaged by tree root growth and this project seeks to identify and repair that damage in order to provide a safe and well maintained bike trail. Areas in need of repair will be identified during the engineering design phase of the project using onsite observation and will also be located with a survey station system. Areas that are identified during this phase as damaged will be repaired using the most appropriate measures, which may include the use of heavy equipment or work completed using hand tools. Appendix G-32 includes a map of the Dauphin Island Bike Trail.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands.
- Justification: This project is consistent with Authorized Use #1 as it will provide an indirect benefit to the coastal environment by maintaining controlled, non motorized access to the trail which is part of Alabama's State Park System and consists of more than 30 miles of beaches, dunes, maritime forests, salt marshes, freshwater lakes, bogs, and pine savannas.
- 
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: There will be no partnering with this project.

Indirect benefit to the Natural Coastal Environment: The bike trail offers a safe, minimal impact option for the thousands of bird watchers who visit Dauphin Island to enjoy the Audubon Sanctuary and others to enjoy the marshes and wetlands without damaging these fragile ecosystems.

As a tool for conservation, the trail preserves important natural landscapes, provides a link between various habitats and offer tremendous opportunities for protecting plant and animal species.

Trails and greenways improve air quality by protecting the plants that naturally create oxygen and filter out air pollutants such as ozone, sulfur dioxide, carbon monoxide and airborne particles of heavy metals. According to a study conducted by David Nowak in 1991, natural tree-related air filtration provided Chicago, Illinois with \$1 million in annual air pollution removal. *See: Nowak, David J, "Air Pollution Removal by Chicago's Urban Forest," Chicago's Urban Forest Ecosystem: Results of the Chicago Urban Forest Climate Project, U.S. Forest Service, 1994. Cited in Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors, National Park Service, Rivers, Trails and Conservation Assistance, 4th edition, 1995, p. 8-9.*

Trails and greenways are important tools for improving water quality. Greenways provide natural buffer zones that protect streams, rivers and lakes from pollution run-off caused by the frequent use of fertilizers, pesticides and other forms of polluted runoff. Such non-point source pollution degrades waterways and threatens water quality and the health of aquatic species.

The sanctuaries consist of maritime forest, marshes, and dunes, including a lake, swamps, and a beach. The named sites in the sanctuary system include the following:

- Shell Mound Park and Goat Tree Reserve with ancient live oak groves;
- Sea Point Saw Grass – a productive marsh system of black needle rush and spartina;
- Audubon Bird Sanctuary – a mixture of habitats including beach and dune, gum swamp, lake, and maritime forest with pine, yaupon, wax myrtle, and palmetto;
- Tupelo Gum Swamp and Gorgas Swamp Reserve – a mixed forest of tupelo gum, pine, yaupon, wax myrtle, and palmetto;
- Steiner Block: a salt marsh habitat merging into an upland pine forest community

The Bike Trail also offers public access to the following parks:

- Cadillac Square Public Park
- Aloe Bay Landing
- Calumet Public Park
- Green Park
- Jefferies Park
- Public Campgrounds
- West End Beach Public Access- Bay & Gulf
- Penalver Park
- Bayou Heron Park
- Billy Goat Hole Water Access

During spring migration, the sanctuaries at Dauphin Island often host the first landfall for neo-tropical migrants after their long flight across the Gulf of Mexico from Latin America. Here these birds, exhausted and weakened from severe weather during the flight, find their first food and shelter. For many it is the first land they see after a 600-mile trip from the Yucatan Peninsula. It also serves as a final feeding and resting place for migrants before their return flight each fall. There are 348 species on the sanctuaries' bird list, including 38 warbler species.

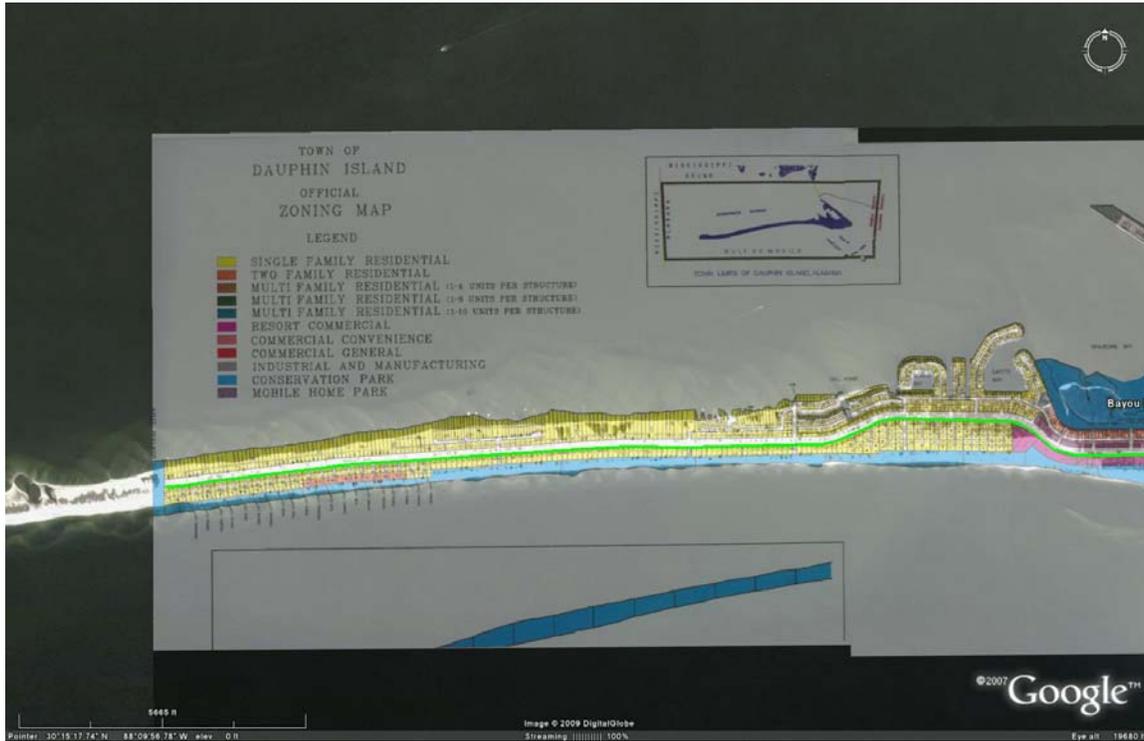
The bike trail is currently in use by residents and tourists and is in need of repair to prevent further erosion and damage to habitat located directly off-trail. This trail is utilized by many, ranging from experienced to the more casual cyclists. The repair of the damaged areas of the trail will not only improve the aesthetics of the area but will prevent cyclists from veering off-trail to circumvent obstacles thereby destroying wildlife habitat and sensitive vegetation. Additionally, clearing and restoring the damaged areas of the trail will help reduce the occurrence of erosion caused by upsets along the trail. By providing a mechanism for the public to enjoy the natural resource of the Island, it allows the visitor to connect to the Island's resources and an interest will be sparked in protection and conserving publicly-owned natural resources. Subsequently, this interest will promote responsible use, foster a sense of ownership and land stewardship for future generations and promote the goals of the U.S. Department of the Interior by providing access to a natural resource and providing recreational opportunities for the public.

The Dauphin Island Bike Trail is adjacent (denoted with a \*) to or offers access to:

|                              |   |
|------------------------------|---|
| *Audubon Bird Sanctuary      | 25,086 linear feet adjacent to the DIBT |
| *Cadillac Square             | 760 linear feet adjacent to the DIBT    |
| *Dauphin Island Park & Beach | 13,085 linear feet adjacent to the DIB  |
| *Calumet Park                | 13,082 linear feet adjacent to the DIBT |
| Billy Goat Hole              |   |
| Aloe Bay Landing             |   |
| Penalver Park                |   |
| Jefferies Park               |   |
| Bayou Heron Park             |   |
| Green Park                   |   |
| *The West End Beach          | The trail ends at the West End Beach    |



The above graphic is of the EAST end of Dauphin Island



The above graphic is of the WEST end of Dauphin Island



The above graphic is of the entire Island.

The Bike Trail is denoted by the GREEN line along Bienville Blvd.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Establishment of a Mobile County Recycling Facility**

PROJECT NUMBER: **MC-6**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton P.E., Environmental Services<br>Director |
| Address   | Mobile County Public Works                           |
|           | Mobile County Commission                             |
|           | 205 Government Street                                |
|           | Mobile, AL 36644                                     |
| Telephone | (251) 574-3229                                       |
| Fax       | (251) 574-4722                                       |
| E-mail    | bmelton@mobilecounty.net                             |

**PROJECT SUMMARY**

LOCATION: **Mobile County**

DURATION: **Four Years**

ESTIMATED COST:

| MC-6               |               |
|--------------------|---------------|
| Total Project Cost | \$ 775,000.00 |
| FY 2007            | \$ 425,000.00 |
| FY 2008            | \$ 350,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-6 |               |
|------|---------------|
| 2008 | \$ 550,000.00 |
| 2009 | \$ 75,000.00  |
| 2010 | \$ 75,000.00  |
| 2011 | \$ 75,000.00  |

**GOAL:** The goal of this project is to establish a Mobile County Recycling and Household Hazardous Waste drop off facility to reduce the amount of these materials being deposited in landfills.

**OBJECTIVE:** The objective of the project is to establish a recycling and household hazardous waste drop off center in an appropriate location in the unincorporated area of Mobile County.

The goal of this project is to establish a Mobile County Recycling Facility to reduce the amount of recyclable materials deposited in landfills. The City of Mobile's Keep Mobile Beautiful Program operates a voluntary recycling program that involves collecting and processing newspaper, aluminum and steel cans, plastic bottles, cardboard and glass. The following list provides the estimated annual amount of materials that were collected at the existing facility:

| <u>Material</u> | <u>Amount recycled (pounds)</u> |
|-----------------|---------------------------------|
| Paper           | 1.6 million                     |
| Cardboard       | 370,000                         |
| Glass           | 480,000                         |
| Plastic         | 74,000                          |
| Aluminum        | 2,700                           |
| Steel           | 31,500                          |

In addition to the waste identified above, this project will facilitate the public's need to drop off household hazardous waste. The types of household hazardous waste that will be accepted are: Paints, stains, varnishes, paint thinners, paint strippers, partially filled and full aerosol cans, containers, cleaners, polishes, waxes, adhesives, batteries, pesticides, herbicides, and used oil. Types of wastes not accepted will be fuels, PCB's, asbestos, dioxins, tires, mercury and mercury containing devices, and explosives. A structure will be built to conduct the drop off of wastes and will consist of a 100' x 100' pre-engineered steel structure enclosed on all sides. This project will be phased with engineering and design in the initial phase and construction in phase 2. A third phase will plan and implement household hazardous waste collection events open to residences of Mobile County.

The population of Mobile County is 404,157 (according to 2006 census estimates). The recycling program processing center is located in historic downtown Mobile. The estimated number of citizens in the zip codes surrounding the existing facility is 52,000. While this location is successful, it is not convenient for Mobile County residents that live outside Mobile City's historic downtown or midtown area. Mobile County would like to add an additional recycling and drop off center in Mobile County. The establishment of an additional recycling facility in Mobile County is expected to further reduce the amount of recyclable materials that are disposed of in the landfill. The numbers listed above represent the bare minimum that would be expected to be collected at a second facility.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: Opportunities for Mobile County citizens to reduce the amount of refuse deposited in landfills will be increased. The project will also provide the opportunity for greater educational awareness of the benefits of recycling.
- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: There will be no partnering on this project.
- Benefit to Natural Coastal Environment: This project will reduce the amount of materials filling landfills and extend the life expectancy of this resource. Additional landfill capacity will be made available for disposal needs created by natural disasters. Additionally, the project will reduce the illicit disposal of household hazardous waste by providing a facility for the public to conveniently take such materials. There is no permanent location for the public to legally dispose of such materials.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Mobile County Greenprint Project**

PROJECT NUMBER: **MC-7**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton P.E., Environmental Services<br>Director |
| Address   | Mobile County Public Works                           |
|           | Mobile County Commission                             |
|           | 205 Government Street                                |
|           | Mobile, AL 36644                                     |
| Telephone | (251) 574-3229                                       |
| Fax       | (251) 574-4722                                       |
| E-mail    | bmelton@mobilecounty.net                             |

**PROJECT SUMMARY**

**LOCATION: Mobile County, Alabama**

**DURATION: One Year**

**ESTIMATED COST:**

| MC-7               |              |
|--------------------|--------------|
| Total Project Cost | \$ 73,000.00 |
| FY 2007            | \$ 73,000.00 |
| FY 2008            | \$ -         |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-7 |              |
|------|--------------|
| 2008 | \$ 73,000.00 |
| 2009 | \$ -         |
| 2010 | \$ -         |
| 2011 | \$ -         |

GOAL: The goal of this project is to identify and map land parcels that may be acquired for the protection of sensitive habitats and wetlands.

OBJECTIVE: The objectives of this project are to utilize data, modeling, and community outreach to support the development and implementation of sensitive habitat protection strategies.

The unincorporated areas of Mobile County’s landscape are made up of high density suburban uses, rural and industrial areas, wetlands, marshes, uplands, rivers, a manmade reservoir (Big Creek Lake), and several bayous and creeks. As growth spreads out from the City of Mobile and extends into unincorporated areas, forests, floodplains, and other sensitive habitat are being converted to new development. The natural lands that once retained and absorbed stormwater are being lost, increasing the risk of future flooding and other storm impacts. There is a need to identify lands that will be most critical to conserve and manage and develop a plan for protecting those lands before they are lost to development. The goal of this project is to identify and map land parcels that may be acquired for the protection of sensitive habitats and wetlands. The objectives of this project are to utilize data, modeling, and community outreach to support the development and implementation of sensitive habitat protection strategies.

This project will:

1. Identify a set of community values around land conservation and park creation by engaging a diverse set of community participants in developing parks and conservation goals, and site-specific strategies for the places identified as important to protect;
2. Create a model for Mobile County that shows how the County can protect its sensitive habitats while meeting other local park and resource protection needs; create a set of maps that prioritize exactly where the community should invest its limited resources in order to meet its goals related to acquisition of lands for conservation.
3. Produce a final report providing project overview, current condition analysis, model description and modeling results, and including discussion and overview of implementation recommendations for supporting local goals.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project is consistent with Authorized Use #1 as it identifies environmentally sensitive areas for conservation and protection.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: The Mobile County Commission proposes to partner with the Trust for Public Land, the Mobile Bay National Estuary Program, and the Alabama Coastal Foundation to implement this project.
- Benefit to the Natural Coastal Environment: This project will identify lands that will be most critical to conserve and manage and develop a plan for protecting those lands before they are lost to development.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Sensitive Habitat Restoration and Enhancement of County-owned Property**

PROJECT NUMBER: **MC-8**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton P.E., Environmental Services<br>Director |
| Address   | Mobile County Public Works                           |
|           | Mobile County Commission                             |
|           | 205 Government Street                                |
|           | Mobile, AL 36644                                     |
| Telephone | (251) 574-3229                                       |
| Fax       | (251) 574-4722                                       |
| E-mail    | bmelton@mobilecounty.net                             |

**PROJECT SUMMARY**

LOCATION: **Unincorporated Mobile County**

DURATION: **Four Years**

ESTIMATED COST:

| MC-8               |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,000,000.00 |
| FY 2007            | \$ 500,000.00   |
| FY 2008            | \$ 500,000.00   |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-8 |               |
|------|---------------|
| 2008 | \$ 250,000.00 |
| 2009 | \$ 250,000.00 |
| 2010 | \$ 250,000.00 |
| 2011 | \$ 250,000.00 |

**GOAL:** The goal of this project is to enhance or restore and protect sensitive habitats on county-owned property.

**OBJECTIVE:** The objective of this project is to improve 800 acres of county-owned properties by engaging activities that will enhance the property’s environmental attributes. The actions are restoration of stream corridor, enhancement of wetland areas, improvements to sensitive habitats with the removal of invasive plant species, planting of native trees, removal of damaged trees and vegetation, construction of maintenance access roads, and shoreline restoration and protection.

The Mobile County Commission owns a number of properties containing sensitive habitats that would benefit from restoration and enhanced management. They include property on Laurendine Road (approximately 2000 acres with 2 streams and wetlands), Half Mile Road (approximately 52 acres with wetlands), and shoreline property along the southern portion of Dauphin Island Parkway. The goal of this project is to enhance, protect and/or restore sensitive habitats on county-owned property. The objective of this project is to increase the number of acres owned by the County of Mobile that serve to benefit the natural coastal environment including benefits to wildlife, native vegetation, and water quality. This project will be divided into sub-projects and developed in a phased approach. Phase I will include planning and design activities to better identify and detail the sub-projects. Phase I will also include training for County personnel as discussed further below. Phase II will include sub-project implementation. Three miles of stream corridor will be included in the project and 1000 square yards of accumulated sediment will be removed. Invasive trees and vegetation will be eradicated along the same corridor. Other activities will include the removal of damaged trees and vegetation, restoration of stream corridor, construction of maintenance access roads and control burn fire breaks, and shoreline restoration and protection. Additional activities that will be evaluated during an engineering phase include repairs to a boat ramp, replacement of a storm destroyed pier, demolition of a structure, replacement of marsh grass, and improvements to a parking area. All activities are to be performed pursuant to the advice of a professional registered forester and a professional biologist with a background in coastal wetland restoration. The services of a professional registered forester will be retained to assist in management practices, and 300-400 acres of pine and cypress trees will be planted per the recommendation of the forester. Site preparation activities are included and will consist of both mechanical and chemical methods. The removal of debris from logging operations and soil conditioning will be performed to maximize growth. Forestry management services after trees are planted are not included. Training for County personnel is included in the project to facilitate management of the county-owned properties without the use of outside assistance.

Five county staff personnel will attend training, conferences, seminars, and workshops to improve education and expertise in stream restoration, wetland mitigation, floodplain management, natural disaster mitigation and preparedness and recovery, stormwater quality monitoring and management, and shoreline restoration and protection. This training will be conducted over a period of four years and will include attending the Annual National Mitigation and Conservation Conference with a concentration on such courses as wetland mitigation & conservation, stream mitigation and restoration, The New Mitigation Rule Workshop, and seagrass mitigation. Staff will attend the National Hurricane Conference with a concentration on protection, recovery, and mitigation of publicly maintained properties including workshops on Debris Management, Mitigation Planning for Local Government, Recovery Public Assistance, and other relevant courses, seminars, workshops, or conferences that are offered during this period. Although the names of all courses cannot be named at this time, the courses will be limited to the subjects mentioned in this project. Education for staff also includes courses designed for the protection and administration of floodplains including HEC-RAS and other hydraulic and hydrologic analysis of other flood prone areas.

This project will also include acquisition of equipment needed to implement and maintain project objectives. The equipment to be purchased will be a 50 hp or larger tractor with attachments, 99 hp compact track loader with rotary drum mulcher and attachments, two 6 X 6 low ground pressure, +700cc, fuel injected, dump bed all terrain vehicles, small equipment, herbicide, limestone, seed, and native vegetation. A storage building not to exceed 25 X 20 feet, 20 X 25 greenhouse, consulting services, and tree planting services will also be required.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands.
- Justification: This project is consistent with Authorized Use #1 as it will restore, protect, and enhance coastal areas including wetlands on County owned properties.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: There will be no partnering with this project.
- Benefit to the Natural Coastal Environment: With the enhancement and/or restoration of sensitive habitats Mobile County will provide the much needed conservation, protection, and management of our coastal natural resources. Indirect and direct benefits to the natural coastal environment include restoration of native shoreline vegetation, protection of shoreline property from coastal erosion, provision of controlled public access, restoration of wetland and stream bank impacts, advancement of environmental stewardship through staff training, protection of floodplain through technical and administrative program management.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama**

PROJECT NUMBER: **MC-9**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton P.E., Environmental Services<br>Director |
| Address   | Mobile County Public Works                           |
|           | Mobile County Commission                             |
|           | 205 Government Street                                |
|           | Mobile, AL 36644                                     |
| Telephone | (251) 574-3229                                       |
| Fax       | (251) 574-4722                                       |
| E-mail    | bmelton@mobilecounty.net                             |

### PROJECT SUMMARY

LOCATION: **Mobile County, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| MC-9               |               |
|--------------------|---------------|
| Total Project Cost | \$ 250,000.00 |
| FY 2007            | \$ 152,000.00 |
| FY 2008            | \$ 98,000.00  |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-9 |               |
|------|---------------|
| 2008 | \$ -          |
| 2009 | \$ 250,000.00 |
| 2010 | \$ -          |
| 2011 | \$ -          |

**GOAL:** The goal of this project is to facilitate management research of Alabama’s coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

**OBJECTIVE:** The objective of this project is to contribute a \$250,000.00 of CIAP funding to purchase, install, and support the operation of a continuous and real-time weather and water quality recording station in Mississippi Sound/Portersville Bay.

It is a priority of the State of Alabama CIAP to support coastal observing systems as these systems provide much-needed data to understand and manage complex estuarine systems. The collection of continuous, real-time observations in coastal Alabama began with support of the first CIAP program, administered by NOAA in 2001. Since then, Dauphin Island Sea Lab and the Mobile Bay National Estuary Program have partnered with the University of South Alabama, Weeks Bay National Estuarine Research Reserve, the Alabama Department of Conservation, State Land Division, Coastal Programs, EPA’s Gulf of Mexico Program and the Alabama Lighthouse Association to provide real-time data at four sites in the Mobile Bay area. Parameters being monitored at these sites include wind speed, wind direction, air temperature, barometric pressure, photosynthetically active radiation, precipitation, water temperature, dissolved oxygen, water height, and salinity. Real-time data are available in a user-friendly format at [www.mymobilebay.com](http://www.mymobilebay.com). This informative website describes and graphs each parameter. Researchers may download the data in a spreadsheet format any time for further analysis. Data from these stations can also be accessed through the National Data Buoy Center at:

[http://www.ndbc.noaa.gov/maps/Alabama\\_inset.shtml](http://www.ndbc.noaa.gov/maps/Alabama_inset.shtml).

Through a partnership, the State of Alabama, Baldwin County, and Mobile County will add monitoring sites to complete an east-west transect in the coastal area of Alabama (AL-21, BC-9 and MC-9). This project will construct data collection devices and support the implementation and operation of the network for two years. The costs associated with the implementation of each monitor include salaries (data manager, technician, and project manager), boat and vehicle expenses, and other expendables. The State of Alabama will contribute CIAP funding to purchase, install and implement a monitor in Bon Secour Bay, partnering with funding from NOAA. Baldwin County will fund the purchase, install and implement a monitor in Perdido Bay, and the Mobile County will purchase, install, and implement a monitor in the Mississippi Sound/Portersville Area. The State of Alabama, Baldwin County, and Mobile County will each

submit a separate grant application for their respective project within this grant. Appendix G-11 contains a map depicting the proposed monitor locations. The map also depicts the locations of the existing funded monitors.

The data collected from the Continuous and Real-time Recording Station of Meteorological and Hydrological Parameters have been used and will be used for a numerous coastal conservation, protection and restoration projects. For example, the Dauphin Island Sea Lab's technical support group has been maintaining a real-time water quality monitoring station at the Middle Bay Light in Mobile Bay, Alabama since fall 2004. At the Middle Bay Light station, current conditions have been served at a website (<http://cast-net.disl.org/monitoringdata/StationInfoBmiddlebay.asp?jday=&property=&chartyear=&StationID=188>) for meteorological (air temperature, relative humidity, wind speed and direction, barometric pressure, precipitation, and photosynthetically active radiation) and hydrographic (water level, temperature, salinity, and dissolved oxygen) parameters. The hydrographic parameters, in particular, are collected by a vertical profiler, which gives hourly vertical profiles at a 0.5 m interval.

The University of South Alabama, Department of Marine Resources has completed extensive research using the data from the Middle Bay Lighthouse station. This research has recently developed a hydrodynamic model that simulates physical transport processes in Mobile Bay. The dredged ship channel serves as a conduit through which salty seawater intrudes upriver, thereby significantly affecting horizontal salinity gradient (baroclinic forcing). The data from the Middle Bay Light station are invaluable in detecting and characterizing the intrusion events. We have observed the presence of strong vertical stratification along the ship channel, which can be destratified during the times of high energy events such as strong winds and high freshwater discharges. Stratification/destratification plays an important role in the formation of hypoxic bottom water in the ship channel. It also affects the water in the nearby shallow areas where strong stratification and hypoxic bottom waters have also been observed during summer. Therefore, vertical profiles of density (salinity and temperature) and dissolved oxygen recorded by a vertical profiler at the Middle Bay Light are invaluable in studying temporal and spatial patterns and variations of stratification and bottom hypoxia.

Other research included the study of the development of a larval transport model for Eastern Oyster, funded by Alabama Oyster Reef Restoration Program. One key component of this project is to study the characteristics of larval transport and spat distribution in the lower Mobile Bay and eastern Mississippi Sound using the model under various environmental conditions. Characterization of various environmental conditions (i.e. design of scenario runs from the standpoint of model) is critical, which has to be based on the data of meteorological (e.g. wind) and hydrographic (e.g. salinity) parameters. The data from the Middle Bay Light will certainly be used for this purpose.

An additional application of the data included the collection of data over the long term which can be used for designating water use criteria and providing baseline readings for 303(d) improvements. Specifically, Mobile Bay (AL/03160205-010-01-1998) Fish and Wildlife, Shellfish Harvesting and Swimming Waters have been 303(d) listed for low dissolved oxygen as a result of urban runoff and storm sewers. Currently there are a limited number of water monitoring stations in Mobile Bay which provide data suitable for designated water use criteria.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will obtain data necessary for scientific research and investigation of coastal areas. These data are necessary in conserving, protecting, and restoring complex coastal ecosystems
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding. The State of Alabama, Baldwin County, and Mobile County (AL-21, BC-9, and MC-9) will partner to create an east-west transect of continuous and real-time weather and water quality recording stations along southern coastal Alabama.

This project contains many partners in addition to CIAP. Specifically, the Dauphin Island Sea Lab, Mobile Bay National Estuary Program, University of South Alabama, Weeks Bay National Estuarine Research Reserve, the Alabama Department of Conservation, State Land Division, Coastal Program, EPA's Gulf of Mexico Program and the Alabama Lighthouse Association have all contributed to the implementation of these systems in coastal waters. Additional funding from the Emergency Disaster Response Fund (EDRF) is being utilized to purchase and maintain monitors in the Mississippi Sound, near the western boundary of Mobile County.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **North Mobile County Wastewater Facilities**

PROJECT NUMBER: **MC-10**

PROJECT CONTACT:

|           |   |
|-----------|---|
| Name      | Bill Melton P.E., Environmental Services Director |
| Address   | Mobile County Public Works                        |
|           | Mobile County Commission                          |
|           | 205 Government Street                             |
|           | Mobile, AL 36644                                  |
| Telephone | (251) 574-3229                                    |
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| E-mail    | bmelton@mobilecounty.net                          |

**PROJECT SUMMARY**

LOCATION: **Mobile County, Alabama**

DURATION: **Three Years**

ESTIMATED COST:

| MC-10              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,500,000.00 |
| FY 2007            | \$ 650,000.00   |
| FY 2008            | \$ 850,000.00   |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-10 |               |
|-------|---------------|
| 2008  | \$ 500,000.00 |
| 2009  | \$ 500,000.00 |
| 2010  | \$ 500,000.00 |
| 2011  | \$ -          |

**GOAL:** The goal of this project is to reduce the number of on-site sewage disposal systems and therefore reduce pathogens to local waters.

**OBJECTIVE:** The objective of the project is to remove 200 homes from use of on-site sewage disposal by facilitating the connection of residential on-site sewage disposal systems to either a public or privately operated conveyance system along the I-65/Highway 43 corridor.

The I-65/Highway 43 corridor between Satsuma and Mount Vernon in northeast Mobile County is home to high density residential and commercial land uses. Small portions of this area are served by publicly owned wastewater treatment facilities while most of the areas utilize on-site disposal of wastewater through septic tanks, many of which are failing due to age, design, and lack of adequate maintenance. The goal of this project is to reduce the number of residential on-site sewage disposal systems and therefore reduce pathogens to local waters. The objective of the project is to engage public/private partnerships and facilitate connection of on-site systems to conveyance facilities. This project will take place in two phases. The first phase will identify the areas where septic systems can be connected to a wastewater conveyance system and produce a design for a collection system. The second phase will be the construction of the collection system. Maintenance costs and other subsequent costs after connection are not included in this project. The costs of wastewater treatment plants or conveyance pump stations or their appurtenances are not included in this project. Once the collection system is constructed, the operation and maintenance responsibility of the system is placed upon the wastewater treatment plant owner. On-site disposal systems are connected to the collection system and the costs associated with this action is not funded by this project.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use No. 1, conservation, protection, or restoration of coastal areas, including wetlands.
- **Justification:** This project is consistent with Authorized Use No. 1 because it serves toward the protection of groundwater and the coastal waters from pathogenic contaminants.
- **Cost Sharing:** Cost sharing is not applicable to this project.

- Partnering: There will be no financial partnering with this project.
- Benefit to the Natural Coastal Environment: Sanitary sewer infrastructure in this area is an integral component of protecting local waterways from pathogens associated with failing septic systems. Locally heavy rainfall and close proximity to vital commercial and recreational waterways underscore the importance of properly maintained and operated treatment systems. Reducing the area's dependence on septic systems is expected to greatly reduce the introduction of pathogens to these waterways, which will decrease the frequency and impact of algae blooms due to nutrient overload; it will also reduce the number of marine life and human health warnings associated with wastewater contamination.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Coastal Research Weather Stations**

PROJECT NUMBER: **MC-11**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton P.E., Environmental Services<br>Director |
| Address   | Mobile County Public Works                           |
|           | Mobile County Commission                             |
|           | 205 Government Street                                |
|           | Mobile, AL 36644                                     |
| Telephone | (251) 574-3229                                       |
| Fax       | (251) 574-4722                                       |
| E-mail    | bmelton@mobilecounty.net                             |

### PROJECT SUMMARY

LOCATION: **Mobile County**

DURATION: **Two Years**

ESTIMATED COST:

| MC-11              |               |
|--------------------|---------------|
| Total Project Cost | \$ 145,000.00 |
| FY 2007            | \$ 145,000.00 |
| FY 2008            | \$ -          |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-11 |              |
|-------|--------------|
| 2008  | \$ 72,500.00 |
| 2009  | \$ 72,500.00 |
| 2010  | \$ -         |
| 2011  | \$ -         |

GOAL: The goal of the Coastal Research Weather Stations project is to enhance ability to conserve and protect natural coastal environments through an improved weather data collection system.

OBJECTIVE: The objective of the project is to establish weather stations throughout Mobile County that are accessible by local schools and universities to improve understanding, prediction, and monitoring of weather patterns and natural hazards to inform decisions by authorities and the public to better plan for, manage, and mitigate within the natural coastal environment.

The University of South Alabama Mesonet program combines weather data collection for the National Weather Service and the University of South Alabama (USA) Weather Center with a program that makes the data collected available on the internet for students and teachers. The program also includes experts from USA providing local teachers with training on the importance and use of weather data in the classroom. The goal of the Coastal Research Weather Stations project is to enhance computer enabled environmental education activities for Mobile County students. The objective of the project is to establish weather stations throughout Mobile County that are accessible by local schools.

The project will include installation of at least six weather stations that contain wind monitors, barometers, temperature/humidity sensors, rain gauges, and soil moisture probes and that are connected to the internet. Station locations will be provided for the grant application.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it is for conservation and protection to natural coastal environments.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: There will be no partnering with this project.

- Benefit to the Natural Coastal Environment: By creating a real time data retrieval system, students, teachers, experts, weather stations, and monitors are able to access the data collected and report all changes in wind, barometric pressure, temperature/humidity, water quality, salinity, and soil conditions. Coordinated and comprehensive data can be utilized to predict and analyze changes in the local area's weather patterns and will aid in assessing the best course of action to protect environmentally sensitive habitats from the harmful effects of these changes and/or severe weather events.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **West Mobile County Conservation Property Acquisition**

PROJECT NUMBER: **MC-12**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton P.E., Environmental Services<br>Director |
| Address   | Mobile County Public Works                           |
|           | Mobile County Commission                             |
|           | 205 Government Street                                |
|           | Mobile, AL 36644                                     |
| Telephone | (251) 574-3229                                       |
| Fax       | (251) 574-4722                                       |
| E-mail    | bmelton@mobilecounty.net                             |

**PROJECT SUMMARY**

LOCATION: **Mobile County, Alabama**

DURATION: **Three Years**

ESTIMATED COST:

| MC-12              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 2,250,000.00 |
| FY 2007            | \$ 825,000.00   |
| FY 2008            | \$ 1,425,000.00 |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-12 |               |
|-------|---------------|
| 2008  | \$ 750,000.00 |
| 2009  | \$ 750,000.00 |
| 2010  | \$ 750,000.00 |
| 2011  | \$ -          |

**GOAL:** The goal of this project is to acquire, for conservation purposes, environmentally sensitive areas in West Mobile County.

**OBJECTIVE:** The objective of this project is to purchase tracts (475 acres) of coastal areas and manage the tracts for conservation purposes.

West Mobile County is home to the Big Creek Watershed, the Escatawpa River Watershed, and other watersheds that contain undeveloped tracts of land. Big Creek Lake is the major drinking water source for Mobile County. The Escatawpa River is widely recognized as one of the finest undeveloped black water streams in the nation. Parts of the area are also identified as Gopher Tortoise (*Gopherus polyphemus*) habitat (listed as endangered in Mobile County). The goal of this project is to acquire, for conservation purposes, coastal areas in West Mobile County. This project will be completed in two phases: phase one will consist of the identification of property for acquisition and phase two will include the purchase and associated activities for the areas identified in phase one.

The Mobile County Commission proposes to purchase tracts of coastal areas (approximately 475 acres) and manage the tracts for conservation purposes. Deed restrictions will be placed on these parcels. Elements of this project include appraising potential parcels for acquisition and developing and implementing conservation management plans.

Market conditions prevent the identification of specific parcels at this time so the project will be phased with the initial phase identifying the parcels to be purchased.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project will acquire land for conservation within the coastal area of Alabama.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: There will be no partnering with this project.

- Benefit to the Natural Coastal Environment: Natural lands that once retained and absorbed stormwater and provided animal habitat are being lost to development, thereby increasing the risk of future flooding and other adverse impacts. With the acquisition of these lands Mobile County will provide the much needed conservation, protection, and management of our coastal natural resources.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Acquisition of Sensitive Waterfront Property, Dauphin Island**

PROJECT NUMBER: **MC-13**

PROJECT CONTACT:

|           |   |
|-----------|---|
| Name      | Bill Melton P.E., Environmental Services Director |
| Address   | Mobile County Public Works                        |
|           | Mobile County Commission                          |
|           | 205 Government Street                             |
|           | Mobile, AL 36644                                  |
| Telephone | (251) 574-3229                                    |
| Fax       | (251) 574-4722                                    |
| E-mail    | bmelton@mobilecounty.net                          |

PROJECT SUMMARY

LOCATION: **Dauphin Island, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| MC-13                    |                 |
|--------------------------|-----------------|
| Total Project Cost       | \$ 2,000,000.00 |
| State of Alabama FY 2007 | \$ -            |
| State of Alabama FY 2008 | \$ 1,000,000.00 |
| Mobile County FY 2007    | \$ -            |
| Mobile County FY 2008    | \$ 1,000,000.00 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC-13 |                 |
|-------|-----------------|
| 2008  | \$ 1,000,000.00 |
| 2009  | \$ -            |
| 2010  | \$ -            |
| 2011  | \$ -            |

GOAL: Using CIAP funding, the State of Alabama and Mobile County will partner to protect and acquire sensitive waterfront habitat on Dauphin Island.

OBJECTIVE: The objective of this project is to acquire waterfront property on Dauphin Island at a cost not to exceed \$2,000,000.00. The State of Alabama and the Mobile County Commission will split the cost of acquisition evenly with each entity providing up to \$1,000,000.00.

Dauphin Island, Alabama (30° 15' 8.34" N, 88° 66' 32.98" W) is a coastal barrier island located at the southern tip of Mobile County, Alabama. The island is surrounded by many bodies of water including the Gulf of Mexico, Mississippi Sound, and Mobile Bay. The island is composed of beaches and dunes, maritime forests, and wetlands on approximately 6.1 square miles. According to 2000 Census data, the full-time population on the island is 1,212. Conservation-oriented outdoor activities on the island include fishing, camping, and bird watching. There are many conservation destinations on the island including the Dauphin Island Sea Lab Estuarium, Historic Fort Gaines, and the Audubon Bird Sanctuary.

The shoreline habitats of Dauphin Island provide many ecological benefits, including shoreline stabilization and productive nesting and foraging areas for fish and wildlife. Many of these important and rare waterfront areas are privately-owned on Dauphin Island, threatening adverse impacts from development. Also, waterfront sites for the public to participate in low impact natural resource-based educational activities are in great demand.

The objective of this project is to acquire waterfront property on Dauphin Island at a cost not to exceed \$2,000,000.00. This project will be a Phased Project Phase 1 of this project will identify a suitable parcel and obtain an appraisal. Phase 2 of this project will purchase the property. The State of Alabama (AL-24) and the Mobile County Commission will split the cost of acquisition evenly with each entity providing up to \$1,000,00.00. The parcel will be available for public use and at least (3) natural resource-based educational signage will be installed. The title of the property will be held by the Town of Dauphin Island and the deed will be restricted according CIAP requirements. At this time, the specific acreage of the acquired tract is unknown. Through a partnership, the cost of the acquired land will be split equally between the State of Alabama and Mobile County. Per program guidelines, the land acquisition will follow the Uniform Appraisal Standards for Federal Land Acquisitions.

This site will provide public access to the waterways of southern Alabama for natural resource-based educational activities such as birding and research. The parcel will be used as a main exit and entry point for the Coastal Kayaking Trail (AL-5), which will create a water-based trail linking Alabama's coastal communities and ecosystems. In addition, the site may be a candidate for inclusion in the Alabama Coastal Birding Trail ([www.alabamacoastalbirdingtrail.com](http://www.alabamacoastalbirdingtrail.com)). This trail, among other things, serves as a means to educate users about coastal Alabama's abundant natural resources. During spring and fall migrations, Dauphin Island can be one of the best birding locations along the entire Gulf Coast and has hosted nationally-recognized birding events. Future projects at the acquired property could include restoration of near shore intertidal habitat and construction of low impact public facilities to complement the goal of this project. . Improvements to this property will utilize non-CIAP funding sources and will be submitted to the MMS for approval.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas including wetland.
- Justification: This project meets Authorized Use #1 because it involves the acquisition of sensitive land for conservation within the coastal area of Alabama. The deed will be restricted according to CIAP requirements.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: The State of Alabama will contribute \$1,000,000.00 of CIAP funding to this project. The Mobile County Commission will contribute \$1,000,000.00 of CIAP funding to this project.



## 9. Proposed Tier Two Project Descriptions

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a. State of Alabama Tier Two Project Descriptions

| Project Number | Project Title  | Project Cost    | Page Number |
|----------------|--|-----------------|-------------|
| MC-1           | Administration of the Coastal Impact Assistance Program  | \$ 362,030.28   | 205         |
| MC-2           | Mobile County River Delta Tourism and Welcome Center Property Acquisition and Improvements                   | \$ 1,527,000.00 | 207         |
| MC-3           | Heron Bay Cut-Off Access Improvements  | \$ 725,000.00   | 211         |
| MC-4           | Dauphin Island Campground Improvements   | \$ 200,000.00   | 215         |
| MC-5           | Dauphin Island Bicycle Trail Repair  | \$ 95,000.00    | 219         |
| MC-6           | Establishment of a Mobile County Recycling Facility  | \$ 775,000.00   | 227         |
| MC-7           | Mobile County Greenprint Project   | \$ 73,000.00    | 231         |
| MC-8           | Sensitive Habitat Restoration and Enhancement of County-owned Property                                       | \$ 1,000,000.00 | 235         |
| MC-9           | Continuous and Real-time Recording Stations of Meteorological and Hydrographic Parameters in Coastal Alabama | \$ 250,000.00   | 239         |
| MC-10          | North Mobile County Wastewater Facilities  | \$ 1,500,000.00 | 243         |
| MC-11          | Coastal Research Weather Stations  | \$ 145,000.00   | 247         |
| MC-12          | West Mobile County Conservation Property Acquisition   | \$ 2,250,000.00 | 251         |
| MC-13          | Acquisition of Sensitive Waterfront Property, Dauphin Island   | \$ 1,000,000.00 | 255         |
| Total          |  | \$ 9,902,030.28 |             |



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Biodiversity Inventories in Designated Protected Areas of Coastal Alabama**

PROJECT NUMBER: **AL2-1**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Jo Lewis, Chief Natural Heritage Section         |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3484                                   |
| Fax       | (251) 621-1331                                   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | jo.lewis@dcnr.alabama.gov                        |

### PROJECT SUMMARY

**LOCATION:** Grand Bay Savanna in southwestern Mobile County, Mobile Tensaw Delta, Splinter Hill Bog in northern Baldwin County, Weeks Bay, Perdido River corridor in eastern Baldwin County, and Lillian Swamp in southeastern Baldwin County (see Appendix G-4)

**DURATION:** Four Years

ESTIMATED COST:

| AL2-1              |               |
|--------------------|---------------|
| Total Project Cost | \$ 500,000.00 |
| FY 2007            | \$ 500,000.00 |
| FY 2008            | \$ -          |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-1  |               |
|--------|---------------|
| Year 1 | \$ 125,000.00 |
| Year 2 | \$ 125,000.00 |
| Year 3 | \$ 125,000.00 |
| Year 4 | \$ 125,000.00 |

**GOAL:** The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to implement three biological surveys detailing plant and animal species composition and biodiversity. The surveys will result in a report and geographic database of species locations.

The goal of this project is to conserve natural areas in coastal Alabama's designated protected areas (Grand Bay Savanna, Lillian Swamp, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) by managing native habitats through better understanding of the plant and animal species composition and biodiversity.

Through a partnership with the Geological Survey of Alabama, the State of Alabama conducted an aquatic inventory of the Mobile-Tensaw Delta using 2001 CIAP funding. This project generated a report listing the species composition of the MTD and has been instrumental in developing management plans for rare, endemic, threatened, or endangered species, as well as obtaining grant funding. The State of Alabama would like to conduct similar inventories in other designated protected areas in coastal Alabama, specifically the Grand Bay Savanna, Splinter Hill Bog, Mobile Tensaw Delta (expanding upon the 2001 CIAP studies), Lillian Swamp, and Perdido River Corridor as little information concerning species composition in these areas exists. In addition to a summary report, the inventory will produce a geographic database of species location which will be incorporated in the State's official Natural Heritage Database. Details concerning each biological inventory project will be provided when grants are submitted.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will provide data to better manage designated protected areas in coastal Alabama. More successful management of these areas will conserve and protect coastal areas.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Assessment of Coastal Alabama Salt Marsh Communities**

PROJECT NUMBER: **AL2-2**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Jo Lewis, Chief Natural Heritage Section         |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3484                                   |
| Fax       | (251) 621-1331                                   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | jo.lewis@dcnr.alabama.gov                        |

### PROJECT SUMMARY

LOCATION: **Salt marshes located in Mobile and Baldwin Counties**

DURATION: **Four Years**

ESTIMATED COST:

| AL2-2              |               |
|--------------------|---------------|
| Total Project Cost | \$ 200,000.00 |
| FY 2007            | \$ 200,000.00 |
| FY 2008            | \$ -          |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-2  |              |
|--------|--------------|
| Year 1 | \$ 50,000.00 |
| Year 2 | \$ 50,000.00 |
| Year 3 | \$ 50,000.00 |
| Year 4 | \$ 50,000.00 |

**GOAL:** The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to implement three assessments of salt marsh indicator species. The assessment will result in a report and a geographic database.

In addition to being highly productive systems, the salt marshes of coastal Alabama provide many benefits such as habitat, breeding grounds, and foraging areas for a variety of plant and animal species. According to recent land use data, approximately 5% of all the wetlands in coastal Alabama are salt marshes. The goal of this project is to obtain a better understanding of salt marsh plant and animal species composition and biodiversity. The objective of this project is to implement three assessments of qualitative salt marsh indicator species. Higher number of these species is an indication of successful conservation of this habitat type and will help SLD managers conserve and protect these ecosystems more efficiently. In addition to creating successful management strategies, the results of the assessments will be used to obtain other federal grants. The species to be assessed will include Rallidae spp., Diamondback terrapins, and aquatic minnows. Assessments will result in a written report and a geographic database of the indicator species.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will provide data to better manage designated protected areas in coastal Alabama. More successful management of these areas will conserve and protect coastal areas.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Development of Natural Resource-based Public Education and Outreach  
Materials for Coastal Alabama**

PROJECT NUMBER: **AL2-3**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Hank Burch, State Lands Manager                  |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | Five Rivers Alabama's Delta Resource Center      |
|           | 30945 Five Rivers Boulevard                      | 30945 Five Rivers Boulevard                      |
|           | Spanish Fort, Alabama 36527                      | Spanish Fort, Alabama 36527                      |
| Telephone | (251) 621-1238                                   | (251) 625-0814                                   |
| Fax       | (251) 621-1331                                   | (251) 625-0864                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | hank.burch@dcnr.alabama.gov                      |

### PROJECT SUMMARY

LOCATION: **Coastal Alabama**

DURATION: **Four Years**

ESTIMATED COST:

| AL2-3              |               |
|--------------------|---------------|
| Total Project Cost | \$ 500,000.00 |
| FY 2007            | \$ 500,000.00 |
| FY 2008            | \$ -          |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-3  |               |
|--------|---------------|
| Year 1 | \$ 125,000.00 |
| Year 2 | \$ 125,000.00 |
| Year 3 | \$ 125,000.00 |
| Year 4 | \$ 125,000.00 |

**GOAL:** The goal of this project is to increase public awareness of conservation and protection of coastal Alabama’s designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) through the production of natural resource-based educational materials.

**OBJECTIVE:** This project will design and print five separate conservation education products such as books, maps, videos, posters, calendars, and/or brochures for distribution to schools to educate at least 70,000 students. In addition, this project will construct a water quality kiosk at Five Rivers Alabama’s Natural Resource Center to provide 75,000 people annually a hands-on interactive exhibit of water quality dynamics.

Coastal Alabama has a wealth of natural resources, and the conservation and protection of these resources is essential as development and population increases. This project will increase public awareness of Alabama's natural resources through the production five (5) educational materials such as books, brochures, maps, posters and videos. The educational materials will highlight the state's designated protected areas (Grand Bay Savanna, Lillian Swamp, Gulf State Park, Splinter Hill Bog, Perdido River Corridor and Mobile-Tensaw Delta) and describe the diverse flora and fauna, as well as the rich history and culture of Coastal Alabama. An example product would be a colorful poster of the "Butterflies of Coastal Alabama" or a brochure on the mound-building "Bottle Creek Indians". Educational materials such as this will promote Alabama's conservation endeavors, and will be distributed throughout classrooms in the coastal counties and in SLD facilities such as Weeks Bay Reserve and Five Rivers Delta Resource Center. Distribution goals are at least 70,000 students and at least 75,000 visitors to SLD facilities. The specific products and associated budgets will be developed at the grant phase of this project. Costs associated with this project include design fees, printing expenses and labor. The budget for this project is \$400,000.00.

A water quality exhibit will be constructed at Five Rivers Alabama’s Delta Resource Center that displays ambient water quality parameters in an interactive ‘hands-on’ exhibit. The objective of the exhibit is to educate 75,000 people (i.e. visitors to Five Rivers) annually on the dynamics of water quality. For example, one display could highlight the salinity gradient north and south of the Mobile Bay Causeway. The associated budget for this project is \$100,000.00. The kiosk will be 12-feet 20-feet and will contain an interactive monitor displaying past and present water quality parameters.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will promote conservation endeavors in coastal Alabama, thus conserving and protecting coastal areas. For example, a poster depicting the butterflies of the Grand Bay Savanna will foster a sense of ownership of public lands and their associated natural resources and will help the public identify with these projects.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Implement and Expand Prescribed Burning Program**

PROJECT NUMBER: **AL2-4**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Ricky Hunt, Land Management Officer, Supervisor  |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3484                                   |
| Fax       | (251) 621-1331                                   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | ricky.hunt@dcnr.alabama.gov                      |

**PROJECT SUMMARY**

**LOCATION: Designated Protected Areas throughout coastal Alabama**

**DURATION: Four Years**

**ESTIMATED COST:**

| AL2-4              |               |
|--------------------|---------------|
| Total Project Cost | \$ 100,000.00 |
| FY 2007            | \$ 100,000.00 |
| FY 2008            |               |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-4  |              |
|--------|--------------|
| Year 1 | \$ 25,000.00 |
| Year 2 | \$ 25,000.00 |
| Year 3 | \$ 25,000.00 |
| Year 4 | \$ 25,000.00 |

**GOAL:** It is a goal of the State of Alabama CIAP to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to initiate fire on 1000 acres throughout designated protected areas in coastal Alabama.

The goal of this project is to restore habitat and natural area in Alabama's coastal area through controlled burns on 1000 acres of designated protected areas in coastal Alabama. This is a four-year project and this project will burn 250 acres per year.

Re-establishment of fire in historically fire-dependant communities is identified as a vital restoration strategy. Coastal Alabama longleaf pine ecosystems depend on fire to achieve and maintain a diverse understory. Long-term studies show that the frequent use of fire hastens initiation of height growth, reduces undesirable competing vegetation, and provides habitat for numerous flora and fauna. The State Lands Division conservation staff will establish and implement burning plans in designated protected areas during the winter and growing season. In addition, fire frequency and duration will be documented and researched in order to maximize burning effectiveness. This project will enhance the Division's existing capacity by funding labor, materials and equipment necessary to implement burn plans resulting in an additional 1000 acres of burned areas in designated protected areas throughout the project period. In addition, construction of fire lines and mechanical removal of excess fuel will be implemented as needed. Burning will take place in designated protected areas of coastal Alabama including Grand Bay, Weeks Bay, Perdido River Corridor, and the Mobile-Tensaw Delta, and Splinter Hill Bog. Appendix G-4 includes a map of the designated protect areas of coastal Alabama.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it restores fire to fire-dependant communities in the coastal area.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Expansion of the Graduate Research Program at Weeks Bay National  
Estuarine Research Reserve**

PROJECT NUMBER: **AL2-5**

PROJECT CONTACT (s):

|           | Primary Contact  | Secondary Contact  |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner                    | Phillip Hinesley, Chief Coastal Section                    |
| Address   | Alabama State Lands Division                               | Alabama State Lands Division, Coastal Section              |
|           | Department of Conservation and Natural Resources           | Department of Conservation and Natural Resources           |
|           | Five Rivers Alabama's Delta Resource Center                | Five Rivers Alabama's Delta Resource Center                |
|           | 30945 Five Rivers Boulevard<br>Spanish Fort, Alabama 36527 | 31115 Five Rivers Boulevard<br>Spanish Fort, Alabama 36527 |
| Telephone | (251) 621-1238   | (251) 621-1216   |
| Fax       | (251) 621-1331   | (251) 621-1331   |
| E-mail    | cara.stallman@dcnr.alabama.gov                             | phillip.hinesley@dcrn.alabama.gov                          |

### PROJECT SUMMARY

LOCATION: **Weeks Bay, Fairhope, Alabama**

DURATION: **Four Years**

ESTIMATED COST:

| AL2-5              |               |
|--------------------|---------------|
| Total Project Cost | \$ 125,000.00 |
| FY 2007            | \$ 125,000.00 |
| FY 2008            | \$ -          |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-5  |              |
|--------|--------------|
| Year 1 | \$ 31,250.00 |
| Year 2 | \$ 31,250.00 |
| Year 3 | \$ 31,250.00 |
| Year 4 | \$ 31,250.00 |

**GOAL:** The goal of the State of Alabama CIAP is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** This project will fund four (4) years of a graduate student stipend including tuition, research materials, and salaries to conduct research of harmful algal blooms in Weeks Bay, resulting in a final report.

The Weeks Bay Estuarine Research Reserve is located in southwest Baldwin County and is managed through the Coastal Section of the State Lands Division of the Alabama Department of Conservation and Natural Resources. Its mission is to provide leadership to promote informed management of estuarine and coastal habitats through scientific understanding and encourage good stewardship practices through partnerships, public education, and outreach programs. Thousands of visitors and students come to this facility every year.

Preliminary data indicate harmful algal blooms in Weeks Bay and Mobile Bay have become more prevalent in the past few years. The goal of this project is to fund graduate student research for four (4) years on these harmful phenomena. Costs associated with this project include tuition, graduate student stipends, and research expenses (\$31,250.00 annually). In addition to the collection of data, a final report summarizing the research will be generated as a result of this project. The goal of this project is to identify causes for harmful algal blooms in order to identify and implement the appropriate management solutions. Many environmental conditions could be responsible for the blooms such as hydrologic alterations, nutrient loading, or sea-level rise. Applied research is a mechanism for identifying the causes in order to determine a remedy to environmental problems (i.e. harmful algal blooms)..

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will obtain research harmful algal blooms Weeks Bay. Preliminary data indicate these blooms are connected to larger blooms in Mobile Bay. Further information regarding this topic will lead to improvement management strategies and will, subsequently, help conserve and protect coastal areas.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Alabama Coastal Area Management Program Web Portal**

PROJECT NUMBER: **AL2-6**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Phillip Hinesley, Chief Coastal Section          |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division, Coastal Section    |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | Five Rivers Alabama's Delta Resource Center      |
|           | 30945 Five Rivers Boulevard                      | 31115 Five Rivers Boulevard                      |
|           | Spanish Fort, Alabama 36527                      | Spanish Fort, Alabama 36527                      |
| Telephone | (251) 621-1238                                   | (251) 621-1216                                   |
| Fax       | (251) 621-1331                                   | (251) 621-1331                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | phillip.hinesley@dcrn.alabama.gov                |

### PROJECT SUMMARY

LOCATION: **N/A**

DURATION: **One Year**

ESTIMATED COST:

| AL2-6              |              |
|--------------------|--------------|
| Total Project Cost | \$ 50,000.00 |
| FY 2007            | \$ 50,000.00 |
| FY 2008            | \$ -         |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-6  |              |
|--------|--------------|
| Year 1 | \$ 50,000.00 |
| Year 2 | \$ -         |
| Year 3 | \$ -         |
| Year 4 | \$ -         |

GOAL: The goal of this project is to improve management and administration of coastal resources.

OBJECTIVE: This project will create and implement a multi-faceted educational website dedicated to supporting the mission of the Alabama Coastal Area Management Program (ACAMP).

In order to improve management of coastal resources, this project will create and implement a multi-faceted educational website (web portal) dedicated to supporting the purpose of the Alabama Coastal Area Management Program (ACAMP). The purpose of the ACAMP is to promote, improve, and safeguard the lands and waters located in Alabama’s coastal area through a comprehensive and cooperative program designed to preserve, enhance, and develop such valuable resources for the present and future well-being and general welfare of the citizens of this state. The ACAMP is a dynamic program that is highly interactive with the citizens and governments of the two Alabama coastal counties.

A web-portal is an extension of a basic information website by serving as a location to access a collection of information. This project will result in an interactive web portal which will have many different applications related to the Alabama Coastal Area Management Program (ACAMP). The proposed website will allow numerous users to access reports, maps, GIS data, databases, etc... The anticipated users will be subcontractors, grant recipients, local elected officials, partners, committee members, and the general public. Many levels of access will be created for the users for many different applications. For example, in September of every year, the ACAMP sponsors Coastal Cleanup, whereby thousands of volunteers remove thousands of pounds of debris from coastal Alabama beaches and shorelines. When this website is available, a volunteer crew captain could access the web portal prior to the event and request supplies and after the event to fill in the required data needed for the national database. Currently, this information is recorded on hard copy forms, tallied by hand, and then submitted to the Ocean Conservancy as part of the International Coastal Cleanup regarding the type and amount of trash collected.

In addition to the outreach events, the ACAMP administers competitive grant funding annually for coastal planning (306) and public access projects (306a). The website will provide notices to local government contacts request for proposals, notifications of awards, and other necessary ACAMP information. Once a grant is awarded, the ACAMP portal will allow grant recipients to submit grant packages, manage contact information, and submit reports. The website will support a listserv which will provide information to all engaged participants of coastal activities such as Birdfest, Coastal Cleanup, and other outreach events. Last, the ACAMP portal will serve ACAMP publications, products, maps and databases in a streamlined and efficient manner.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will support the purpose of the ACAMP by providing information, grant applications, volunteer opportunities, and other coastal management issues to the general public. Implementation of the ACAMP will conserve and protect the coastal areas of Alabama.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Removal of Derelict Structures and Vessels in Waterways from Hurricanes**

PROJECT NUMBER: **AL2-7**

PROJECT CONTACT (s):

|           | Primary Contact                                  |
|-----------|--|
| Name      | Cara Stallman, Natural Resource Planner          |
| Address   | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      |
|           | 30945 Five Rivers Boulevard                      |
|           | Spanish Fort, Alabama 36527                      |
| Telephone | (251) 621-1238                                   |
| Fax       | (251) 621-1331                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   |

### PROJECT SUMMARY

LOCATION: **N/A**

DURATION: **One Year**

ESTIMATED COST:

| AL2-7   |               |
|---------|---------------|
| AL      | \$ 250,000.00 |
| FY 2007 | \$ 250,000.00 |
| FY 2008 | \$ -          |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-7  |               |
|--------|---------------|
| Year 1 | \$ 250,000.00 |
| Year 2 | \$ -          |
| Year 3 | \$ -          |
| Year 4 | \$ -          |

**GOAL:** The goal of this project is restore coastal areas by removing marine debris caused by recent hurricanes.

**OBJECTIVE:** The objective of this project is to remove up to 4,000 tons of marine debris from state waters in the coastal area.

As a direct result of Hurricanes Ivan and Katrina, there are a number of dilapidated piers and docks and other underwater obstructions throughout Alabama's coastal waters. These structures detract from the coastal environment and are a hazard to navigation. In addition to the dilapidated piers and docks, derelict abandoned vessels located in state waters are a public safety hazard to navigation and an environmental hazard. The project will remove up to 4,000 tons of dilapidated piers, docks and derelict abandoned vessels from state waters in the coastal area. The specific number of piers, docks and vessels will be submitted in the grant application.

After Hurricane Ivan and Katrina, the Federal Emergency Management Agency (FEMA) set priorities for removal of debris in Alabama's waterways. These priorities included removal of debris from navigational channels and removal of debris in areas that posed a threat to public safety or well-being, such as a leaking gas tank from a submerged vessel. Debris was removed from these priority areas utilizing FEMA funding, however, other ancillary debris still exist in these waters. Furthermore, removal of debris from a particular area of state-owned land was an eligible expenditure as long as it was coupled with a reconstruction project. For example, if a storm destroyed a wooden boardwalk, FEMA paid for the associated debris removal as part of the contract for reconstruction of the boardwalk. This project proposes to remove debris which is not associated with a specific reconstruction project. The project will remove debris from in-shore waters, whereas AL2-12 will add debris in areas conducive to reef creation. For example, this project may remove old creosote-laden pilings which serve no benefit for habit creation and pose an environmental threat to water quality. Furthermore, deployed reef materials must be heavy and clean (i.e. recycled concrete).

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #2: mitigation of damage to fish, wildlife, or natural resources.

- Justification: This project meets Authorized Use #2 because it removes debris deposited as a direct result of Hurricanes Ivan and Katrina. This project will mitigate damage caused by these storms in Alabama's coastal waters.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Support of Natural Resource Damage Assessment Program (NRDA) in  
Coastal Alabama**

PROJECT NUMBER: **AL2-8**

PROJECT CONTACT (s):

|           |   |
|-----------|---|
| Name      | Will Brantley, State Lands Manager                  |
| Address   | Alabama State Lands Division                        |
|           | Department of Conservation and<br>Natural Resources |
|           | 64 North Union Street                               |
|           | Montgomery, Alabama 36130                           |
| Telephone | (251) 621-1238                                      |
| Fax       | (251) 621-1331                                      |
| E-mail    | will.brantley@dcnr.alabama.gov                      |

### PROJECT SUMMARY

LOCATION: **N/A**

DURATION: **Four Years**

ESTIMATED COST:

| AL2-8              |               |
|--------------------|---------------|
| Total Project Cost | \$ 400,000.00 |
| FY 2007            | \$ 400,000.00 |
| FY 2008            | \$ -          |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-8  |               |
|--------|---------------|
| Year 1 | \$ 100,000.00 |
| Year 2 | \$ 100,000.00 |
| Year 3 | \$ 100,000.00 |
| Year 4 | \$ 100,000.00 |

GOAL: The goal of this project is to support natural resource trustee assessment and restoration activities associated with injuries to natural resource trust resources. Trust resources include, but are not limited to, fish, wildlife, birds and groundwater. Trustees assess and restore injuries arising from the release of contaminants through implementation of monitoring and research of baseline and current environmental conditions.

OBJECTIVE: The objective of this project is to assist the DCNR State Lands Division in acquiring relevant data and research to support natural resource trustee injury assessment activities at Superfund sites in coastal Alabama. This project will result in collection and analysis of data sets, written reports, development of restoration plans and contracted professional services which support natural resource trustee injury restoration.

The DCNR State Lands Division staff will work in concert with other state and federal natural resource trust agencies, including the Geological Survey of Alabama and the U.S. Fish and Wildlife Service, in implementing a Natural Resource Damage Assessment (NRDA) program for the State of Alabama. The purpose of an NRDA program is to identify and resolve natural resource injuries associated with the past release of hazardous contaminants. Examples of hazardous contaminants include, but are not limited to, DDT, mercury and PCB's. Such a program will aid in the determination of potential sites in coastal Alabama in which to pursue natural resource injury assessment and restoration. This project will enhance DCNR's ability to implement a protocol for formal damage assessment which may result in expedited settlement negotiations with industry to resolve natural resource damage liabilities. This project will not only support staff time associated with NRDA activities, but it may also fund specialized data collection and analysis relating to contaminant releases.

NRDA funding through the CIAP would supplement limited existing state and federal funding sources dedicated to this activity. Each NRDA site presents in own unique set of circumstances and requirements. As such, it is difficult to predict 'how many' NRDA sites could be funded through this project. It is probable that the NRDA funding through CIAP could be utilized to fund key data collection gaps associated with two or three ongoing NRDA publications.

First, staff will determine suitable coastal areas in which it is necessary to pursue a NRDA. Once potential areas have been located, details of necessary activities will be determined and will be fully described in the CIAP grant application process. Necessary activities may include data collection and analysis, report compilation and generation, literature reviews, development of restoration plans and coordination with

state and federal trust resource agencies. Specifics for each location will be fully described in the CIAP grant application. A written report summarizing the particular funded activity will be required as a deliverable.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #2: mitigation of damage to fish, wildlife, or natural resources.
- Justification: This project meets Authorized Use #2 because it involves the NRDA process whose purpose is to mitigate damage to natural resource trust resources through implementation of restoration activities.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding. Such funding, however, may compliment other limited federal funding sources dedicated to NRDA activities.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Land Acquisition in the Mobile-Tensaw Delta, Perdido River Corridor  
and/or Lillian Swamp, Baldwin County**

PROJECT NUMBER: **AL2-9**

PROJECT CONTACT (s):

|           | Primary Contact  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner                    | Greg Lein, Assistant Director                    |
| Address   | Alabama State Lands Division                               | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center                | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard<br>Spanish Fort, Alabama 36527 | Montgomery, Alabama 36130                        |
| Telephone | (251) 621-1238   | (334) 242-3484                                   |
| Fax       | (251) 621-1331   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                             | greg.lein@dcnr.alabama.gov                       |

**PROJECT SUMMARY**

**LOCATION: Mobile-Tensaw Delta, Perdido River Corridor or Lillian Swamp**

**DURATION: One Year**

**ESTIMATED COST:**

| AL2-9              |                  |
|--------------------|------------------|
| Total Project Cost | \$ 10,000,000.00 |
| FY 2007            | \$ 10,000,000.00 |
| FY 2008            | \$ -             |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-9  |                  |
|--------|------------------|
| Year 1 | \$ 10,000,000.00 |
| Year 2 | \$ -             |
| Year 3 | \$ -             |
| Year 4 | \$ -             |

GOAL: Using CIAP funding, the State of Alabama will acquire and conserve sensitive habitat throughout the coastal area.

OBJECTIVE: The objective of this project is to acquire approximately 5,000 acres of sensitive land for conservation in the Mobile-Tensaw Delta, Perdido River Corridor, and/or Lillian Swamp.

Using CIAP funding, the State of Alabama will acquire and conserve sensitive habitat throughout the coastal area. The objective of this project is to acquire approximately 5,000 acres of sensitive land for conservation in the Mobile-Tensaw Delta, Perdido River Corridor, and/or Lillian Swamp. The property will be managed by the SLD and the deed will be restricted as according to program requirements.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will acquire land for conservation within the coastal area of Alabama.
- Cost Sharing: Cost sharing is not applicable to this project. However previous phases of this acquisition utilized funds from the Coastal and Estuarine Land Conservation Program, 2001 CIAP, Forest Legacy, and the State of Alabama Forever Wild Land Trust.
- Partnering: This project will utilize 100% of CIAP funding.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Land Acquisition in the Escatawpa River Corridor and/or Coastal Mobile  
County**

PROJECT NUMBER: **AL2-10**

PROJECT CONTACT (s):

|           | Primary Contact  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner                    | Greg Lein, Assistant Director                    |
| Address   | Alabama State Lands Division                               | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center                | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard<br>Spanish Fort, Alabama 36527 | Montgomery, Alabama 36130                        |
| Telephone | (251) 621-1238   | (334) 242-3484                                   |
| Fax       | (251) 621-1331   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                             | greg.lein@dcnr.alabama.gov                       |

### PROJECT SUMMARY

LOCATION: **Escawtawpa River Corridor and Coastal Mobile County**

DURATION: **One Year**

ESTIMATED COST:

| AL2-10             |                  |
|--------------------|------------------|
| Total Project Cost | \$ 10,000,000.00 |
| FY 2007            | \$ 10,000,000.00 |
| FY 2008            | \$ -             |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-10 |                  |
|--------|------------------|
| Year 1 | \$ 10,000,000.00 |
| Year 2 | \$ -             |
| Year 3 | \$ -             |
| Year 4 | \$ -             |

GOAL: Using CIAP funding, the State of Alabama will acquire and conserve sensitive habitat throughout the coastal area.

OBJECTIVE: The objective of this project is to acquire approximately 5,000 acres of sensitive land for conservation in the Escatawpa River Corridor and/or other sensitive habitats within coastal Mobile County.

Southwestern and western Mobile County has many opportunities for land acquisition projects. First, the Escatawpa River forms the western border between Alabama and Mississippi. The total acreage of the Escatawpa River Longleaf Hills project area is 20,000 acres, owned by one family trust. Analysis of GIS data indicates that this 20,000 acre tract is comprised of 75 percent upland and 20 percent wetland forests, with the remaining five percent being open water. Much of the upland forested land is naturally regenerated timber, with large components of longleaf pine. The tract is intersected by 25 miles of the Escatawpa River (about 30 percent of its entire length) and 29 miles of tributary stream of this classic blackwater river system. The Escatawpa River is a major tributary to the Pasagoula River, which in turn is part of the Grand Bay National Estuarine Research Reserve's watershed area. The tract encompasses both banks of large portions of the Escatawpa and its tributaries, directly protecting the river and the system's water quality, and, ultimately, the health of the estuaries at the Pascagoula River's termination in the Gulf of Mexico. The tract is readily manageable and strategically located to initiate a regional conservation project that will protect the biodiversity of this relatively small but extremely unique blackwater stream watershed. Thousands of acres of southeastern longleaf pine habitat along with bottomland wetland make up this area. The objective of this project is to acquire 5,000 acres of this target tract. This project complements a Mobile County Tier Two Project: 'Escatawpa Hollow River Park Acquisition and Improvements'. In this project, Mobile County will acquire a key parcel to access the Escatawpa River conservation land targeting in this project.

Second, coastal Mobile County has many opportunities for land acquisition. The State of Alabama and the U.S. Fish and Wildlife Service (Grand Bay National Estuarine Research Reserve) have already acquired almost 10,000 acres of this unique wetland habitat. Additional parcels may be available for purchase in this area which will link and enhance existing conservation property.

Using CIAP funding, the State of Alabama will acquire and conserve sensitive habitat throughout the coastal area. The objective of this project is to acquire approximately 5,000 acres of sensitive land for conservation in the Escawtawpa River and/or coastal Mobile County. The property will be managed by the SLD and deed will be restricted according to program requirements.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will acquire land for conservation within the coastal area of Alabama.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Land Acquisition in the Red Hills, Monroe County**

PROJECT NUMBER: **AL2-11**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Greg Lein, Assistant Director                    |
| Address   | Alabama State Lands Division                     | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | 64 North Union Street                            |
|           | 30945 Five Rivers Boulevard                      | Montgomery, Alabama 36130                        |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (334) 242-3484                                   |
| Fax       | (251) 621-1331                                   | (334) 242-0999                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | greg.lein@dcnr.alabama.gov                       |

**PROJECT SUMMARY**

**LOCATION: Monroe County, Alabama**

**DURATION: One Year**

**ESTIMATED COST:**

| AL2-11             |                  |
|--------------------|------------------|
| Total Project Cost | \$ 10,000,000.00 |
| FY 2007            | \$ 10,000,000.00 |
| FY 2008            | \$ -             |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-11 |                  |
|--------|------------------|
| Year 1 | \$ 10,000,000.00 |
| Year 2 | \$ -             |
| Year 3 | \$ -             |
| Year 4 | \$ -             |

**GOAL:** Using CIAP funding, the State of Alabama will acquire and conserve sensitive habitat throughout the coastal area and its associated watersheds.

**OBJECTIVE:** The objective of this project is to acquire approximately 5,000 acres of conservation land in the Red Hills of the southeastern plains region of Alabama

The objective of this project is to acquire 5,000 acres of conservation land in the Red Hills of the southeastern plains region of Alabama. Although this property is located outside of the coastal counties, it is located within the NOAA-sponsored Coastal Estuarine Land Conservation Program (CELCP) approved boundary. This boundary is determined by hydrologic unit codes (HUCs) with tidal influence.

This project will initiate a regional conservation project to protect the biodiversity of Alabama's Red Hills Region. The area supports upland deciduous forest, mixed mesic slope forest and scrub/shrub, and forested wetlands that are transected by 7.3 miles of small creeks that feed the larger Big Flat Creek. Big Flat Creek is the most upstream tributary to the Alabama River on the eastern bank below its first impoundment, Claiborne Dam. During the summer dry season the salt wedge from the Mobile-Tensaw Delta system is known to reach as far upstream as Claiborne Dam. These streams provide un-impounded headwater habitat for numerous catadromous and anadromous species. There is a significant potential to acquire several adjacent large tracts in the near future. The project area lies within 40 miles of Alabama's largest holding of state owned conservation land- the Mobile Tensaw Delta Wetland Conservation Area, which comprises approximately 112,000 acres of publicly owned and managed land. Lastly, the target area is known to support the federally listed as Threatened Red Hills Salamander and about 25 percent of the tract is designated salamander habitat. The property will be managed by the SLD and deed will be restricted according to program requirements.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will acquire land for conservation within the coastal area of Alabama.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Artificial Reef -- Construction, Research, and Development**

PROJECT NUMBER: **AL2-12**

PROJECT CONTACT (s):

|           | Primary Contact                                  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner          | Stevens R. Heath, Chief Marine Biologist         |
| Address   | Alabama State Lands Division                     | Alabama Marine Resources Division                |
|           | Department of Conservation and Natural Resources | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      | PO Drawer 458                                    |
|           | 30945 Five Rivers Boulevard                      | Gulf Shores, Alabama 36547                       |
|           | Spanish Fort, Alabama 36527                      |  |
| Telephone | (251) 621-1238                                   | (251) 968-7576                                   |
| Fax       | (251) 621-1331                                   | (251) 968-6307                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   | steve.heath@dcnr.alabama.gov                     |

**PROJECT SUMMARY**

**LOCATION: Coastal Alabama**

**DURATION: Four Years**

**ESTIMATED COST:**

| AL2-12             |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,000,000.00 |
| FY 2007            | \$ 1,000,000.00 |
| FY 2008            | \$ -            |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-12 |               |
|--------|---------------|
| Year 1 | \$ 250,000.00 |
| Year 2 | \$ 250,000.00 |
| Year 3 | \$ 250,000.00 |
| Year 4 | \$ 250,000.00 |

**GOAL:** The goal of this project is to protect, conserve, and restore natural coastal habitat and wildlife through data analysis, research, and on-the-ground conservation activities.

**OBJECTIVE:** The objective of this project is to construct, research and develop one-hundred (100) acres of offshore fishery enhancement reefs in coastal Alabama.

The Marine Resources Division (MRD) of the Alabama Department of Conservation and Natural Resources conducts fishery habitat enhancements such as oyster bed restoration and artificial reef construction. The objective of this project is to construct, research and develop one-hundred (100) acres of offshore fishery enhancement reefs in coastal Alabama. Inshore sites will be developed through co-management, utilizing the collective expertise of agency scientists and local fishing organizations to determine appropriate sites and materials for enhancement. Offshore, the zones will be utilized for reef deployment, and research will be conducted to examine contributions of the reefs to fish stock health and angler success. The reefs will be constructed by intentionally placing dense materials, such as old ships and barges, concrete and steel demolition debris and dredge material on the sea floor. Costs associated with this project include labor, equipment, and materials.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will enhance fishery habitat, thus restoring coastal natural resources.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Outreach for Local Marine Conservation Awareness Public Service  
Announcements**

PROJECT NUMBER: **AL2-13**

PROJECT CONTACT (s):

|           | Primary Contact  | Secondary Contact                                |
|-----------|--|--|
| Name      | Cara Stallman, Natural Resource Planner                    | Stevens R. Heath, Chief Marine Biologist         |
| Address   | Alabama State Lands Division                               | Alabama Marine Resources Division                |
|           | Department of Conservation and Natural Resources           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center                | PO Drawer 458                                    |
|           | 30945 Five Rivers Boulevard<br>Spanish Fort, Alabama 36527 | Gulf Shores, Alabama 36547                       |
| Telephone | (251) 621-1238   | (251) 968-7576                                   |
| Fax       | (251) 621-1331   | (251) 968-6307                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                             | steve.heath@dcnr.alabama.gov                     |

**PROJECT SUMMARY**

LOCATION: **N/A**

DURATION: **Four Years**

ESTIMATED COST:

| AL2-13             |               |
|--------------------|---------------|
| Total Project Cost | \$ 200,000.00 |
| FY 2007            | \$ 200,000.00 |
| FY 2008            | \$ -          |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-13 |              |
|--------|--------------|
| Year 1 | \$ 50,000.00 |
| Year 2 | \$ 50,000.00 |
| Year 3 | \$ 50,000.00 |
| Year 4 | \$ 50,000.00 |

GOAL: The goal of this project is to increase public awareness of conservation and protection of coastal Alabama's marine resources.

OBJECTIVE: The objective of this project is to produce at least five (5) different forms of marine resource educational materials, including ten-thousand (10,000) brochures, two (2) television commercials, and one (1) informative website. Topics for outreach include invasive species, commercial harvests, recreational bag limits, bycatch, shoreline development, and habitat protection and enhancement.

The Marine Resources Division (MRD) of the Alabama Department of Conservation and Natural Resources manages the marine environment in coastal Alabama. Recent residential growth in coastal Alabama has resulted in direct and indirect consequences such as increased use of marine resources, exacerbated shoreline erosion, and an increase in stormwater and wastewater discharge. The goal of this project is to increase public awareness of conservation and ultimately enhance the protection of the coastal marine environment. Specifically, this project would like to target consumptive and non-consumptive users of the marine environment including anglers, tourists, and residents of the importance of a healthy coastal marine ecosystems. The objective of this project is to produce at least five (5) different forms of marine resource educational materials, including ten-thousand (10,000) brochures, two (2) television commercials, and one (1) informative website. Topics for outreach include invasive species, commercial harvests, recreational bag limits, bycatch, shoreline development, and habitat protection and enhancement.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will provide education to the public on the conservation and protection of coastal resources.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Bathymetric, Seismic, and Vibracore Survey of Federal Waters**

PROJECT NUMBER: **AL2-14**

PROJECT CONTACT (s):

|           | Primary Contact                                  |
|-----------|--|
| Name      | Cara Stallman, Natural Resource Planner          |
| Address   | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      |
|           | 30945 Five Rivers Boulevard                      |
|           | Spanish Fort, Alabama 36527                      |
| Telephone | (251) 621-1238                                   |
| Fax       | (251) 621-1331                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   |

### PROJECT SUMMARY

LOCATION: **Coastal Alabama**

DURATION: **One Year**

ESTIMATED COST:

| AL2-14             |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,150,000.00 |
| FY 2007            | \$ 1,150,000.00 |
| FY 2008            | \$ -            |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-14 |                 |
|--------|-----------------|
| Year 1 | \$ 1,150,000.00 |
| Year 2 | \$ -            |
| Year 3 | \$ -            |
| Year 4 | \$ -            |

GOAL: The goal of this project is to facilitate management research of Alabama’s coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

OBJECTIVE: The objective of this project is to conduct a comprehensive bathymetric, seismic, and vibracore survey to perform sedimentological analysis offshore of Baldwin and Mobile Counties to identify federal sand for future beach renourishment projects.

Due to regular tropical weather activity, Alabama’s beaches have experienced eroded significant erosion. Through a partnership, coastal communities have worked with the State of Alabama to conduct beach nourishment projects along Alabama’s shoreline of shoreline. Geologists speculate that recent beach nourishment have depleted beach quality sand resources located in State waters. This project will explore the sand resources in pre-approved federal sand resource areas resulting in detailed maps and a written report. These data will be essential in planning for future large-scale beach nourishment projects in coastal Alabama.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will provide essential information needed for future coastal restoration projects.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.

**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

---

DESIGNATED STATE AGENCY OR CPS: **Alabama State Lands  
Department of Conservation  
and Natural Resources**

PROJECT TITLE: **Development of GIS-based Applications and Digital Data to Assist in  
Management of Alabama's Coastal Resources**

PROJECT NUMBER: **AL2-15**

PROJECT CONTACT (s):

|           | Primary Contact                                  |
|-----------|--|
| Name      | Cara Stallman, Natural Resource Planner          |
| Address   | Alabama State Lands Division                     |
|           | Department of Conservation and Natural Resources |
|           | Five Rivers Alabama's Delta Resource Center      |
|           | 30945 Five Rivers Boulevard                      |
|           | Spanish Fort, Alabama 36527                      |
| Telephone | (251) 621-1238                                   |
| Fax       | (251) 621-1331                                   |
| E-mail    | cara.stallman@dcnr.alabama.gov                   |

**PROJECT SUMMARY**

LOCATION: **N/A**

DURATION: **One Year**

ESTIMATED COST:

| AL2-15             |               |
|--------------------|---------------|
| Total Project Cost | \$ 675,000.00 |
| FY 2007            | \$ 675,000.00 |
| FY 2008            | \$ -          |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| AL2-15 |               |
|--------|---------------|
| Year 1 | \$ 675,000.00 |
| Year 2 | \$ -          |
| Year 3 | \$ -          |
| Year 4 | \$ -          |

GOAL: The goal of this project is to facilitate management research of Alabama’s coastal environment through improved data collection systems, enhanced research infrastructure, and upgrades of research tools.

OBJECTIVE: The objective of this project is to develop four GIS-based applications and associated digital data to assist in the management of Alabama’s coastal resources including a GIS-based erosion model, shoreline classification model of Mobile Bay, Land Use/Land Cover analysis of both coastal counties from 1995 to 2005, and a turbidity study of Mobile Bay.

This project will develop numerous GIS-based applications and associated digital data to assist in management of Alabama's coastal Resources. Four applications and associated digital data will be developed as a result of this project.

1. GIS-based Erosion Modeling of Mobile and Baldwin Counties: The purpose of this project is to create a model to determine the area's potential for erosion resulting from land clearing or changing land use (clearing, conversion from timber to agriculture, etc.). The output will be polygon shapefiles with an assigned erodability index that can be used by local planning entities in land use decision making processes and may also be utilized by regulatory entities to conduct monitoring activities. This project will result in a geographic database depicting polygons of susceptibility of erosion.
2. Shoreline Classification of Mobile Bay: The shoreline of Mobile Bay will be classified using high-resolution aerial photographs coupled with groundtruthing. The classifications would include habitat, erosion, landuse, and shoreline protection. This project will result in a shapefile to be used by planning and regulatory entities.
3. Land Use/Land Cover Classification: A Land Use/Landcover classification of Mobile and Baldwin Counties will be developed from year 2005 Landsat 5 data. The project will include classification of the 2005 scenes as well as change detection comparing the 2005 classification with those of years 2000 and 1995. This project will resulting a geographic database and a report.
4. Turbidity study of Mobile Bay: Sediment data and multitemporal Landsat data will be analyzed to determine patterns of turbidity on a temporal scale in Mobile Bay. One Landsat image for each

month will be obtained, and multispectral analyses will be performed to analyze turbidity, flow patterns, sediment type (mineralogy), and the variations of these in a seasonal perspective. This study will result in a geographic database and an associated report.

Information from the above modeling effort will complement the goals and objectives of BC-5 (Comprehensive Land Use Plan) and MC- 8 (Mobile County Greenprint Project).

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will provide more data to coastal managers, resulting in better management of coastal resources. Better management will lead to the conservation, protection and restoration of coastal resources. The results of GIS-based erosion models of Mobile and Baldwin Counties can be used by local planning entities in land-use decision-making processes and may also be utilized by regulatory entities to conduct monitoring activities, thus helping to conserve and protect the Alabama coastal area. The classification of the Mobile Bay shorelines will provide the information necessary to conserve and protect the bay and will provide a baseline for future restoration activities. The Land Use/Landcover classification of Mobile and Baldwin Counties will provide the information necessary to conserve and protect the coastal counties and will provide a baseline for future restoration activities. An historical analysis of turbidity through time will show how changes in sedimentation have impacted fish and wildlife habitat, and will help identify those areas needing conservation, protection, or mitigation.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% of CIAP funding.



b. Baldwin County Tier Two Project Descriptions

| Project Number | Project Title  | Project Cost | Page Number |
|----------------|--|--------------|-------------|
| BC2-1          | Erosion Control Materials for Highway Department       | \$480,000.00 | 309         |
| BC2-2          | Enhancement of Recycling Facility at Magnolia Landfill | \$300,000.00 | 313         |
| BC2-3          | Household Hazardous Waste Amnesty Day                  | \$150,000.00 | 317         |
| BC2-4          | Water & Wastewater Infrastructure Study                | \$100,000.00 | 321         |



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Erosion Control Materials for Highway Department**

PROJECT NUMBER: **BC2-1**

PROJECT CONTACT:

|           | Primary Contact  |
|-----------|--|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner    |
| Address   | Baldwin County Commission                                |
|           | Baldwin County Planning & Zoning Department              |
|           | 312 Courthouse Square, Suite 18<br>Bay Minette, AL 36507 |
| Telephone | (251) 580-1655   |
| Fax       | (251) 937-0293   |
| E-mail    | jbatchelor@co.baldwin.al.us                              |

**PROJECT SUMMARY**

LOCATION: **Silverhill, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| BC2-1              |               |
|--------------------|---------------|
| Total Project Cost | \$ 480,000.00 |
| FY 2007            | \$ 480,000.00 |
| FY 2008            | \$ -          |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC2-1  |               |
|--------|---------------|
| Year 1 | \$ -          |
| Year 2 | \$ 480,000.00 |
| Year 3 | \$ -          |
| Year 4 | \$ -          |

GOAL: The goal of this initiative is to reduce the detrimental environmental impacts to the waterways of Baldwin County by reducing the amount of sediment that enters the waterways.

OBJECTIVE: The objective of this initiative is to purchase materials to be used by the County Highway Department and the County Parks Department to reduce the potential for erosion and sediment runoff.

Baldwin County is almost completely surrounded by water and numerous waterways flow throughout the County. These waters are at risk for impacts from sediment input from a variety of sources. These include agricultural activities, silvicultural activities, land clearing for new construction and dirt road construction and maintenance. The goal of this initiative is to reduce the detrimental environmental impacts to the waterways of Baldwin County by reducing the amount of sediment that enters the waterways. The use of erosion and sediment control materials are is very important in the reduction of sediment deposition. The objective of this initiative is to purchase equipment and materials to be used by the County Highway Department and the County Parks Department to reduce the potential for erosion and sediment runoff.

There are a variety of materials that would be purchased to be used for this purpose. One product that would be purchased is erosion control blankets. This product is used to stabilize ditches and drainage easements. It is also used on embankments along rights-of-way to stop erosion and sediment from entering ditches which lead to waterways and wetlands.

Another product to be purchased is articulated concrete mats. This material can be used for shoreline protection where vegetation is not established or soils are not fertile for vegetative growth. It would also be used in ditches where there are highly erodible soils, steep slopes, and high flows. This product would dissipate energy and resist the erosive forces of flowing water to protect from scour and erosion. The design of this material provides voids that serve as habitat for fish and marine life when placed in the water. A similar product is concrete earth-stabilizing units that can be used along stream banks and along the coast where erosion is occurring at an accelerated rate.

Additional materials to be purchased include waddles, silt fencing, geotextile fabric and rip-rap. These materials will be used to control erosion and to prevent sediment from entering wetlands, waterways, and drainage ditches. Containing this sediment will prevent the degradation of wetland areas and protect water quality. The amount of each type of material purchased will depend on the specific types of projects assigned to the Highway Department. Other factors that influence the quantities of material needed

include site conditions such as topography and size, rainfall amounts, hurricanes and other natural disasters, and the amount of development within the County. This will be a phased project. Phase 1 will identify the areas where work will be performed and evaluate the site conditions. Phase 2 will involve the determination of the types and quantities of erosion control materials to be used.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because the focus of this initiative is for protection to coastal waters and wetlands. Erosion and sediment deposition contribute greatly to damage to wetlands, degradation of sensitive habitat and reduced water quality. It is extremely important that sediment be contained on a site and ditches and drainage areas be stabilized to reduce the amount of sediment that impacts the wetlands and waterways.
- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Enhancement of Recycling Facility at Magnolia Landfill**

PROJECT NUMBER: **BC2-2**

PROJECT CONTACT:

|           |                                       |
|-----------|---------------------------------------|
| Name      | James Ransom, Jr.                     |
| Address   | Baldwin County Commission             |
|           | Baldwin County Solid Waste Department |
|           | 15140 County Road 19                  |
|           | Summerdale, Alabama 36580             |
| Telephone | (251) 972-6826                        |
| Fax       | (251) 972-6827                        |
| E-mail    | jransom@co.baldwin.al.us              |

### PROJECT SUMMARY

LOCATION: **Magnolia Sanitary Landfill, Summerdale, Alabama**

Latitude: **87° 46' 24.54" W**

Longitude: **30° 26' 36.71" N**

DURATION: **One Year**

ESTIMATED COST:

| BC2-2              |               |
|--------------------|---------------|
| Total Project Cost | \$ 300,000.00 |
| FY 2007            | \$ 300,000.00 |
| FY 2008            | \$ -          |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC2-2  |               |
|--------|---------------|
| Year 1 | \$ -          |
| Year 2 | \$ 300,000.00 |
| Year 3 | \$ -          |
| Year 4 | \$ -          |

**GOAL:** The goal of this initiative is to expand the operating capabilities of the Baldwin County recycle facility.

**OBJECTIVE:** The objective is to increase the amount of recyclable material processed as well as eliminate recyclables from being disposed of in the Magnolia Landfill.

The goal of this initiative is to expand the operating capabilities of the Baldwin County recycle facility. The Baldwin County Solid Waste Department operates a voluntary recycling program that involves collecting and processing newspaper, aluminum cans, plastic bottles, and cardboard. The recycling program processing center is located at the Magnolia Sanitary Landfill in Summerdale, AL approximately three miles north of U.S. Highway 98 and five miles west of State Highway 59. The Magnolia Landfill is located approximately eight miles from Weeks Bay (Appendix G-27 includes pictures of the recycling facility). The Baldwin County Solid Waste Department and the Magnolia Landfill are owned and operated by the Baldwin County Commission. Currently, the recycle center operates one horizontal baler for baling cardboard, one vertical baler for baling plastic and aluminum, and one truck loading dock. The recycle center was constructed in 2006 using money from the previous CIAP plan and became fully operational in October 2006. The recycling center provides a processing floor for traditional recyclable materials such as aluminum cans, plastic bottles, cardboard, and paper as well as a collection area for material commonly referred to as “household hazardous waste.” Examples of “household hazardous waste” include household materials such as cleaning chemicals, insecticides, herbicides, motor oil, and automotive batteries. Hazardous Waste such as industrial chemicals, agricultural chemicals and other industrial and commercial materials are not accepted. Citizens are encouraged to place recyclable materials in containers such as aluminum, plastic, cardboard, and paper staged throughout Baldwin County. Currently there are twenty-two containers in Baldwin County. At the time the current recycle center was designed, only fourteen containers were located in Baldwin County. With the increased number of containers combined with the rapid increase in the population of Baldwin County, the volume of recyclable material entering the recycle center has greatly increased. Recycle containers are emptied onto the floor of the recycle center, and the various materials are separated for processing. Unauthorized materials, such as household garbage, may ‘contaminate’ the load of recyclables and must be separated from the recyclables. Due to the time required to separate recyclables from contaminants and the floor space required to perform the separation, a subsequent load of recyclables may have to be disposed of in the landfill.

In an effort to increase the amount of recyclable material processed as well as eliminate recyclables from being disposed of in the Magnolia Landfill, the current recycle center should be expanded. The existing building includes an area under cover of a roof approximately 40 feet wide and 80 feet long that should be enclosed to provide greater floor space and allow for an additional vertical baler and another loading dock. Increased safety features for the original facility would be included in the proposed building expansion so that the increased volume of recyclable material may be processed safely. One such safety feature is the addition of a hydraulic dock leveler. Other features may be identified by a building evaluation performed by an architect. This project would be phased with Phase 1 including the building evaluation and preparation of plans. Phase 2 would involve the construction aspects of the project.

The existing building includes a mezzanine that may be used for storage as well as a viewing platform to allow visitors to watch the recycling process. The mezzanine is not ADA accessible and must be accessed from an exterior stairway. The addition of an elevator will allow the mezzanine to be fully accessible to visitors and will encourage schools and other organizations to visit the center for educational purposes. It is anticipated that by increasing the capacity of the facility, the increase in tonnage of plastic, cardboard, and aluminum recycled would be increased by 30 percent. It is also hoped that the facility would see an increase of 50 percent in the number of visitors coming to the recycle center for educational purposes. The amounts recycled in FY 2007 are as follows: Aluminum cans – 14 tons, newspaper – 68 tons, cardboard – 24.88 tons, #1 plastic – 18.3 tons, #2 plastic – 16.3 tons, and batteries – 446.5 tons.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project meets Authorized Use #1 because it will allow the recycling facility to increase its capacity to process the ever-increasing volume of recyclables received. The greater amount of trash that is recycled, the less landfill space is consumed. It will also provide the opportunity for greater educational awareness of the benefits of recycling.
- Cost Sharing: : This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Household Hazardous Waste Amnesty Day**

PROJECT NUMBER: **BC2-3**

PROJECT CONTACT:

|           |                                       |
|-----------|---------------------------------------|
| Name      | James Ransom, Jr.                     |
| Address   | Baldwin County Commission             |
|           | Baldwin County Solid Waste Department |
|           | 15140 County Road 19                  |
|           | Summerdale, Alabama 36580             |
| Telephone | (251) 972-6826                        |
| Fax       | (251) 972-6827                        |
| E-mail    | jransom@co.baldwin.al.us              |

**PROJECT SUMMARY**

**LOCATION: Magnolia Sanitary Landfill, Baldwin County, Alabama**

**Latitude: 87° 46' 24.54" W**

**Longitude: 30° 26' 36.71" N**

**DURATION: Two Years**

**ESTIMATED COST:**

| BC2-3              |               |
|--------------------|---------------|
| Total Project Cost | \$ 150,000.00 |
| FY 2007            | \$ 150,000.00 |
| FY 2008            | \$ -          |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC2-3  |              |
|--------|--------------|
| Year 1 | \$ -         |
| Year 2 | \$ 75,000.00 |
| Year 3 | \$ 75,000.00 |
| Year 4 | \$ -         |

**GOAL:** The goal of this initiative is to provide citizens a way to safely dispose of hazardous wastes and to increase public awareness of the importance of proper disposal.

**OBJECTIVE:** The objective is to hold two (2) Household Hazardous Waste Amnesty Days (one per year for two years) to provide the opportunity for proper disposal of hazardous wastes.

In the past, the Baldwin County Commission has sponsored Household Hazardous Waste Amnesty Days. These events have been very successful in terms of attendance and the amount of household hazardous waste received. The goal of this initiative is to provide citizens a way to safely dispose of hazardous wastes and to increase public awareness of the importance of proper disposal. The objective is to hold two (2) Household Hazardous Waste Amnesty Days (one per year for two years) to provide the opportunity for proper disposal of hazardous wastes. In addition, the events will serve as an opportunity to provide the public with educational material related to this and other environmental concerns. A nationally-recognized hazardous waste disposal company will be utilized to collect household hazardous waste. The hazardous waste disposal company will use federally-approved disposal methods to incinerate, recycle, or place the material in a designated hazardous waste landfill. Household hazardous waste materials such as motor oil, antifreeze, and paint are often poured into storm drains, which may empty into coastal waters. Household Hazardous Waste amnesty days allow citizens of Baldwin County to properly dispose of household hazardous waste materials to potentially prevent improper disposal into storm drains and to reduce toxic input into Baldwin County's groundwater via the landfill. The potential for coastal water quality protection exists as a result of household hazardous waste amnesty days.

Past household hazardous waste amnesty days have been very successful. Last year 714 customers were served. A total of 3,150 gallons of household hazardous materials were disposed of via the Household Hazardous Waste Handling and Disposal Facility. The Household Hazardous Waste Handling and Disposal Facility is located at the Magnolia Landfill. This facility, which opened in 2006, was constructed using funds from the previous CIAP. (Appendix G-19 and G-28 include a map and pictures of Baldwin County's hazardous waste collection facility).

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.

- Justification: This project is consistent with Authorized Use #1 because it provides protection to coastal lands and waterways. This is accomplished by providing citizens a way to dispose of household hazardous waste materials that might otherwise be poured into waterways, storm drains or onto soil.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: Partnering is not applicable to this project.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Baldwin County Commission**

PROJECT TITLE: **Water & Wastewater Infrastructure Study**

PROJECT NUMBER: **BC2-4**

PROJECT CONTACT:

|           | Primary Contact  |
|-----------|--|
| Name      | Julie Batchelor, P.E. Senior Natural Resource Planner    |
| Address   | Baldwin County Commission                                |
|           | Baldwin County Planning & Zoning Department              |
|           | 312 Courthouse Square, Suite 18<br>Bay Minette, AL 36507 |
| Telephone | (251) 580-1655   |
| Fax       | (251) 937-0293   |
| E-mail    | jbatchelor@co.baldwin.al.us                              |

### PROJECT SUMMARY

LOCATION: **Baldwin County, Alabama**

DURATION: **One Year**

ESTIMATED COST

| BC2-4              |               |
|--------------------|---------------|
| Total Project Cost | \$ 100,000.00 |
| FY 2007            | \$ 100,000.00 |
| FY 2008            | \$ -          |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| BC2-4  |               |
|--------|---------------|
| Year 1 | \$ -          |
| Year 2 | \$ 100,000.00 |
| Year 3 | \$ -          |
| Year 4 | \$ -          |

**GOAL:** The goal of this initiative is to assess the quality and quantity of groundwater in Baldwin County and determine the environmental impacts of treated wastewater on the waterways of the County.

**OBJECTIVE:** The objective of this initiative is to hire a consultant to conduct an assessment on issues related to wastewater and groundwater in Baldwin County. The final product would be a written report submitted to the Baldwin County Commission.

Baldwin County has experienced a rapid population increase in the past few years. The prediction is that this trend will continue. With this growth comes an increased challenge to maintain the water quality both in our streams and bays and in our groundwater. This increase in growth leads to an increase in impervious surface in the form of rooftops, driveways, roadways and parking lots. This loss of pervious surface can have a significant impact on the recharge of the groundwater. **Groundwater can have a significant impact on the natural coastal environment.** Streams either gain water from inflow of groundwater or lose water by outflow to groundwater. According the United States Geological Survey coastal areas are a highly dynamic interface between the continents and the ocean. The physical and chemical processes in these areas are quite complex and commonly are poorly understood. Historically, concern about ground water in coastal regions has focused on seawater intrusion into coastal aquifers. More recently, ground water has been recognized as an important contributor of nutrients and contaminants to coastal waters. Likewise, plant and wildlife communities adapted to particular environmental conditions in coastal areas can be affected by changes in the flow and quality of ground-water discharges to the marine environment ([http://pubs.usgs.gov/circ/circ1186/html/gw\\_effect.html](http://pubs.usgs.gov/circ/circ1186/html/gw_effect.html))

Wetlands can also be quite sensitive to the effects of ground-water pumping. Ground-water pumping can affect wetlands not only as a result of progressive lowering of the water table, but also by increased seasonal changes in the altitude of the water table. The amplitude and frequency of water-level fluctuations through changing seasons, commonly termed the hydroperiod, affect wetland characteristics such as the type of vegetation, nutrient cycling, and the type of invertebrates, fish, and bird species present ([http://pubs.usgs.gov/circ/circ1186/html/gw\\_effect.html#wetlands](http://pubs.usgs.gov/circ/circ1186/html/gw_effect.html#wetlands)).

In addition, this growth leads to an increase in the amount of wastewater generated that must be processed and eventually released into the surrounding streams and bays. Baldwin County would like to ensure that the inevitable growth does not cause a significant adverse affect on the environment and natural beauty that is the very reason so many people are drawn to the area.

The goal of this initiative is to assess the quality and quantity of groundwater in Baldwin County and determine the environmental impacts of treated wastewater on the waterways of the County. The objective

of this initiative is to hire a consultant to conduct an assessment on issues related to wastewater and groundwater in Baldwin County. The results of the assessment, to be included in a report to the Baldwin County Commission, will provide information on the state of our waterways and groundwater. In addition, it would include recommendations for coordinating with water and wastewater service providers to ensure adequate services are planned and provided. It would also identify areas of concern regarding long-term regulatory and infrastructure needs and provide recommendations for addressing these concerns. In addition, suggestions for construction specifications for collection and transmission systems would be provided. These results and recommendations will be presented to the Baldwin County Commission.

The implementation of this analysis in regards to the wastewater issues would require collection of data on the location, design, capacity and point of discharge for all wastewater facilities within the County. It would include coordination with agencies that monitor these resources such as the Alabama Department of Environmental Management. The type of information gathered would depend on the reporting requirements of the facilities and the agencies. Information from the County's Comprehensive Land Use Plan would also be reviewed to identify areas which might be significantly impacted by future growth. At this time, most of the wastewater effluent is discharged into the streams and bays. The County would like to see other methods utilized for effluent discharge. One method that could be explored is groundwater recharge by direct injection. This method is effective in coastal areas because it creates a freshwater barrier against saltwater intrusion, which is of significant concern. Another would be the ability to re-use the water for irrigation of sod farms and golf courses. Both of these methods would help address the second issue of this study.

There is great concern about the quality and quantity of groundwater. Baldwin County receives all of its drinking water from groundwater sources. There are also a great number of sod farms, numerous golf courses and a large agricultural presence throughout the county that draw a significant amount of water from the aquifer with numerous wells. In addition, many homeowners have private wells. All of this usage places a great demand on our groundwater, one of our essential natural resources. As groundwater levels drop, levels in creeks and streams may be diminished. This area has been experiencing a drought for the past several years that has placed a strain on this resource. As with wastewater, the consultant would need to coordinate with agencies such as US Geological Survey and the Alabama Department of Environmental Management. They would identify available aquifer information and methods for monitoring available groundwater supply volumes and quality.

Baldwin County would like to ensure that adequate water resources are planned and provided. This assessment will provide guidance to the County on preparing for and managing water resources for future growth.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This initiative meets Authorized Use #1 because it will provide the County with information to facilitate proactive planning to protect the water quality of the surrounding water bodies and groundwater in Baldwin County.

- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: Partnering is not applicable to this project.

c. Mobile County Tier Two Project Descriptions

| Project Number | Project Title  | Project Cost    | Page Number |
|----------------|--|-----------------|-------------|
| MC2-1          | Mobile County Conservation Acquisition                                     | \$ 4,000,000.00 | 327         |
| MC2-2          | South Mobile County Wastewater Facilities                                  | \$ 2,500,000.00 | 329         |
| MC2-3          | Dauphin Island Causeway Restoration, Protection, and Public Access Project | \$ 1,000,000.00 | 333         |
| MC2-4          | West Mobile County Wastewater Facilities                                   | \$ 2,500,000.00 | 337         |
| MC2-5          | Theodore Ship Channel Boat Access  | \$ 1,000,000.00 | 341         |
| MC2-6          | Erosion & Sediment Control   | \$ 1,000,000.00 | 345         |
| MC2-7          | Bayfront Park Improvements   | \$ 275,000.00   | 349         |
| MC2-8          | Erosion Control Equipment for Public Works Department                      | \$ 500,000.00   | 353         |
| MC2-9          | Escatawpa Hollow River Park Acquisition and Education Center               | \$ 2,000,000.00 | 357         |



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Mobile County Conservation Acquisition**

PROJECT NUMBER: **MC2-1**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

**PROJECT SUMMARY**

**LOCATION: Mobile County, Alabama**

**DURATION: Two Years**

**ESTIMATED COST:**

| MC2-1              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 4,000,000.00 |
| FY 2007            | \$ 4,000,000.00 |
| FY 2008            | \$ -            |

**SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:**

| MC2-1  |                 |
|--------|-----------------|
| Year 1 | \$ 2,000,000.00 |
| Year 2 | \$ 2,000,000.00 |
| Year 3 | \$ -            |
| Year 4 | \$ -            |

GOAL: The goal of this project is to acquire, for conservation purposes, environmentally sensitive areas in Mobile County.

OBJECTIVE: The objective of this project is to purchase approximately 800 acres of coastal areas and manage the tracts for conservation purposes. Elements of this project include appraising potential parcels for acquisition and developing and implementing conservation management plans.

Mobile County is home to portions of the Mobile River delta, numerous creeks and streams, many acres of wetlands, pine savanna, coastal area, the watershed with the County's drinking water supply, the Escatawpa River Watershed, and other watersheds that contain undeveloped tracts of environmentally sensitive habitat. Mobile County provides habitat for threatened and endangered species such as the Gopher Tortoise (*Gopherus polyphemus*, listed as endangered in Mobile County). The goal of this project is to acquire, for conservation purposes, environmentally sensitive areas in Mobile County.

The Mobile County Commission proposes to purchase one or more tracts totaling approximately 800 acres of coastal areas and manage the tracts for conservation purposes. Deed restrictions will be placed on these parcels. Elements of this project include appraising potential parcels for acquisition and developing and implementing conservation management plans.

Market conditions prevent the identification of specific parcels at this time.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands.
- Justification: This project will acquire land for conservation within the coastal area of Alabama.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: This project will utilize 100% CIAP funding.
- Benefit to Natural Coastal Environment: Natural lands that once retained and absorbed stormwater and provided animal habitat are being lost to development, thereby increasing the risk of future flooding and other adverse impacts. With the acquisition of these lands Mobile County will provide the much needed conservation, protection, and management of our coastal natural resources.

# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **South Mobile County Wastewater Facilities**

PROJECT NUMBER: **MC2-2**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

### PROJECT SUMMARY

LOCATION: **Mobile County, Alabama**

DURATION: **Two Years**

ESTIMATED COST:

| MC2-2              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 2,500,000.00 |
| FY 2007            | \$ 2,500,000.00 |
| FY 2008            |                 |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC2-2  |                 |
|--------|-----------------|
| Year 1 | \$ 1,000,000.00 |
| Year 2 | \$ 1,500,000.00 |
| Year 3 | \$ -            |
| Year 4 | \$ -            |

GOAL: The goal of this project is to reduce the number of on-site sewage disposal systems and therefore reduce pathogens to local waters.

OBJECTIVE: The objective of the project is to construct a collection system to connect residential properties that currently use on-site sewage disposal systems, to a wastewater treatment plant. Approximately 200 homes will be served with a collection system.

Census and building permit data confirm that the areas experiencing the highest rates of development in Mobile County are areas that are not served by centralized wastewater treatment infrastructure. This means that there are many subdivisions and other types of development designed to be served by on-site wastewater (septic tanks). Individual systems often suffer failure from lack of maintenance and/or damage from rising floodwaters. Further, there are many aging on-site systems that were built to lower standards, were damaged by Hurricane Katrina, and/or are not being maintained. The goal of this project is to reduce the number of on-site sewage disposal systems and therefore reduce pathogens to local waters. The objective of the project is to construct a collection system to serve 200 homes to public wastewater systems that will be maintained by a publicly owned wastewater treatment system. This project will take place in two phases. The first phase will identify the areas where septic systems can be connected to a wastewater conveyance system and produce a design for a collection system. The second phase will be the construction of the collection system. Maintenance costs and other subsequent costs after connection are not included in this project. The costs of a wastewater treatment plants is not included in this project. Once the collection system is constructed, the operation and maintenance responsibility of the system is placed under the of the wastewater treatment plant owner. On-site disposal systems are connected to the collection system and the costs associated with this action is not funded buy this project.

**AUTHORIZED USES**

- o This project meets the criteria set forth in Authorized Use #1, conservation, protection, or restoration of coastal areas, including wetlands.
- o Justification: This project is consistent with Authorized Use No. 1 because it serves toward the protection of groundwater and the coastal waters from pathogenic contaminates.
- o
- o Cost Sharing: Cost sharing is not applicable to this project.

- Partnering: This project will utilize 100% CIAP funding.
- Benefit to the Natural Coastal Environment: Sanitary sewer infrastructure in this area is an integral component of protecting local waterways from pathogens associated with failing septic systems. Locally heavy rainfall and close proximity to vital commercial and recreational waterways underscore the importance of properly maintained and operated treatment systems. Reducing the area's dependence on septic systems is expected to greatly reduce the introduction of pathogens to these waterways, which will decrease the frequency and impact of algae blooms due to nutrient overload; it will also reduce the number of marine life and human health warnings associated with wastewater contamination.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Dauphin Island Causeway Restoration, Protection, and Public Access Project**

PROJECT NUMBER: **MC2-3**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

**PROJECT SUMMARY**

LOCATION: **Mobile County, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| MC2-3              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,000,000.00 |
| FY 2007            | \$ 1,000,000.00 |
| FY 2008            | \$ -            |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC2-3  |                 |
|--------|-----------------|
| Year 1 | -               |
| Year 2 | \$ 1,000,000.00 |
| Year 3 | \$ -            |
| Year 4 | \$ -            |

**GOAL:** The goal of the project is to reduce wave energy and subsequent erosion along Dauphin Island Parkway in order to protect the causeway and to restore and enhance the Dauphin Island Causeway shoreline to promote wetland vegetation re-growth in the area, improving the habitat for marine fish, invertebrates, migratory birds and marine mammals.

**OBJECTIVE:** The objectives of the project are to expand the protective buffer along the right of way of the causeway, restore and enhance the causeway shoreline to promote wetland vegetation re-growth, improving the habitat for marine life, and to provide additional public access points.

The Dauphin Island Parkway is a north-south road linking Interstate 10 to Dauphin Island in southern Mobile County. Shoreline erosion has occurred adjacent to the roadway, causing a loss of wetland habitat for young shrimp, blue crab, speckled trout, oysters, red snapper, and dozens of other species.

This project will place wave energy attenuators along a 1.5 mile segment to reduce wave energy and subsequent erosion along Dauphin Island Parkway to protect the causeway and to restore and enhance the Dauphin Island Causeway shoreline to promote wetland vegetation re-growth in the area, improving the habitat for marine fish, invertebrates, migratory birds and marine mammals. The project will also provide for the planting of 9 acres of wetland habitat and the emplacement of 2,250 cubic yards of hard bottom substrate on approximately 4 acres for oyster habitat.

The objectives of the project are to expand the protective buffer along the right of way of the causeway, restore and enhance the causeway shoreline to promote wetland vegetation re-growth, improving the habitat for marine life, and to provide additional public access points. This project was suggested by the Mobile Bay National Estuary Program.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: This project will restore coastal areas.
- Cost Sharing: Cost sharing is not applicable to this project.

- Partnering: Project partners include the Town of Dauphin Island; Dauphin Island Sea Lab; Mobile Bay National Estuary Program; DCNR State Lands Division, Coastal Section and Marine Resources Division; Alabama Department of Environmental Management, Coastal Section; Alabama Department of Transportation; and Mississippi Alabama Sea Grant Consortium
  
- Benefit to the Natural Coastal Environment: The reduction of wave energy and the subsequent erosion along Dauphin Island Parkway will restore and enhance the causeway shoreline promoting wetland vegetation re-growth in the area, improving the habitat for marine fish, invertebrates, migratory birds and marine mammals.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **West Mobile County Wastewater Facilities**

PROJECT NUMBER: **MC2-4**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

### PROJECT SUMMARY

LOCATION: **Mobile County, Alabama**

DURATION: **Two Years**

ESTIMATED COST:

| MC2-4              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 2,500,000.00 |
| FY 2007            |                 |
| FY 2008            | \$ 2,500,000.00 |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC2-4  |                 |
|--------|-----------------|
| Year 1 | \$ 1,000,000.00 |
| Year 2 | \$ 1,500,000.00 |
| Year 3 | \$ -            |
| Year 4 | \$ -            |

**GOAL:** The goal of this project is to reduce the number of on-site sewage disposal systems and therefore reduce pathogens to local waters.

**OBJECTIVE:** The objective of the project is to construct a collection system to connect residential properties that currently use on-site sewage disposal systems to a wastewater treatment plant. Approximately 200 homes will be served with a collection system.

Census and building permit data confirm that the areas experiencing the highest rates of development in Mobile County are areas that are not served by wastewater treatment infrastructure. This means that there are many subdivisions and other types of development designed to be served by on-site wastewater (septic tanks). Individual systems often suffer failure from lack of maintenance and/or damage from rising floodwaters. Further, there are many aging on-site systems that were built to lower standards, were damaged by Hurricane Katrina, and/or are not being maintained. The goal of this project is to reduce the number of on-site sewage disposal systems and therefore reduce pathogens to local waters. The objective of the project is to construct a collection system to serve 200 homes to public wastewater systems that will be maintained by a publicly owned wastewater treatment system. This project will take place in two phases. The first phase will identify the areas where septic systems can be connected to a wastewater conveyance system and produce a design for a collection system. The second phase will be the construction of the collection system. Maintenance costs and other subsequent costs after connection are not included in this project. The costs of a wastewater treatment plants is not included in this project. Once the collection system is constructed, the operation and maintenance responsibility of the system is placed under the of the wastewater treatment plant owner. On-site disposal systems are connected to the collection system and the costs associated with this action is not funded buy this project.

### AUTHORIZED USES

- o This project meets the criteria set forth in Authorized Use #1, conservation, protection, or restoration of coastal areas, including wetlands.
- o Justification: : This project is consistent with Authorized Use No. 1 because it serves toward the protection of groundwater and the coastal waters from pathogenic contaminants.

- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: To be determined.
- Benefit to the Natural Coastal Environment: Sanitary sewer infrastructure in this area is an integral component of protecting local waterways from pathogens associated with failing septic systems. Locally heavy rainfall and close proximity to vital commercial and recreational waterways underscore the importance of properly maintained and operated treatment systems. Reducing the area's dependence on septic systems is expected to greatly reduce the introduction of pathogens to these waterways, which will decrease the frequency and impact of algae blooms due to nutrient overload; it will also reduce the number of marine life and human health warnings associated with wastewater contamination.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Theodore Ship Channel Boat Access**

PROJECT NUMBER: **MC2-5**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

### PROJECT SUMMARY

LOCATION: **Theodore, Alabama**  
**(30° 32' 2.5" N, 88° 7' 25.3" W)**

DURATION: **Two Years**

ESTIMATED COST:

| MC2-5              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,000,000.00 |
| FY 2007            | \$ 1,000,000.00 |
| FY 2008            | \$ -            |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC2-5  |               |
|--------|---------------|
| Year 1 | \$ 500,000.00 |
| Year 2 | \$ 500,000.00 |
| Year 3 | \$ -          |
| Year 4 | \$ -          |

**GOAL:** The goal of the Theodore Ship Channel Boat Access project is to provide public access infrastructure at the Theodore Ship Channel to minimize damage to fragile coastal environments.

**OBJECTIVE:** The objective of this project is to prevent and abate long-term damage to seagrasses, wetland areas, and the shoreline due to uncontrolled access to the sensitive habitats within the project site by providing public access infrastructure and stabilizing the shoreline to prevent future degradation of wetlands.

The Theodore Ship Channel (formerly Middle Fork Deer River) provides access to middle Mobile Bay for nearby industry. In the past, this river provided fishers and boaters easy access to local waters. The goal of the Theodore Ship Channel Boat Access project is to provide public access infrastructure at the Theodore Ship Channel to minimize damage to fragile coastal environments.. The objective of this project is prevent and abate long-term damage to seagrasses, wetland areas, and the shoreline due to uncontrolled access to the sensitive habitats within the project site by providing public access infrastructure and stabilizing the shoreline to prevent future degradation of wetlands. Uncontrolled access at this site has adversely impacted these fragile habitats. The project will include construction of a boat ramp approximately 12 feet wide and parking area under/near the Rangeline Road Bridge in a location chosen to minimize impact to sensitive habitats. This will include shoreline stabilization and protection, placement of pervious material in the parking area, and installation of sufficient lighting to ensure public safety. At least 3 educational signs will be constructed to educate the public on seagrass habitats, protection of wetlands, and environmentally friendly boating practices. This will be a phased project with engineering, design, and permitting addressed in Phase 1 and construction activities taking place in Phase 2. Half of the funds will be used for shoreline stabilization and protection, one fourth of the funds will be used to construct a boat ramp, and the remaining fourth of the funds will purchase and install the educational signage, environmentally friendly parking area and lighting. Appendix G-36 includes a map of the Theodore Ship Channel Boat Access.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1: conservation, protection, or restoration of coastal areas, including wetlands.

- Justification: This project is consistent with Authorized Use No. 1 because it will prevent and abate long-term damage to seagrasses, wetland areas, and the shoreline. Also, it will serve to educate the public on seagrass habitats, protection of wetlands, and environmentally friendly boating practices.
- Cost Sharing: Cost sharing is not applicable to this project
- Partnering: This project will utilize 100% CIAP funds.
- Benefit to the Natural Coastal Environment: The development of amenities that support and improve natural resource based activities encourage a sense of ownership and stewardship of public land, thus protecting the natural coastal environment. These sites highlight land conservation, and demonstrate successful protection and management of coastal natural resources. Providing the public a place to experience natural resource conservation, protection, and management enhances their appreciation of the natural coastal environment. As a result, this appreciation reinforces a sense of ownership providing benefit to the natural coastal environment.

As stated in the Department of the Interior’s Strategic Plan, “Successful conservation, by its very nature, must be a partnership between the American people and their governments. The more the Department of the Interior can empower people as stewards of the land, the more effective we can be in our conservation mission. Farmers, ranchers, hunters, anglers, and landowners were the first and are often the best conservationists. We can achieve more by working with them as partners, capitalizing on their knowledge of the land, than by telling them what to do.” “Men, women, and children who care for and share in the stewardship of our public lands gain a greater understanding of our natural resources.”

Construction of controlled, low-impact infrastructure conserves and protects designated areas throughout coastal Alabama by creating controlled access. Controlled access to natural resources manages and minimizes the degree of impact to the natural environment.

Since the beginning of the conservation movement in the early 1900s, natural resource management has recognized the importance of balancing the protection of natural resources in a manner that protects these resources while providing opportunities for the public to appreciate them. These opportunities provide the hands-on knowledge and experience which forms the foundation in the public consciousness for conservation activities. This balance is clearly described in the Department of the Interior’s mission statement. Natural resource protection, responsible resource use, and providing recreation opportunities are the top three goals of that mission statement.

Providing public access to specific natural resources is inherently beneficial to the entire ecosystem. The experience fosters a sense of appreciation for the natural coastal environment resulting in successful conservation of coastal Alabama. Public access affords the public the opportunity to observe habitats and understand their importance to local wildlife populations. The absence of this exposure may cause indifference to public and private policies which would result in the impairment or elimination of the functionality of specific habitats resulting in adverse impacts to the ecosystem as a whole.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Erosion & Sediment Control**

PROJECT NUMBER: **MC2-6**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

### PROJECT SUMMARY

LOCATION: **Mobile County, Alabama**

DURATION: **Four Years**

ESTIMATED COST:

| MC2-6              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 1,000,000.00 |
| FY 2007            | \$ 1,000,000.00 |
| FY 2008            | \$ -            |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC2-6  |               |
|--------|---------------|
| Year 1 | \$ 250,000.00 |
| Year 2 | \$ 250,000.00 |
| Year 3 | \$ 250,000.00 |
| Year 4 | \$ 250,000.00 |

**GOAL:** The goal of this initiative is the protection of coastal areas, including wetlands, by reducing problems of erosion and sediment transport and thus contributing to improved water quality.

**OBJECTIVE:** The objective is to protect 300 acres of environmentally sensitive areas by implementing erosion control measures to prevent sediment transport with a surface treatment and/or the stabilization of at least 6 miles of dirt roads.

Mobile County has an inventory of approximately 416 miles of dirt roads that are controlled and maintained by the Mobile County Public Works Department. The Public Works Department performs regular maintenance on these roads to include placement of new road material, road grading, shoulder work, and maintenance of drainage ditches. Even with proper maintenance, these dirt roads can still have a detrimental impact on environmentally sensitive areas and surrounding water bodies. The Public Works Department applies additional material to each mile of dirt road in the County each year. During major rain events, sediment has transported toward wetlands and water bodies because the roads do not have a permanent surface. Without a surface treatment to provide permanent stabilization on these roads, sediment may continue to erode into these wetlands, creeks, and rivers.

This initiative will provide for a surface treatment and/or the stabilization of portions of dirt roads where impacts are occurring in environmentally sensitive areas. Surface treatments will consist of crushed aggregate, chemical polymers, asphalt, and/or any combination of these or newly developed surface treatments. With assistance from the Public Works Department, those roads which have the greatest impact on wetlands and/or streams will be identified and categorized for treatment. Staff will continue to review and update the status of the dirt roadways and will make a final decision on those which are most critical once funding is approved. The goal of this initiative is the protection of coastal areas, including wetlands, by reducing erosion and contributing to improved water quality. The objective is to protect 300 acres of environmentally sensitive areas by implementing erosion control measures to prevent sediment transport with a surface treatment and/or the stabilization of at least 6 miles of dirt roads.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: The focus of this initiative will be for protection to coastal waters and wetlands.

- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: This project will utilize 100% CIAP funds.
- Benefit to the Natural Coastal Environment: The most detrimental and prevalent pollutant to the waters of Mobile County is sediment. Dirt roads are a significant contributor to this problem. Implementing erosion control measures thereby preventing sediment transport reduces the filling in of acres of wetlands and miles of streams.



# STATE OF ALABAMA

## COASTAL IMPACT ASSISTANCE PROGRAM PLAN

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Bayfront Park Improvements**

PROJECT NUMBER: **MC2-7**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

### PROJECT SUMMARY

LOCATION: **Mobile County, Alabama**  
(30° 21' 23.2" N, 88° 7' 1.5" W)

DURATION: **Two Years**

ESTIMATED COST:

| MC2-7              |               |
|--------------------|---------------|
| Total Project Cost | \$ 275,000.00 |
| FY 2007            | \$ 175,000.00 |
| FY 2008            | \$ 100,000.00 |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC2-7  |               |
|--------|---------------|
| Year 1 | \$ 137,500.00 |
| Year 2 | \$ 137,500.00 |
| Year 3 | \$ -          |
| Year 4 | \$ -          |

**GOAL:** The goal of the Bayfront Park Improvement project is to restore, enhance and preserve the natural environmental aspects of the property and to improve the park's public access.

**OBJECTIVE:** The objective of this project is to restore 7 to 12 acres of native vegetation including wetlands, place eight (8) interpretive signs that vary in size (12 to 36 inches) to educate the public on seagrass habitats, protection of wetlands, wildlife, and environmentally-friendly low impact activities. The project will also construct and enhance public access infrastructure.

In 2001, the Mobile County Commission constructed some shoreline stabilization and park amenities along the shores of Mobile Bay in south Mobile County to minimize damage to fragile coastal environments, and utilized Coastal Impact Assistance Program funding to make these improvements to the Mobile County Bayfront Park in the Alabama Port community. Improvements included construction of boardwalks and onsite sewage infrastructure for restroom facilities. The park's location on the shores of Mobile Bay in south Mobile County places it adjacent to wetlands and waterfront. This provides an opportunity to protect sensitive habitat by controlling public access. The goal of the Bayfront Park Improvement project is to enhance and restore public access along the shores of Mobile Bay in south Mobile County. The objective of the project is to enhance and restore 7 to 12 acres of native vegetation including wetlands, place eight interpretive signs that vary in size (12 to 36 inches) to educate the public on seagrass habitats, protection of wetlands, wildlife, and environmentally-friendly low impact activities. The project will also construct and enhance public access infrastructure.

The project may include the continuation of the existing boardwalk providing access to additional areas of the property, and replacement of aging playground equipment, enhancement to entrance roads, refurbishment of picnic areas, lighting, and the installation of eight educational signs identifying native vegetation, the animals that live in the wetland areas, and the protection wetlands provide. The project will be phased with the initial phase determining the exact number, type, and size of improvements to be made. Appendix G-33 includes a map of Bayfront Park.

### AUTHORIZED USES

- o This project meets the criteria set forth in Authorized Use No. 1, conservation, protection, or restoration of coastal areas, including wetlands.

- Justification: This project is consistent with Authorized Use No. 1 as it will restore 7-12 acres of coastal area including wetlands. Activities will include the restoration and enhancement of wetland areas, improvements to sensitive habitats with the removal of invasive plant species, planting of native trees, and removal of damaged trees and vegetation.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: There will be no partnering with this project.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Erosion Control Equipment for Public Works Department**

PROJECT NUMBER: **MC2-8**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

**PROJECT SUMMARY**

LOCATION: **Mobile County, Alabama**

DURATION: **One Year**

ESTIMATED COST:

| MC2-8              |               |
|--------------------|---------------|
| Total Project Cost | \$ 500,000.00 |
| FY 2007            | \$ 500,000.00 |
| FY 2008            | \$ -          |

## SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC2-8  |               |
|--------|---------------|
| Year 1 | \$ 200,000.00 |
| Year 2 | \$ 200,000.00 |
| Year 3 | \$ 100,000.00 |
| Year 4 | \$ -          |

**GOAL:** The goal of this initiative is to reduce the detrimental environmental impacts from stormwater induced erosion and transport into to the waterways of Mobile County.

**OBJECTIVE:** The objective of this initiative is the purchase of equipment to be used by the County Public Works Department and the County Parks and Recreation Department to reduce the potential for stormwater induced erosion.

Mobile County is bordered to the east by the Mobile River and Mobile Bay and to the south by the Mississippi Sound. Additionally, numerous waterways flow throughout the County. These waters are at risk for impacts from sediment input from a variety of sources initiated or maintained by Mobile County. These include land disturbance activities associated with sensitive habitat restoration and enhancement, agricultural and silvicultural activities, building and road construction, and dirt road maintenance. The goal of this initiative is to reduce the detrimental environmental impacts from stormwater induced erosion and transport into the waterways of Mobile County. The objective of this initiative is the purchase of equipment to be used by the County Public Works Department and the County Parks and Recreation Department to reduce the potential for stormwater induced erosion. Mobile County intends to purchase a minimum of one (1) combination hay-bale spreader with minimum 1,500 pound bale capacity operated by minimum 90 horsepower tractor with erosion control attachments (i.e. silt fence installer, seeder, cultivator, disc, bushhog, loader, etc.). Mobile County also intends to purchase a hydraseeder with a minimum 500 gallon capacity. The types of materials included in this initiative also include erosion control blankets, hydroseed, silt fence, grass seed, haybales, and other Best Management Practice materials as deemed appropriate.

### AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.
- Justification: The focus of this initiative will be for protection to coastal waters and wetlands.
- Cost Sharing: This project will be completely administered using CIAP funds. No cost sharing or matching will be used.
- Partnering: There will be no partnering with this project.

- Benefit to the Natural Coastal Environment: Sediment transport is identified as one of the most detrimental and prevalent pollutant to the waters of Mobile County. Land disturbance activities and maintenance of dirt roads are major contributors to this problem. Implementing erosion control measures thereby preventing sediment transport reduces the filling in of acres of wetlands and miles of streams.



**STATE OF ALABAMA**

**COASTAL IMPACT ASSISTANCE PROGRAM PLAN**

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DESIGNATED STATE AGENCY OR CPS: **Mobile County Commission**

PROJECT TITLE: **Escatawpa Hollow River Park Acquisition and Education Center**

PROJECT NUMBER: **MC2-9**

PROJECT CONTACT:

|           |  |
|-----------|--|
| Name      | Bill Melton, Environmental Services Director |
| Address   | Mobile County Public Works                   |
|           | Mobile County Commission                     |
|           | 205 Government Street                        |
|           | Mobile, AL 36644                             |
| Telephone | (251) 574-3229                               |
| Fax       | (251) 574-4722                               |
| E-mail    | bmelton@mobilecounty.net                     |

**PROJECT SUMMARY**

**LOCATION: Mobile County, Alabama**

**DURATION: Two Years**

**ESTIMATED COST:**

| MC2-9              |                 |
|--------------------|-----------------|
| Total Project Cost | \$ 2,000,000.00 |
| FY 2007            | \$ 2,000,000.00 |
| FY 2008            | \$ -            |

SPENDING ESTIMATE PER CALENDAR YEAR OF PROJECT DURATION:

| MC2-9  |                 |
|--------|-----------------|
| Year 1 | \$ 1,500,000.00 |
| Year 2 | \$ 500,000.00   |
| Year 3 | \$ -            |
| Year 4 | \$ -            |

GOAL: The goal of the Escatawpa Hollow River Park project is to conserve sensitive habitats in the Escatawpa Watershed and to manage those resources in such a way as to protect them from future development while providing a mechanism for the public to enjoy and appreciate black water river ecosystems in Mobile County. An education center will be developed in an existing on-site structure to provide storage for scientific equipment as well as a site for students and other citizens to learn about the significance of the Escatawpa River as one of the most pristine black water rivers in the United States.

OBJECTIVE: The primary objective of the project is to use CIAP funding to acquire the privately owned, 50-acre, Escatawpa Hollow Campground and Canoe Rental property and renovate facilities and infrastructure to provide a range of education and public access options while protecting the area from development pressures. An education center will provide public information on black water ecosystems. Water quality monitoring will take place on site and the facility will serve as a launching site for additional monitoring projects

In the early 1980's, the Escatawpa River was evaluated by the National Park Service to determine its suitability for inclusion in the Wild and Scenic Rivers Act. The National Park Service identified the Escatawpa River as a high quality undeveloped black water stream. The Escatawpa River begins in southwest Alabama less than one mile from the Alabama/Mississippi border in Washington County, Alabama. From there it flows south through northwest Mobile County into Mississippi through a watershed that is long and narrow, with a total length of about 100 miles and width of approximately 15 miles. The river eventually empties into a series of water bodies that form the mouth of Mississippi's Pascagoula River. Though portions of the Escatawpa flow through somewhat remote locales, the watershed is less than an hour drive from the City of Mobile, and equally as close to Pascagoula, Mississippi. The goal of the Escatawpa Hollow River Park project is to enhance public access to and appreciation for black water river ecosystems in Mobile County while protecting the area from future unmitigated development. The primary objective of the project is to acquire the privately owned Escatawpa Hollow Campground and Canoe Rental property and renovate facilities and infrastructure to provide a range of environmental education and public access options. Additional objectives include providing public information on black water ecosystems and monitoring water quality.

Facilities existing on the site area a Welcome Center with an attached office, camp sites, small supply building, larger unfinished storage building, one 6000 gallon septic system, three 1000 gallon septic

systems, three Artesian wells, and a bath house. The project will include acquisition of the property (including equipment and inventory), construction of additional river access points, construction of boardwalks and pavilions, expanding campsites and recreational vehicle sites, and renovating existing structures (the Welcome Center and larger unfinished storage building) to serve as Ranger Stations and an environmental education center that will be made available to local school systems as an education facility. These improvements will require expansion of utilities and an upgrade to the onsite sewage disposal system. CIAP funds for this project will also be utilized to obtain water quality monitoring equipment and to train staff to monitor water quality at the project site. The project will also include the creation and installation of signage to mark significant habitats and provide information on water quality and appropriate behaviors in sensitive habitats to the public. The park accommodates thousands of visitors every year which will be provided educational opportunities with interpretive signage, and printed materials in the Welcome Center. School-age children will use the site to learn about the ecosystem, take part in water quality monitoring and other educational activities. This project complements a State of Alabama Tier 2 project entitled, “Land Acquisition in the Escatawpa River Corridor and Grand Bay”, as the Escatawpa River corridor is a State Lands Division acquisition target. In addition, this project also complements the State of Alabama’s water-based nature trail project, as this project will promote low impact eco-tourism activities.

This will be a phased project. Phase 1 will consist of the acquisition of the 50-acre parcel. Phase 2 will consist of assessment of existing facilities, structures, and infrastructure. The engineering, design, and permitting will also be addressed in this phase. Construction activities will take place in Phase 3. Appendix G-37 includes a map of the Escatawpa Hollow River Park.

## AUTHORIZED USES

- This project meets the criteria set forth in Authorized Use #1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands.
- Justification: This project is consistent with Authorized Use #1 as this site provides an unprecedented opportunity to learn about the fragile black water ecosystem in a hands-on way. The project site is located less than an hour away from the City of Mobile which will enable school-age children to travel to the site to learn about the ecosystem, take part in water quality monitoring and other educational activities. Permanent facilities will provide a safe environment, clean restrooms and shelter from the elements, particularly heat. Improvements to the site will also allow scientific equipment to be readily accessible on site.
- Cost Sharing: Cost sharing is not applicable to this project.
- Partnering: There will be no partnering with this project.
- Benefit to the Natural Coastal Environment: The development of amenities that support and improve natural resource based activities encourages a sense of ownership and stewardship of public land, thus protecting the natural coastal environment. These sites highlight land conservation, and demonstrate successful protection and management of coastal natural resources. Providing the public a place to experience natural resource conservation, protection, and management enhances their appreciation of the natural coastal environment. As a result, this appreciation reinforces a sense of ownership providing benefit to the natural coastal environment.

As stated in the Department of the Interior’s Strategic Plan, “Successful conservation, by its very nature, must be a partnership between the American people and their governments. The more the Department of the Interior can empower people as stewards of the land, the more effective we can be in our conservation mission. Farmers, ranchers, hunters, anglers, and landowners were the first and are often the best conservationists. We can achieve more by working with them as partners, capitalizing on their knowledge of the land, than by telling them what to do.” “Men, women, and children who care for and share in the stewardship of our public lands gain a greater understanding of our natural resources.”

Construction of controlled, low-impact infrastructure conserves and protects designated areas throughout coastal Alabama by creating controlled access. Controlled access to natural resources manages and minimizes the degree of impact to the natural environment.

Since the beginning of the conservation movement in the early 1900s, natural resource management has recognized the importance of balancing the protection of natural resources in a manner that protects these resources while providing opportunities for the public to appreciate them. These opportunities provide the hands-on knowledge and experience which forms the foundation in the public consciousness for conservation activities. This balance is clearly described in the Department of the Interior’s mission statement. Natural resource protection, responsible resource use, and providing recreation opportunities are the top three goals of that mission statement.

Providing public access to specific natural resources is inherently beneficial to the entire ecosystem. The experience fosters a sense of appreciation for the natural coastal environment resulting in successful conservation of coastal Alabama. Public access affords the public the opportunity to observe habitats and understand their importance to local wildlife populations. The absence of this exposure may cause indifference to public and private policies which would result in the impairment or elimination of the functionality of specific habitats resulting in adverse impacts to the ecosystem as a whole.