

# **Mobile Bay National Estuary Program**

## **CCMP Work Plan Year 16**

**Fiscal Year 2012**



***Prepared May, 2011***

# TABLE OF CONTENTS

<b>Preface</b>	<b>3</b>
<b>Introduction</b>	<b>5</b>
Purpose, Goals, Objectives	5
<b>Part One: MBNEP Work Plan for 2011-2012</b>	<b>6</b>
Major Goals and Focus For 2011-2012	6
<b>Budget Overview: 2011-2012</b>	<b>7</b>
<b>1. Project Details: Estuary Status and Trends (EST)</b>	<b>8</b>
EST: Ensuring Biological Integrity (BCG)	9
EST: Sediment Budget for Mobile Bay Estuary	11
EST: D'Olive Creek Sediment Baseline Up-Stream I-10	12
EST: Land Use Land Cover 2-Aiding Conservation/ Protection	14
EST: Manatee Sighting Network	16
EST: Annual Alabama Shorebird Assessment	18
EST: Real-time Monitoring of Meteorological Conditions	19
<b>2. Project Details: Ecosystem Restoration (ERP)</b>	<b>20</b>
ERP: D'Olive Watershed: Joe's Branch Restoration	21
ERP: Three Mille Creek Historic Stream Bed Restoration	23
ERP: Mon Louis Island Shoreline Stabilization/Habitat Enhancement	26
ERP: Local Ecosystem Restoration Partnership	28
<b>3. Project Details: Technical Assistance/ Capacity Building (TAC)</b>	<b>30</b>
TAC: Coastal Non Point Source Pollution Program: Clean Water Partnership	31
TAC: Community Education and Training	33
TAC: Estuary Corps	34
<b>4. Project Detail: Program Implementation (PIR)</b>	<b>35</b>
PIR: Comprehensive Conservation Planning for Mobile Bay Estuary	37
PIR: Community Outreach: Newsletter	39
PIR: Video Series: A Redfish Tale	40
PIR: Community Awareness: Stormwater	41
PIR: Community Awareness: Outreach and Events	42
PIR: Interpretive Signage: Steele Creek Lodge	43

PIR: Administration and Indirect Costs _____	44
Staffing Plan _____	45
Travel _____	46
<b>Partners _____</b>	<b>47</b>
The Management Conference _____	47
Federal Partners _____	48
State Resources _____	51
Local Resources _____	51
In-kind Contributions _____	52
Geographic Distribution _____	52
<b>Part Two: Ongoing Projects _____</b>	<b>53</b>
MBNEP Accomplishments 2010-2011 _____	53
Implementation Progress 10/1/2006 - 3/31/2010 _____	60
 <b>References _____</b>	 <b>60</b>

## PREFACE

In 1972, the Clean Water Act was created to restore and maintain the chemical and biological integrity of the nation's waters so that they can support the protection and propagation of fish, shellfish, wildlife and recreation in and on the water. In 1987, the National Estuary Program (NEP) was created by the U.S. Congress via amendments to this Act to identify, restore, and protect nationally significant estuaries. Authorized under Title 3, Section 320, Public Law 94-117, 33 U.S.C 466, the goal of this program is to protect and restore the water quality and living resources of estuaries and associated watersheds designated by the EPA Administrator as estuaries of national significance.

NEPs work to implement estuarine ecosystem-based management by characterizing the priority problems in their estuaries and surrounding watershed, developing Comprehensive Conservation and Management Plans (CCMPs) that list and describe actions to address those problems, and identify partners, including lead entities, to implement the actions. Locally, the Mobile Bay National Estuary Program (MBNEP), in existence for the past 16 years, has led the implementation of a CCMP that was adopted in 2002 to address the water quality, living resources, habitat management, human uses and education and public outreach challenges of the Mobile Bay estuarine system. As of March 31, 2010, of the 101 actions identified in the plan, 11 had been completed, 87 had been implemented on some level, and three have yet to be initiated, indicating the need to re-visit this comprehensive plan and re-craft it for the next 10-year period.

This past year certainly has provided MBNEP with extraordinary challenges. Of chief note, any accomplishments of the program were overshadowed by the specter of the Deepwater Horizon eruption. In light of that tragedy commandeering our every waking thought, as well as our dreams, the MBNEP was able to amass a few notable, measureable successes.

First, MBNEP continued its commitment to the Baldwin County Watershed Coalition (BCWC), diligently educating thousands of county residents about the need for better stormwater management on a regional scale. Although a local referendum to enable the State delegation to create a stormwater authority was soundly defeated, we successfully brought the issue to the fore and got people to consider how to do a better job. You might say that we “failed our way to success,” since, at present, Baldwin County is undertaking a Fish River Basin watershed study that will lead to 1) a re-write of the subdivision regulations and 2) implementation of regional detention at the county level (two actions that actively implement actions prescribed by the BCWC program).

Second, in August of 2010, the D'Olive Watershed Management Plan was completed. This extensive plan documents the causes of degradation and provides conceptual measures and funding sources for undertaking a comprehensive implementation program. Thanks to Alabama Department of Environmental Management (ADEM); Alabama Department of Conservation and Natural Resources-State Lands, Coastal Section (ADCNR); Cities of Spanish Fort and Daphne, the Lake Forest Property Owners; Baldwin County; and Mississippi Alabama Sea Grant Consortium (MASGC) for stepping up to the plate to assist with this important plan. We are wasting no time initiating implementation and have already built a public-private partnership that includes the Alabama Department of Transportation, both cities, Westminster Village, and ADEM in undertaking a comprehensive restoration of Joe's Branch sub-watershed.

Third, MBNEP, MASGC, and many other partners sponsored the 2010 Bays and Bayous Symposium, held at the Arthur J. Outlaw Convention Center on December 1 & 2, 2010. In spite of the vast number of meetings that were put together to discuss potential or real impacts of the Deepwater Horizon incident, this Symposium was attended by over 400 scientists and community leaders, interested in the state of our coastal environment, its water quality, living resources, habitats, and human uses. Although there were many “oil-” related presentations, there were numerous other great examples of what is being studied and how it can be applied to improve how we manage our estuarine and coastal resources.

As we continue to promote the wise stewardship of the water quality and living resource base of Mobile Bay and the Mobile-Tensaw Delta, MBNEP recognizes the need to assemble government, industry, academia, and the community to take actions that stem the degradation of Alabama’s estuaries to ensure their long-lasting health for our community, our economy, and our future. The following action plan aims to build the foundation for making that happen.

## INTRODUCTION

### PURPOSE, GOALS, OBJECTIVES

MBNEP's mission is to promote the wise stewardship of water quality and living resources of the Mobile Bay estuary and Mobile-Tensaw Delta. MBNEP's purpose is to catalyze actions of estuary stakeholders, build community based organizational capacity for sound resource management, and leverage commitment and investment in ensuring the estuary's sustainability.

MBNEP's objectives are to 1) engage estuary stakeholders in the development and implementation of a CCMP; 2) expand resources and involvement in the implementation of this CCMP; and 3) educate residents; visitors; lawmakers; local, State, and Federal government agencies; businesses and industries; conservation and environmental organizations; and academic institutions about how to best protect this nationally significant ecological, economic, and cultural resource to ensure its protection and conservation for our lifetime and beyond. MBNEP works within a set of *guiding principles* to maximize its effectiveness in promoting estuary health:

*Those that live it know it* - Citizens, fishermen, boaters, scientists, hunters and others have a unique insight into the environmental challenges we face, what works, and what doesn't. **Stakeholder input is vital to developing long-term solutions to local challenges.**

*Economic opportunities must be available* - Our coast is an economic engine, creating significant wealth for our State each year through activities such as trade through the Port of Mobile, recreational and commercial fishing, tourism, hunting and coastal construction. **In order to have a healthy economy, we need to have a healthy environment that provides essential natural functions.**

*Environmental Stewardship is interconnected* - Residents, towns, cities, counties, business and industry, academia, community developers, and social services - all have a vested interest in preserving the quality of life derived from Mobile Bay and Mobile-Tensaw Delta estuaries. **Coalitions that bring together a diversity of stakeholder interests are critical to comprehensively addressing the challenges of balancing economic development with environmental protection.**

*It happens in the river, in the sea, and on the street* - Involvement of citizens in carrying out activities aimed at improving the Bay and its watersheds is paramount to ensuring the long-term health and vitality of the Mobile estuary. **Citizens must be actively engaged in balancing the many uses of the Bay so that we can preserve its unique natural resources for all of our needs.**

*Our vision is simple: Alabama's estuaries ("where the rivers meet the sea") are healthy and support ecological functions and human uses.*

Everyone deserves the opportunity to experience the beauty and bounty of Alabama's estuaries - its rivers, creeks, bays, and bayous, abounding diversity of fish and wildlife, productive wetlands, and forests, dunes, and beaches. Alabama's estuaries are integral to the common good of our community and economy.

## PART ONE: MBNEP WORK PLAN FOR 2011-2012

### MAJOR GOALS AND FOCUS FOR 2011-2012

***Does our community recognize the need to maintain a healthy environment, and is it concerned about the degradation of ecosystems and the loss of species and genetic diversity which result from human activities?***

MBNEP's major focus for the coming year is to undertake a new Comprehensive Conservation Planning process based on science that will become the community's road map for coastal environmental management and restoration. This planning process will require many steps, including determining our environmental management goals; building a monitoring program that tracks water quality, habitat change, and living resource abundance and diversity; identifying highly impacted watersheds in need of comprehensive action planning; undertaking strategic ecosystem restoration projects that can be used to engage and educate citizens; cultivating investment and participation among the estuary's key stakeholders; and effecting policy changes at the State and local levels to improve long-term management of the resources.

In preparation for this planning effort, the MBNEP is undertaking the following activities:

First, a community survey is being conducted to assess environmental attitudes and values - in effect, to begin to answer the question posed above. Citizen input is crucial to their "ownership" of the final plan. This assessment will provide guidance on what environmental issues need to be addressed in the next CCMP.

Second, the current CCMP is being evaluated to analyze the extent to which this plan was successfully implemented based on the inventory of ongoing or completed activities, what gaps in implementation exist, and what areas require further study and action.

Third, an analysis of the historic balance of habitats in the area is being conducted by the MBNEP Science Advisory Committee (SAC) to assess which habitat types have been most severely impacted by community growth.

These three sets of information will be brought together to form the foundation of the second CCMP, so that the actions outlined in the plan resonate with the community, are achievable and realistic, and are based in science. In addition, MBNEP will continue to participate in the Natural Resource Damage Assessment process and Coastal Recovery Commission's *Road Map to Resilience*, where possible, to reduce duplication of efforts and streamline actions aimed at restoring our coastal environmental resources.

Both in the analysis of data and the development of this Work Plan, MBNEP has remained acutely aware of the budget constraints under which the State, counties, and municipalities must operate. To this extent, the priorities and activities have been formed to give maximum weight to feasible projects.

## BUDGET OVERVIEW: 2011-2012



Each year the MBNEP receives an allocation from EPA to support activities geared toward achieving the objectives of the CCMP. The allocation for the Year 16 Plan (**2011-2012**) is **\$600,000**. This second year of funding will be added to the Year 15 allocation (**2010-2011**) **\$800,000** for a total of **\$1,400,000**. EPA requires that this total allocation be matched with non-Federal dollars in a 1:1 ratio, or an additional \$1,400,000 either in cash or in-kind valuation. This match may be in the form of cash investments, donated property valuation, or in-kind equipment, professional, or volunteer services (see Match section). Total EPA funds, including match, that will be available for CCMP implementation will be valued at **\$2,800,000** for Year 16.

	<b>EPA/ Non-Federal Share (Actual 3-31-11)</b>	<b>Year 16 EPA/ Non-Federal Share</b>	<b>Total Non-Federal Share (Two Years)</b>
<b>Revenues</b>			
EPA	800,000	598,800	
State			
State Appropriation	68,332	60,000	128,332
ADCNR	70,000	70,000	140,000
Local			
Baldwin County		10,000	
Mobile County	23,850	23,850	47,700
City of Mobile	28,800	28,800	57,600
Other Cities (Daphne, Fairhope, etc)		10,000	10,000
<b>Total Revenues</b>	<b>990,982</b>	<b>801,450</b>	<b>-</b>
<b>Expenses</b>			
Estuary Status and Trends	75,000	45,000	100,000
Ecosystem Restoration and Protection	225,000	105,000	335,000
Technical Assistance and Capacity Building	10,000	23,000	10,000
Education and Outreach	55,000	103,017	50,000
Program Planning and Administration	496,852	420,740	30,000
PIR: DISL Administrative Fee	129,130	104,693	389,915
In-Kind Services			100,253
<b>Total Expenses</b>	<b>990,982</b>	<b>801,450</b>	<b>1,398,800</b>
Surplus/(Deficit)	0	0	0

## 1. Project Details: Estuary Status and Trends (EST)

Description	Total Activity Budget	2011-2012 Budget	2010-2011 Reprogram	2010-2011 Budget	External Grants	Past Year Grant Funds
BCG Support/Mapping	55,000	25,000	(45,000)	75,000		
NEW: Status- Sediment Budget for Mobile Bay	100,000		91,826			8,174
NEW: ALDOT-D'Olive Sediment Study	26,800				26,800	
Land Use Land Cover Change Analysis (NASA)	22,725				22,725	
NEW: Manatee Monitoring Network	15,000	15,000				
Annual Alabama Shorebird Assessment		5,000				13,000
Real Time Meteorological Monitoring	239,925				239,925	
	<b>459,450</b>	<b>45,000</b>	<b>46,826</b>	<b>75,000</b>	<b>289,450</b>	

What does biological integrity look like in the Mobile Bay estuary? What monitoring and research is needed to track environmental conditions through time? How do we reduce stressors and communicate resultant biological changes? One of the charges of the SAC is to integrate science into the development of an environmental monitoring program that informs about the status of the biological condition of the Mobile Bay estuary. It will be imperative that this monitoring program be one that coincides with what citizens value and that data from it is communicated to the public so that progress in improving/protecting biological conditions has widespread community support.

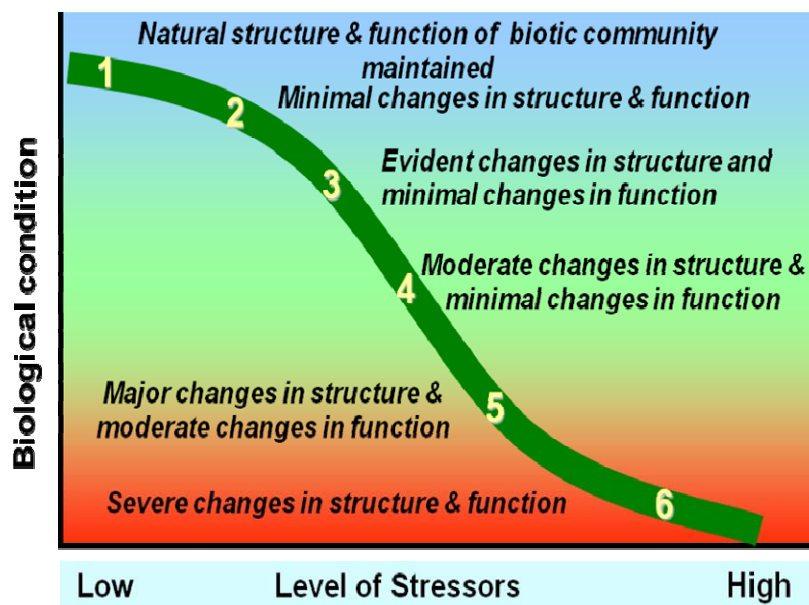
During the next fiscal year, MBNEP's SAC will lead efforts to pursue a habitat balance approach to restoration in terms of change in quantity and quality of habitats through time and identify those habitat types that have suffered the greatest losses as a starting point for determining biological integrity of the estuary system. The Biological Condition Gradient (BCG) framework will be used for priority habitat types most impacted to identify what stressors need to be mitigated and or monitored to improve that habitat type's ability to rebound. Concurrent to developing recommendations for a comprehensive environmental monitoring program, MBNEP will partner with the U.S. Army Corps of Engineers and others to build a Sediment Transport Model and Management Tool to better assess near shore restoration activities, continue to determine baseline sediment conditions in sub-estuaries, assess habitat change throughout the two-county area, and monitor key living resource populations.

## EST: ENSURING BIOLOGICAL INTEGRITY (BCG)

<b>Project Number</b>	EST1101
<b>Title</b>	Ensuring Biological Integrity
<b>CCMP Objective</b>	All
<b>Purpose</b>	Undertake a habitat balance approach to restoration in terms of change in quantity and quality of habitats through time using Biological Condition Gradient Framework
<b>Performing Organization(s)</b>	US EPA Region 1/MBNEP SAC
<b>Outputs/Deliverables</b>	Review of previously identified indicators to identify those that could be recommended as supporting BCG and biological monitoring; Biological Integrity Profile for certain priority habitats; Establishment of community environmental goals; list of indicators for revised monitoring program
<b>Outcomes</b>	Increase knowledge about science, monitoring, habitat management, and restoration of the Mobile Bay estuarine environment; Increase community ownership and involvement in local environmental protection activities
<b>Clean Water Act Relevance</b>	Improve water quality monitoring, support TMDL implementation, improve monitoring of wetland function and coverage
<b>10-11 EPA Funding</b>	\$30,000 (allocated \$45,000 to sediment study)
<b>11-12 EPA Funding</b>	\$25,000
<b>Total EPA Available</b>	\$55,000
<b>Match/Leverage</b>	US EPA, Science Advisory Committee

**Biological integrity** is commonly defined as "the ability to support and maintain a balanced, integrated, and adaptive community of organisms having a species composition, diversity and functional organization comparable to those of natural habitats within a region" (Karr and Dudley, 1981). It is equated with pristine conditions, or those conditions with minimal or no disturbance.

Using a BCG framework to develop environmental goals includes: 1) defining biological condition of a



minimally disturbed area or what the natural condition in the area would be, 2) defining biological attributes that change based on the level of stressors to that condition, 3) associating those changes with specific human impacts, and 4) identifying management practices for improving conditions and, therefore, biological integrity.

The biggest challenge of developing a BCG will be in the determination of “ideal or reference state.” To accomplish this, the SAC will define a realistic “ideal state,” based on science and the historical record, and fine-tune it to align with community attitudes and values. The critical assumption in undertaking this effort is that maintaining a balance of quantity and quality habitats will lead to sustainable living resource populations and improvements in water quality. The SAC will develop a list of indicators that will be used to describe estuarine health as outlined in the vision and determine gaps in data gathering/monitoring related to the indicators identified and potential proxies where data is not available. The products of this effort will be integrated into the CCMP planning effort and used to create recommendations for a comprehensive monitoring program for the coast.

Outcomes from these activities include an improved understanding of Mobile Bay estuarine biological integrity and critical factors or stressors to priority habitats; improved decision support related to water quality, living resource, and habitat restoration actions; and increased integration of science in long-term planning.

## EST: SEDIMENT BUDGET FOR MOBILE BAY ESTUARY

<b>Project Number</b>	EST1102
<b>Title</b>	Sediment Budget for Mobile Bay Estuary
<b>CCMP Objective</b>	HM-D2 Regional Sediment Management
<b>Purpose</b>	Develop sediment budget for the Bay and Delta to establish baseline sediment conditions and determine the relationship between fringe wetlands and sediment dynamics to identify positive and/or negative impacts associated with dredged material management practices, including, but not limited to: circulation impacts from dredged material mounding; beneficial uses of dredged material; and “within-bay” disposal for erosion reduction.
<b>Performing Organization(s)</b>	US Army Corps of Engineers/MBNEP
<b>Outputs/Deliverables</b>	Sediment Budget for Mobile Bay
<b>Outcomes</b>	Increase knowledge about sediment management within Mobile Bay system; Improve use of resources for restoration of the Mobile Bay estuarine environment; Improve understanding of restoration impacts to Mobile Bay environment
<b>Clean Water Act Relevance</b>	Improve water quality monitoring, support TMDL implementation, improve monitoring of wetland function and coverage
<b>10-11 EPA Funding</b>	\$91,826
<b>11-12 EPA Funding</b>	\$ 0
<b>Other Funding</b>	\$ 8,174 (Past EPA grant)
<b>Total EPA Available</b>	\$100,000
<b>Match/Leverage</b>	US Army Corps of Engineers, Northern Gulf Institute, Dauphin Island Sea Lab (Park et al)

According to the Loading Budget Analysis for Mobile Bay Modeling (Tetra Tech, 2001) the major water quality issues in the Mobile River Basin at the turn of this century included nutrient enrichment, sedimentation, pesticides and toxics, habitat degradation, metals, bacterial contamination, and the health of the estuarine environment and its fisheries. To track changes in the condition of this basin, MBNEP has supported a variety of environmental monitoring, including water quality, habitat change, and key living resource populations. This monitoring is conducted to establish long-term datasets to track change over time.

At present, MBNEP is working with the U. S. Army Corps of Engineers and its sediment experts to support development of a sediment budget for Mobile Bay for the implementation of a sediment management plan for the Mobile Bay Watershed. A sediment budget illustrates a balance of the sediment volume entering and exiting a particular section of the coast or estuary system. Sediment budget analysis consists of the evaluation of sediment transport patterns, consisting of sources and sinks involving the various sediment transport processes that accounts for additions and subtractions of sediment within an area of interest such as a section of coast or an estuary. Such knowledge will be useful in better understanding how sediment flows within the

Mobile Bay estuary system (Associated British Ports Marine Environmental Research, Ltd., 2008). This work will be coupled with other ongoing efforts to determine circulation and sediment transport patterns in the bay. The ultimate goal of these activities is to develop a Sediment Transport Model that will provide decision support for restoration efforts along the shore to ensure that these activities do not adversely alter fisheries areas that may be in close proximity to potential restoration sites.

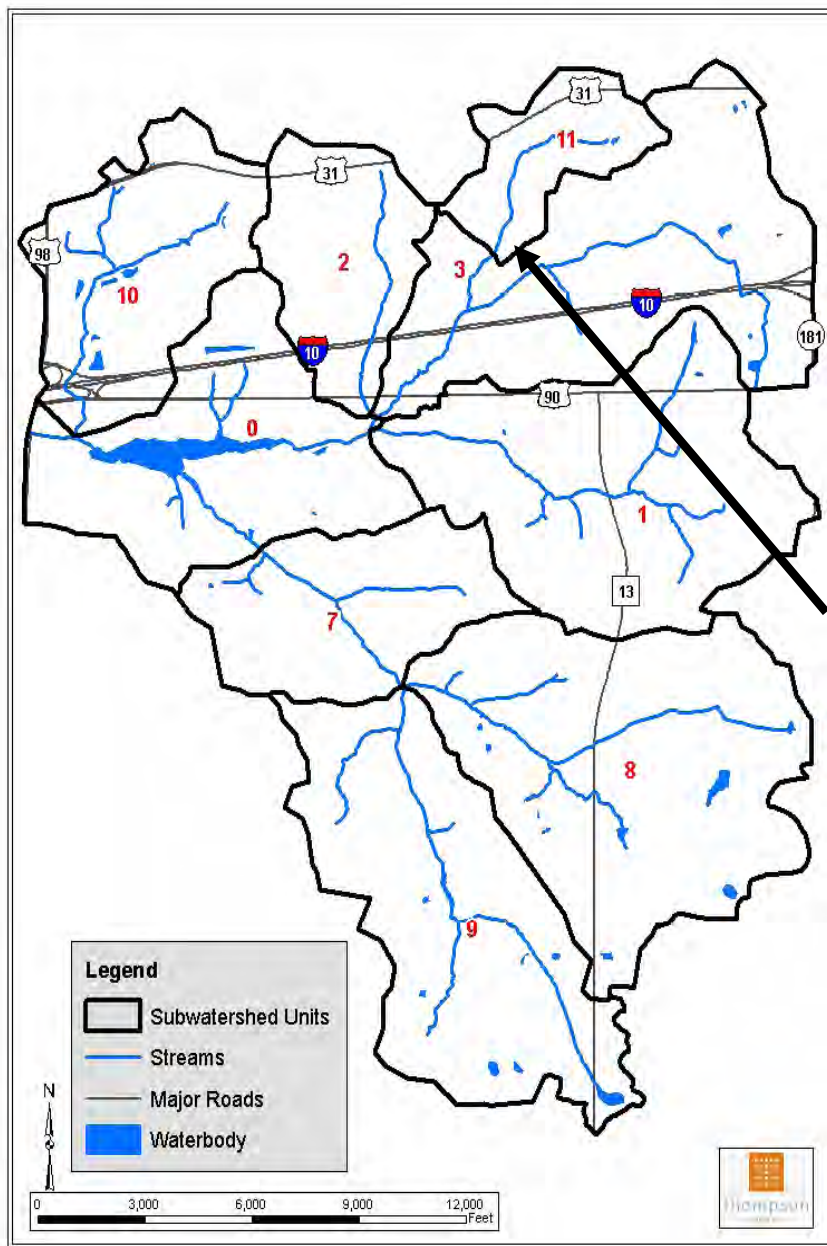
### EST: D'OLIVE CREEK SEDIMENT BASELINE UP-STREAM I-10

<b>Project Number</b>	EST1103
<b>Title</b>	D'Olive Creek Sediment Baseline Up-Stream I-10
<b>CCMP Objective</b>	HU-B2 Restore Natural Hydrologic Conditions
<b>Purpose</b>	Assessment of stream flow and sediment loading upstream of D'Olive Creek at I-10 crossing to develop a baseline of conditions pre-development within a priority impaired water body
<b>Performing Organization(s)</b>	AL Department of Transportation/MBNEP
<b>Outputs/Deliverables</b>	Survey of Baseline conditions for D'Olive Creek at I-10 crossing
<b>Outcomes</b>	Increase knowledge about sediment management within Mobile Bay system, and improve understanding of environmental condition of impaired waterbodies
<b>Clean Water Act Relevance</b>	Improve water quality monitoring, support TMDL implementation
<b>10-11 EPA Funding</b>	\$ 0
<b>11-12 EPA Funding</b>	\$ 0
<b>Other Funding</b>	\$ 18,800 (ALDOT)
<b>Total EPA Available</b>	\$18,800
<b>Mach/Leverage</b>	ALDOT State funding, Geological Survey of AL

D'Olive Creek and its associated wetlands have been severely impacted throughout the majority of the sub-watershed because of dense residential and commercial development. The construction of the Lake Forest subdivision impacted the western half of the creek. More recently the Timber Creek subdivision has contributed to the rapid degradation of habitat quality within the northeastern region of the watershed. Home-building within both subdivisions has contributed large quantities of sediment to the upper reaches of D'Olive Creek and its tributaries, and the subdivisions' road network, golf courses, driveways, roofs, and grassed lawns have all contributed greatly to the volume of runoff that the Creek must accommodate during storm events. The quantity and velocity of the water have scoured the creek bottom and has pushed sediment far downstream, altering the vegetative composition of much of the surrounding wetland acreage. D'Olive Creek has been impacted primarily by sedimentation.

D'Olive Creek and an unnamed tributary to it were among several streams in this watershed that were added to the Alabama Section 303(d) List in 2008. The cause of the listings was given as "Siltation (habitat alteration)" due to "Land Development." The basis for addition to the list was cited as the Geological Survey

of Alabama sediment loading rate study (Cook, 2007). A TMDL has not yet been developed for any of the 303(d)-listed streams in the D'Olive Watershed. The 2010 Alabama 303(d) List provides a Draft TMDL date of 2013 for these waters. The TMDL will be developed on an entire Watershed basis.



For the period 2007-2008, the Upper D'Olive Watershed (i.e., Sub-watersheds 1, 3, and 11 in the map at left) was the dominant contributor of sediments in the Watershed. Sub-watersheds 3 and 11 collectively contributed nearly half the total sediment load of the entire D'Olive Watershed, while Sub-watershed 1 contributed just under one third.

One route for flow into and out of D'Olive Bay is an opening located in the extreme northwestern portion of the Bay, an extremely narrow channel that connects with the I-10 work canal. Discharges from D'Olive Creek enter the Bay through this connection which delivers sediments to D'Olive Bay (Thompson Engineering, 2010).

During the fall of 2010, MBNEP partnered with the Alabama Department of Transportation and the Geological Survey of Alabama to undertake a stream flow and sediment transport assessment to develop a robust baseline for a severely impacted section of D'Olive Creek. The project objective was to monitor conditions pre-construction of any future proposed development in the

area. In addition, this project will help guide future development and justify the need to implement better land management practices including low impact design measures.

**EST: LAND USE LAND COVER 2-AIDING CONSERVATION/ PROTECTION**

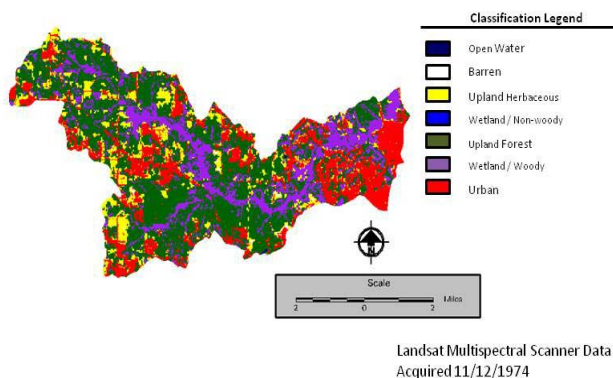
<b>Project Number</b>	EST1104
<b>Title</b>	Land Use Land Cover Analysis: Aiding Conservation and Protection
<b>CCMP Objective</b>	HM-A1 Promote Habitat Preservation Activities
<b>Purpose</b>	Assess permanency of habitat change and identify priority watersheds for habitat conservation efforts
<b>Performing Organization(s)</b>	NASA/University of South Carolina/MBNEP
<b>Outputs/Deliverables</b>	GIS files depicting Coastal HUC-12 change products and urbanization projection outputs; graphic depiction of other geospatial products that can aid in prioritization analysis
<b>Outcomes</b>	Increase knowledge about permanent habitat changes within Mobile Bay system; Improve education about land conversion within the system
<b>Clean Water Act Relevance</b>	improve monitoring of wetland function and coverage
<b>10-11 EPA Funding</b>	\$ 0
<b>11-12 EPA Funding</b>	\$ 0
<b>Other Funding</b>	\$ 22,725 (NASA)
<b>Total EPA Available</b>	\$22,725
<b>Match/Leverage</b>	NASA ROSES A-28, Baldwin County Watershed Study

Land-Use and Land-Cover (LULC) change can negatively impact Gulf coast water quality and ecological resources. The conversion of forest to urban cover impacts the carbon cycle and increases the freshwater and sediment delivered to coastal waters. Increased freshwater runoff decreases salinity and increases the turbidity of coastal waters, thus impacting the growth potential of submerged aquatic vegetation (SAV), which is critical nursery habitat for many Gulf fish and shellfish species. Surveys of Mobile Bay SAV have shown wide spread decreases since the 1940s. Prior to this LULC analysis, coastal environmental managers in Baldwin and Mobile Counties needed greater understanding of the historical LULC to properly assess the impacts of increasing urbanization. In particular, more information on the location and extent of changing urbanization LULC patterns was needed to aid planning and to assess predictions of future LULC patterns.

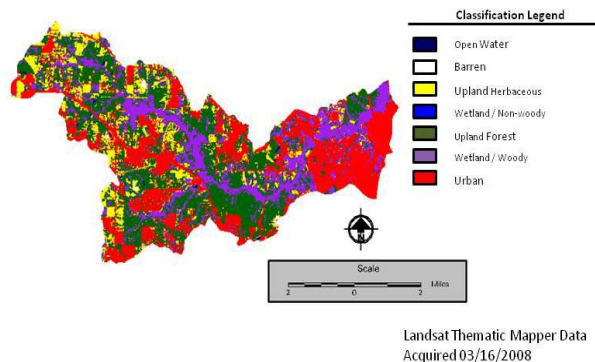
This project will create and validate LULC products to aid end-user coastal conservation decision-making needs. Previous Landsat-based LULC products will be analyzed to characterize the changing urban landscape, assess the permanence of LULC change, and suggest regions of interest for conservation and restoration. The major deliverables will be validated LULC time series with emphasis on key watersheds identified by MBNEP, data products analyzing urban change trends, assessments of the permanence of LULC change, and model output results to identify parcels with conservation and restoration potential.

These products will help coastal environmental managers and land-use planners make better LULC planning and implementation decisions. This project has helped to establish a historical baseline of LULC distributions, a fundamental need in any long term stewardship program (Ellis, *et. al.*, 2008).

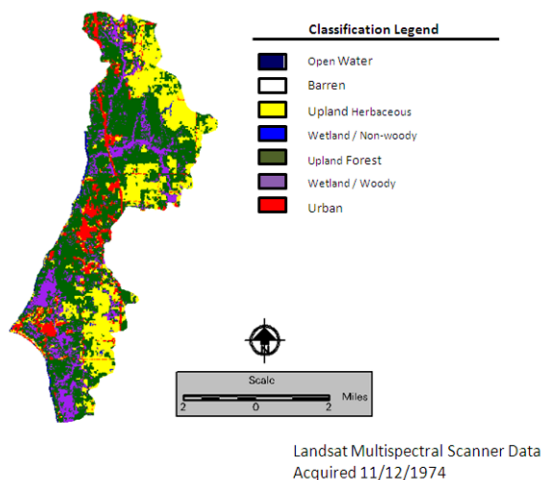
Eight Mile Creek Sub-watershed - 1974 Land Use Land-Cover Classification



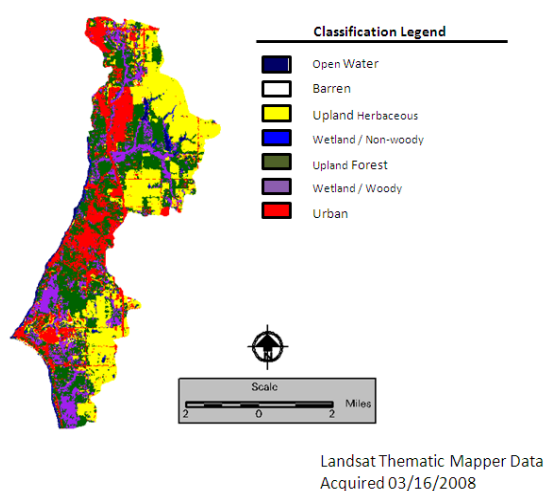
Eight Mile Creek Sub-watershed - 2008 Land Use Land-Cover Classification



Fly Creek Sub-watershed - 1974 Land Use Land-Cover Classification



Fly Creek Sub-watershed - 2008 Land Use Land-Cover Classification



## EST: MANATEE SIGHTING NETWORK

<b>Project Number</b>	EST1105
<b>Title</b>	Manatee Sighting Network Monitoring
<b>CCMP Objective</b>	LR-A1 Improve Monitoring of Key Living Resources
<b>Purpose</b>	Provide interim funding of the Manatee Monitoring Network to support tracking of this endangered species and to better understand the ecology that supports their existence.
<b>Performing Organization(s)</b>	Dauphin Island Sea Lab- Dr. Ruth Carmichael
<b>Outputs/Deliverables</b>	Data to 1) inform the status and 2) enhance public awareness of endangered West Indian manatees in AL
<b>Outcomes</b>	To determine the status of ecologically important and endangered species.
<b>Clean Water Act Relevance</b>	NA
<b>10-11 EPA Funding</b>	\$ 0
<b>11-12 EPA Funding</b>	\$ 15,000
<b>Other Funding</b>	\$
<b>Total EPA Available</b>	\$15,000
<b>Match/Leverage</b>	DISL, AL Dept. of Wildlife and Freshwater Fisheries

The Dauphin Island Sea Lab's Manatee Sighting Network (DISL/MSN) is entering its fifth year of research on manatees and manatee habitat in Alabama waters. DISL/MSN remains the only formal manatee sighting network in the U.S. and is dedicated to receiving and mapping every local manatee sighting. DISL/MSN was established in 2007 as part of a study funded by the Alabama Department of Conservation and Natural Resources, Wildlife and Freshwater Fisheries Division (ALWFFD) under Section 6 from the U.S. Fish and Wildlife Service, to begin defining manatee resources in Alabama. The Network has successfully processed more than 600 manatee sightings in the past four years (in contrast, 156 sightings were recorded in the area during the entire 20 years prior).

DISL/MSN's scientific research has increased the understanding of life history traits for endangered West Indian manatees (*Trichechus manatus*) in fringe habitat. Research has included defining when manatees visit local waters, where they go, what they eat, and linkages between manatees in the northern Gulf of Mexico and Florida. In 2009 and 2010, the project expanded (with leveraged



funding from the MBNEP) to include fitting manatees with satellite-linked GPS/telemetry tags to better define seasonal movements in Alabama waters. *Tracking locally tagged manatees has allowed collection and analysis of data with a level of accuracy never before possible for manatees in fringe habitats of the northern Gulf of Mexico.* As a result, DISL/MSN tracked and directly monitored movements of five manatees nearly continuously within Alabama and during migration to Florida. Over time, these data will unambiguously define the spatial and temporal boundaries of local manatee habitat.

The timing and duration of manatee movements observed to date suggest that Alabama and nearby waters may be home to a subset of manatees who spend most of their time in northern Gulf of Mexico, only traveling to Florida during the coldest months of winter and quickly returning when water temperature rises. Evidence for the existence of a northern Gulf of Mexico manatee population is important not only to understand the fundamental ecology of this endangered species, but also to establish relevant management and conservation practices throughout their range. Despite past successes and the development of substantial infrastructure, funding for this valuable ongoing research and monitoring effort, however, will end on September 30, 2011, and no other program exists to collect these needed data. Funds are needed to continue tagging and tracking efforts and to confirm and further define the regular habitual use of northern Gulf of Mexico waters by manatees through time.

MBNEP funding will be used to cover costs including but not limited to: Argos satellite monitoring, collaborator time and travel, DISL travel out-of-state, batteries for passive acoustic monitors and tags, minor repair, supplies, maintenance, and postage/shipping.

## EST: ANNUAL ALABAMA SHOREBIRD ASSESSMENT

<b>Project Number</b>	EST1106
<b>Title</b>	Alabama Shorebird Assessment
<b>CCMP Objective</b>	LR-A1 Improve Monitoring of Key Living Resources
<b>Purpose</b>	To support a comprehensive, shorebird population and nesting assessments
<b>Performing Organization(s)</b>	Conservian
<b>Outputs/Deliverables</b>	
<b>Outcomes</b>	
<b>Clean Water Act Relevance</b>	
<b>10-11 EPA Funding</b>	\$ 0
<b>11-12 EPA Funding</b>	\$ 5,000
<b>Other Funding</b>	\$ 13,000 (Past EPA Grant)
<b>Total EPA Available</b>	\$18,000
<b>Match/Leverage</b>	ADCNR, USFWS



photo credit: Margo Zdravkovic, 2010

In the spring and summer of 2007, MBNEP and ADCNR State Lands Division- Coastal Section partnered with the National Audubon Society Coastal Bird Conservation Program (CBCP) to conduct the first comprehensive standardized survey of the Alabama coast (including islands) for breeding beach-nesting birds with the cooperation of State and Federal agencies. The surveyed species were those included in the 1998 MBNEP Habitat Loss Characterization and listed as Federal or State species of concern, including: Snowy Plovers, Wilson's Plovers, American Oystercatchers, Least Terns, Gull-billed Terns, Common Terns, and Black Skimmers. The CBCP surveyed all beach-nesting bird habitat or potential habitat on the Alabama coastline, including Bon Secour National Wildlife

Refuge, Dauphin Island, West Dauphin Island, Isle Aux Herbes, Pelican Island, Cat Island, Gulf State Park, and Barton Island Peninsula. CBCP is currently engaging in discussions to implement protective measures with the cooperation of local, State, and Federal agencies to preserve and enhance Alabama's small but precious beach-nesting bird population. With four years of survey data now complete, MBNEP will continue to fund this assessment in the coming year to continue to build a long term data set.

## EST: REAL-TIME MONITORING OF METEOROLOGICAL CONDITIONS

<b>Project Number</b>	EST1107
<b>Title</b>	Real-Time Meteorological Conditions Monitoring
<b>CCMP Objective</b>	WQ-A1.2 Assess Data to Identify Water Quality Problems
<b>Purpose</b>	To support a comprehensive, bay-wide, long term data set of water quality conditions throughout the bay.
<b>Performing Organization(s)</b>	DISL- Michael Dardeau
<b>Outputs/Deliverables</b>	Data to 1) inform the status and 2) enhance public awareness of water quality condition throughout the bay
<b>Outcomes</b>	Data collected will greatly assist in determining the designated water use criteria for the State of Alabama and providing baseline readings for 303(d) improvements.
<b>Clean Water Act Relevance</b>	Support TMDL development
<b>10-11 EPA Funding</b>	\$ 0
<b>11-12 EPA Funding</b>	\$ 0
<b>Other Funding</b>	\$ 239,925
<b>Total EPA Available</b>	\$239,925
<b>Match/Leverage</b>	DISL, US EPA Gulf of Mexico Program

This is a continuation of the comprehensive, Bay-wide, water monitoring program begun in the Year Seven (FY 2003) Work Plan and funded by the Coastal Impact Assistance Program. It provides an opportunity to collect water quality data over the long term in Mobile Bay and along the Alabama coastline including: 1) new and innovative technologies for real-time monitoring/measurement (data from single, multi-sensor probes used to measure standard meteorological measurements plus dissolved oxygen, salinity, water temperature, pH, turbidity, and fluorescence transmitted to an internet web site every 15 minutes); 2) appropriate information management, processing, and delivery (transmitted data via cellular modem will enter the data management center server and be made available on the internet web site); and 3) real-time communication of information to the public through [www.mymobilebaynep.com](http://www.mymobilebaynep.com) and lab analyzed water samples will be reported in the local newspapers. The data collected will be of great value in determining the designated water use criteria for the State of Alabama and providing baseline data for 303(d) improvements.

## 2. PROJECT DETAILS: ECOSYSTEM RESTORATION

Description	Total Activity Budget	2011-2012 Budget	2010-2011 Reprogram	2010-2011 Budget	External Grants	Past Year Grant Funds
City of Chickasaw-Brooks Park Restoration	20,000			20,000		
City of Fairhope- Volanta Watershed Restoration	50,000			50,000		
City of Foley- Wolf Creek Restoration	82,500			82,500		
City of Orange Beach- 161 Wetlands Restoration	27,500			27,500		
City of Daphne- LID Green Infrastructure Regs.	15,000			15,000		
City of Orange Beach- Canal Rd. overlay district	30,000			30,000		
NEW: Mobile County Watershed Restoration	90,000	<b>90,000</b>				
GOMF-Mon Louis Island	141,493	<b>10,000</b>			118,450	13,043
Three Mile Creek Restoration	30,700	<b>5,000</b>			20,000	5,700
	<b>487,193</b>	<b>105,000</b>	<b>-</b>	<b>225,000</b>	<b>138,450</b>	<b>18,743</b>

Ecosystem restoration refers to returning a damaged ecological system to a stable, healthy, and sustainable state. Although it is impossible to return an ecosystem to the exact same condition as prior to disturbance, restoration to improve ecosystem function and the services will contribute to community health and well-being, protection against climate change and sea level rise, economic sustainability, recreation, and community quality of life.

In the coming year, MBNEP will focus on the restoration of Joe's Branch, located in the D'Olive Watershed, and the historic creek bed of Three Mile Creek in the City of Mobile. MBNEP will also work with the State of Alabama to initiate a living shoreline project for habitat enhancement and shoreline stabilization along the western shore of Mobile Bay in part to assess potential policy modifications at the State level to promote this type of activity. In addition, MBNEP will partner with the City of Chickasaw to undertake a wetland restoration, the City of Daphne to develop local stormwater regulations; the City of Fairhope to develop and implement a watershed management plan for Volanta Gully within the Fly Creek Watershed; the City of Foley to undertake a wetland restoration project on Wolf Creek and the City of Orange Beach to conduct a wetland enhancement project and create an overlay district to ensure appropriate development of a sensitive area of the City. Outcomes from these activities include improved wetland function and stormwater management to reduce negative habitat impacts.

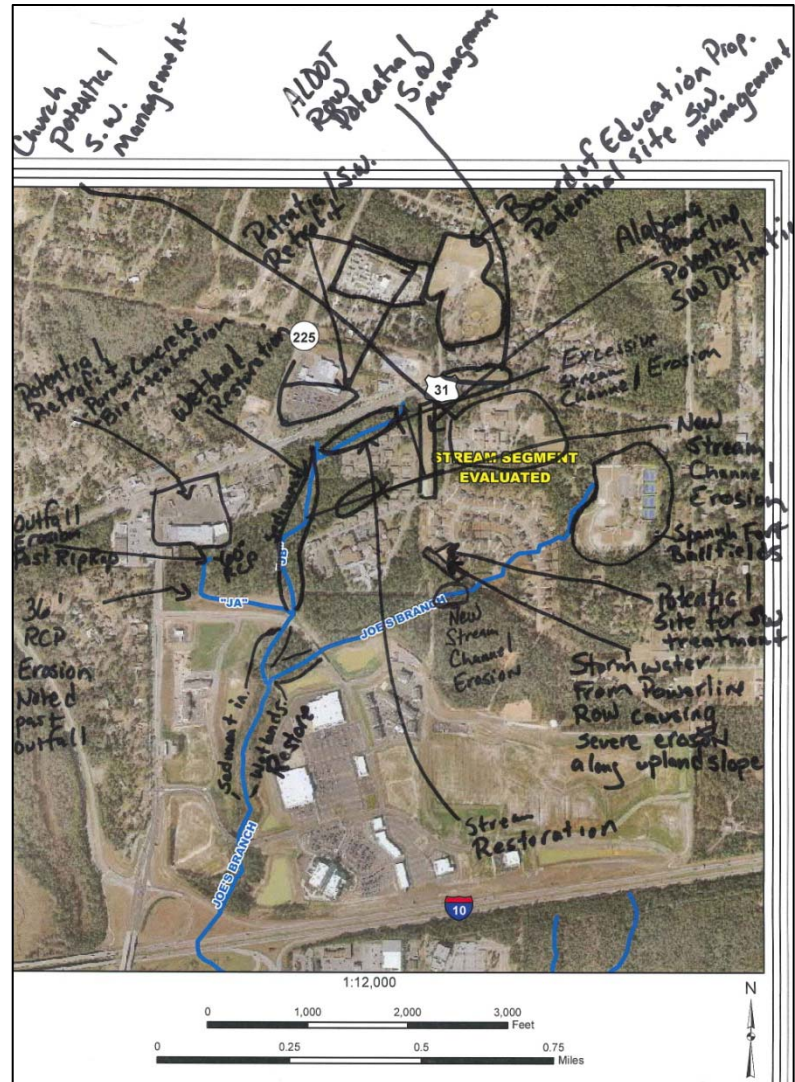
## ERP: D'OLIVE WATERSHED: JOE'S BRANCH RESTORATION

<b>Project Number</b>	ERP
<b>Title</b>	Joe's Branch Restoration
<b>CCMP Objective</b>	WQ, HU-B2
<b>Purpose</b>	Restore Joe's Branch in the D'Olive Watershed with goal of removal from the State's 303(d) List and reduction in sedimentation being transported downstream
<b>Performing Organization(s)</b>	MBNEP , Baldwin County, City of Spanish Fort, City of Daphne, Alabama Department of Transportation, Westminster Village
<b>Outputs/Deliverables</b>	
<b>Outcomes</b>	Improved ecosystem function and protection; Improved community management of ecosystem restoration and protection activities.
<b>Clean Water Act Relevance</b>	Improve water quality monitoring, support TMDL implementation, improve monitoring of wetland function and coverage
<b>10-11 EPA Funding</b>	
<b>11-12 EPA Funding</b>	
<b>Other Funding</b>	\$500,000 (Pending- US EPA 319 funds)
<b>Total</b>	\$500,000
<b>Match/Leverage</b>	Alabama Department of Transportation, Cities of Daphne, Spanish Fort, Westminster Village

Completion of a Comprehensive Management Plan (CWMP) for the D'Olive and Tiawasee Creek and Joe's Branch Watershed, planned Alabama Department of Transportation (ALDOT) modifications to Highway 31, concerns by Westminster Village over severe stream bank erosion and sedimentation of wetlands, and recognition by Baldwin County and local municipalities of need and opportunity coincided to provide partners with a chance to implement plans for the restoration of the Joe's Branch sub-watershed. When Highway 31 in Spanish Fort is widened, ALDOT will also perform extensions and expansions of stormwater conveyance that runs from northeast to southwest along the northern boundaries of Westminster Village. This work will provide approximately \$200,000 of non-Federal funds to manage non-point source pollution. Accordingly, MBNEP will submit application for a Clean Water Act Section 319 grant from the State to fund comprehensive restoration efforts within this sub-watershed. Project partners include ALDOT, the Cities of Daphne and Spanish Fort, Baldwin County, MBNEP, Westminster Village (WV), and Thompson Engineering.

Thompson Engineering, which headed the team that prepared the D'Olive CWMP, was contracted by WV to provide engineering guidance for problems on their property that include dramatic head-cutting and stream bank erosion with mass wasting impacting forested land and threatening homes in stream segments running just south of and parallel to Highway 31. Sources of storm water runoff include outflows from highway conveyances as well as sheet flow from the Faith Family Fellowship property to the east. These eroded stream segments have deposited massive accumulations of sediment into WV wetland areas directly east of the Spanish Fort Methodist Church.

Thompson is currently preparing preliminary plans that describe problem areas, potential solutions, and order-of-magnitude cost estimates to facilitate prioritization and decision making by project partners. Plans include restoration of stream segments and impacted wetlands, potential installation of retention/detention ponds, and installation of demonstration best management practices in the area of Spanish Fort Elementary School and the municipal ball fields to curtail excess volumes of storm water runoff that underlie degradation of this watershed.



## ERP: THREE MILE CREEK HISTORIC STREAM BED RESTORATION

<b>Project Number</b>	ERP
<b>Title</b>	Three Mile Creek Restoration
<b>CCMP Objective</b>	HMC1, LR-C2
<b>Purpose</b>	Use environmentally sound engineering techniques to restore in-stream habitat, create adjacent riparian habitat, enhance wooded floodplain habitats, and provide public access to a unique backwater environment within a highly urbanized, traditionally underserved area of the City of Mobile
<b>Performing Organization(s)</b>	MBNEP, City of Mobile
<b>Outputs/Deliverables</b>	1.25 acres of in-stream habitat; 1,800 feet of restored stream bed; 0.85 acres of riparian habitat; public access point
<b>Outcomes</b>	Improved ecosystem function and protection; Improved community understanding of ecosystem restoration and protection activities.
<b>Clean Water Act Relevance</b>	Improve monitoring of wetland function and coverage
<b>10-11 EPA Funding</b>	\$5,700
<b>11-12 EPA Funding</b>	\$5,000
<b>Other</b>	\$20,000 (Waterkeeper Alliance) (Pending ERP Grant: \$412,972; \$40,000 NOAA)
<b>Total</b>	\$ 30,700
<b>Match/Leverage</b>	Waterkeeper Alliance, Estuary Restoration Partnership, NOAA, City of Mobile, US Army Corps of Engineers, US Fish and Wildlife Service

The restoration of Three Mile Creek provides an opportunity to restore a tidally-influenced creek on State lands in a relatively pristine, cypress-dominated, wetland-rich, flood plain surrounded by industrial development and low-income, traditionally underserved neighborhoods lacking access to environmental resources or passive recreational opportunities.

In 2002, the U. S. Army Corps of Engineers, Mobile District was charged with evaluating various ecosystem restoration alternatives that would restore flow to the historic streambed of Three Mile Creek as a modification to a flood control project to re-establish biological integrity. Their objective was to determine a way to divert a portion of the flow from the bypass channel back into the historic streambed while maintaining average velocities below four feet per second for ten-year flood events. In their “Environmental Assessment – Section 1135 Environmental Improvement and Restoration – Three Mile Creek,” four alternatives were considered (including “no action”). Their preferred alternative involved excavating the old streamway to historical width and depth from the eastern bank of the bypass channel approximately 1,800 feet to where the historic streamway is blocked and terminates. However, the Corps was not able to undertake this project due to funding constraints and Federal agency objections over negative impacts.

As a partner to the Corps and the City of Mobile on this project, MBNEP continues its commitment to the restoration of the original Three Mile Creek streamway. Our goal is to use environmentally sound engineering techniques to restore in-stream habitat, create adjacent riparian habitat, enhance wooded floodplain habitats, and provide public access to a unique backwater environment within a highly urbanized, traditionally underserved area of the City of Mobile. While conventional bucket dredging was rejected by



the F&WS due to excessive ecosystem impacts, spray dredging provides a less invasive technology at 28% of the estimated costs associated with excavation.

This project entails redirecting flow into approximately 1,800 feet of the State-owned, historic streambed of Three Mile Creek to restore hydrology and mimic natural condition to the creek, riparian areas, and the surrounding wooded floodplain. This restoration includes the removal of sediment and woody debris that has built up over several decades after construction of a bypass channel by the City to reduce flood problems between Dr. Martin Luther King, Jr. Avenue (MLK) and Conception Street Road. That project effectively “cut off” a portion of the existing streamway that meandered through the wetland-rich floodplain between the two road crossings. Material dredged to restore the streamway will be side cast using thin-layer disposal without negative impacts to adjacent wetlands.

By clearing sediment and woody debris presently choking off the original streamway, the surrounding environment will greatly benefit from improved water quality, re-establishment or enhancement of native habitat, increased concentrations of dissolved oxygen (DO) in the water column, and restored hydrology to adjacent wetlands. It would provide public access to a unique, backwater environment (within a highly urbanized area) that would further connect to the surrounding flood plain and the associated micro-habitats found within.

The restoration of Three Mile Creek provides community recreation access to local waters for residents of Albert Owens/Jesse Thomas Homes neighborhood, a project developed under the Hope VI Revitalization Plan of the Mobile Housing Board. Such access, along with development of a passive park on Mobile Gas/Sempra property at the corner of MLK and Beauregard Ave., enhances a newly revitalized area that is home to a traditionally underserved segment of the population.

Objectives:

- Restoration of an in-stream ecosystem in 1.25 acres of in-stream habitat with adequate dissolved oxygen (DO) concentrations to sustain benthic and pelagic communities, improved water clarity/decreased turbidity, and decreased nutrient concentrations
- Establishment of 0.85 acres of riparian habitat
- Enhancement of approximately six acres of wooded wetland along 1,800 feet of restored stream bed by thin layer deposition of dredged material and increased connectivity to the surrounding flood plain and its habitats
- Reduction and/or elimination of a mosquito breeding area adjacent to a highly developed area
- Enhancement of habitats for Federally-listed endangered and threatened species likely to be found within the project vicinity, including: eastern indigo snake and Alabama red-bellied turtle
- Enhancement of flood protection with increased runoff capacity
- Provision of increased public access to a tidally influenced creek within an urbanized area with active (paddling, fishing, crabbing, bird watching, etc.) and passive recreational opportunities, resulting in increased connectivity, promotion of environmental stewardship, and general community health
- Enhancement of property values/community tax base for residences in proximity to natural streams compared to those close to channelized streams

Additionally, MBNEP intends to support ALWFFD efforts to contain and reduce abundance of the invasive exotic Island Apple Snail (*Pomacea insularum*) from Three Mile Creek by funding the purchase of emergent aquatic herbicide. Herbicide will be used to limit egg-laying substrate in certain high priority areas in conjunction with the application of copper sulfate and egg scraping from solid structures.

Apple snails were first reported anecdotally in the Creek in 2008, and eradication efforts were undertaken in 2009 and 2010. The presence of this nuisance species in Three Mile Creek is of particular concern, since it drains directly into the Mobile River Ship Channel. Concerns include invasion of the more than 20,000 acres of Mobile-Tensaw Delta habitat as well as attachment to ships and barges and potential introduction to the Tombigbee and Alabama Rivers and ports outside Alabama.

Project Partners include: The City of Mobile; Mobile County Department of Public Health; Alabama Department of Conservation and Natural Resources – State Lands Division, Coastal Section and Wildlife and Freshwater Fisheries Division; Mobile BayKeeper; Dauphin Island Sea Lab/MBNEP; U. S. Army Corps of Engineers, Mobile District; U. S. Fish and Wildlife Service.

## ERP: MON LOUIS ISLAND SHORELINE STABILIZATION/HABITAT ENHANCEMENT

<b>Project Number</b>	ERP
<b>Title</b>	Mon Louis Island Shoreline Stabilization/Habitat Enhancement
<b>CCMP Objective</b>	HM D3, LR-C2
<b>Purpose</b>	Stabilize shorelines from chronic, routine impacts including but not limited to boat wakes from ship channel and re-establish critical fisheries habitat
<b>Performing Organization(s)</b>	MBNEP
<b>Outputs/Deliverables</b>	1,000 ft of shoreline stabilized; 1,000 feet of near shore habitat structure; .45 acres of salt marsh habitat
<b>Outcomes</b>	Improved ecosystem function and protection; Improved community understanding of ecosystem restoration and protection activities.
<b>Clean Water Act Relevance</b>	Improve monitoring of wetland function and coverage
<b>10-11 EPA Funding</b>	\$0
<b>11-12 EPA Funding</b>	\$10,000
<b>Other</b>	\$ 58,451 (GOMF); \$59,999 (USFWS); \$13,043 (Past EPA grant)
<b>Total</b>	\$ 141,493
<b>Match/Leverage</b>	Gulf of Mexico Foundation; USFWS; Volunteers; University of South Alabama, Mississippi Alabama Sea Grant Consortium

Mon Louis Island's Mobile Bay shoreline has experienced significant erosion and loss of habitat over recent decades not only from tropical weather events but also routine effects like wakes from ship channel traffic and prevailing winds. This gradual and chronic loss of shoreline has prevented natural establishment of oyster reef and salt marsh habitat. Homeowners have reported spending thousands of dollars annually to preserve and protect property, frequently using management practices that exacerbate habitat loss and compromise its re-establishment (e.g., bulkheads).

While not offering protection from catastrophic weather events, construction of near shore reef structures and planting intertidal marsh vegetation would stabilize shorelines from chronic, routine impacts and re-establish critical habitat for NOAA Trust Resources, including commercially and economically important fish and shellfish. Alabama's oyster fishery – with historic presence in the project area – has suffered from impacts of recent storms, drought, and resultant proliferation of predacious oyster drills. The project will provide settlement substrate and enhance seed stock of this commercially important resource and will provide fishery habitat for commercially and recreationally important fish and shellfish.

This project involves installation of wave-attenuating structure 300 to over-500 feet from and along the Mon Louis Island-Mobile Bay shoreline and planting of native marsh vegetation in intertidal areas along the shore to create and enhance sub-tidal and intertidal habitat and stabilize sediments. MBNEP and partners have recruited and engaged owners of property along a 1,500-linear foot length of eroded residential shoreline to design and implement this project to 1) attenuate routine wave energy, 2) create/enhance oyster reef and marsh habitat, and 3) demonstrate technologies alternative to shoreline armoring on a scale available to property owners concerned with loss of near shore habitat.

Objectives:

- Create 0.25 acres of reef structures favorable for oyster settlement to provide nursery, forage, and refuge habitat for invertebrates and fish and enhance water quality
- Create up to 0.45 acres of salt marsh habitat to provide nursery, forage, and refuge habitat for invertebrates, fish, and birds; stabilize shoreline sediments, and filter stormwater runoff
- Attenuate the routine wave energy from ship traffic and prevailing southeasterly winds using installed wave attenuating reef structures and stabilize intertidal sediments by planting emergent marsh vegetation
- Engage 12-18 private property owners in designing and implementing a public shoreline restoration project that employs living shorelines technologies and concepts on a scale available to property owners

This project represents a first attempt to engage multiple private property owners in the design and implementation of a project to offer shoreline protection and provide ecosystem services from installed habitat features. Other “living shorelines” projects have been undertaken locally on public shorelines or those owned by a single agreeable entity, but this project requires agreement and commitment by ten to twenty individual property owners.

Certain issues of concern remain to be resolved, including:

- Shoreline boundaries/ownership given past erosion and potential for accretion
- Riparian rights over oysters within 1,800 feet of mean high water
- Maintenance of materials used for reef structure construction, should disruption occur as a result of storm conditions
- Access/ingress/egress through constructed reef structures
- Engineering issues involving constructed reef structures
- Installation of warning signage to prevent navigation accidents
- Project effect on individual property values

External funding, totaling \$188,450, has been obtained to undertake this demonstration project. During the next program year, MBNEP has allocated additional funding to be used as needed for additional engineering services.

Project Partners include: Residents of Mon Louis Island, Alabama Department of Conservation and Natural Resources, State Lands Division- Coastal Section, University of South Alabama Department of Civil Engineering, Dauphin Island Sea Lab, MASGC, Alabama Coastal Foundation (ACF), Mobile BayKeeper, The Nature Conservancy.

## ERP: LOCAL ECOSYSTEM RESTORATION PARTNERSHIP

<b>Project Number</b>	ERP
<b>Title</b>	Local Restoration Partnership
<b>CCMP Objective</b>	WQ, LR, HM, HU
<b>Purpose</b>	Build partnerships with local government and community groups to engage in activities that benefit the entity while implementing actions to reduce the impacts of stormwater, improve wetland coverage and function, or support reduced sediment loading and transport throughout the Mobile Bay estuarine system
<b>Performing Organization(s)</b>	MBNEP – Cities of Chickasaw, Daphne, Fairhope, Foley, Orange Beach, Mobile County
<b>Outputs/Deliverables</b>	Five projects: Three wetland restorations; low impact development program/policy modifications; watershed management plan/stormwater management projects; overlay district for sensitive wetland area
<b>Outcomes</b>	Improved ecosystem function and protection; Improved community management of ecosystem restoration and protection activities.
<b>Clean Water Act Relevance</b>	Improve water quality monitoring, support TMDL implementation, improve monitoring of wetland function and coverage
<b>10-11 EPA Funding</b>	\$225,000
<b>11-12 EPA Funding</b>	\$90,000
<b>Total</b>	\$315,000
<b>Match/Leverage</b>	Cities of Chickasaw, Daphne, Fairhope, Foley and Orange Beach, Mobile County

Infrastructure for housing, transportation, education, social services and industry, results in increases in **impervious surfaces**, which replace the porous soil of natural landscapes and cause a chain of events that negatively impacts water resources. These impervious surfaces seal the soil surface, eliminating rainwater infiltration and natural groundwater recharge of aquifers. Stormwater accumulates on, and runs directly across impervious surfaces, increasing flow volumes and velocities and resulting in incidents of localized flooding; accelerated stream bank erosion; and increasing sediment, nutrient, and pollutant loads. Many of the residues of urban and suburban living flush into streams without treatment, degrading the streams' water quality. Impervious surfaces also deprive tree roots of aeration, eliminating the "urban forest" and the canopy shade that would otherwise moderate our coastal climate.

Because impervious surfaces displace living vegetation, they reduce ecological productivity and interrupt the natural removal of carbon dioxide from the atmosphere. According to Public Works Departments in Mobile and Baldwin Counties, both Counties have experienced an approximate five percent increase in the number of miles of new paved road over the last five years. Not surprisingly, in a Loading Budget Analysis for Mobile

Bay Modeling (Tetra Tech, 2002) prepared by Tetra Tech to assess pollutant loadings contributing to Mobile Bay by way of the Mobile River Basin, there were significant increases in non-point source pollutants for the period from 1970 to 1995.

Communities throughout Mobile and Baldwin Counties continue to struggle with the impacts of increasing amounts of impervious surface. Two major challenges are the management of stormwater and sediments. A result of increasing impervious surfaces is increased volume and velocity of stormwater runoff coursing through creeks, rivers, and streams on the way to Mobile Bay. The greater velocity of water has eroded stream banks, resulting in an increase in sedimentation. This sediment, added to increased loads from poorly managed construction sites, has caused deterioration not only in creeks, rivers, and streambeds, but also to vital wetlands that naturally filter estuarine waters.

The first round of Local Restoration Partnership Funding was awarded in April, 2011. Funded projects included:

- [City of Chickasaw](#), \$20,000.00 to support wetlands restoration at Brooks Park.
- [City of Daphne](#), \$15,000 to initiate the use of low impact development and green infrastructure practices and incentives for the City and to recommend policy and subdivision regulations changes.
- [City of Fairhope](#), \$50,000 to prepare a Volanta Gulley Watershed Management Plan and at least two related stormwater management projects.
- [City of Foley](#), \$82,500 to restore Wolf Creek to its natural channel design, reversing impacts to this section of Wolf Creek caused by stormwater runoff.
- [City of Orange Beach](#), \$27,500.00 to enhance wetlands along Highway 161 to improve water quality in Cotton Bayou, and \$30,000 to develop a Canal Road Overlay District to minimize paved surfaces and promote infiltration while expanding bicycling and walking opportunities.

During the application process, two projects were submitted on behalf of Mobile County. Funding for these were not approved, but the MBNEP Executive Committee recommended pursuing at least one alternative project with the County during the next fiscal year.

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### 3. PROJECT DETAILS: TECHNICAL ASSISTANCE/ CAPACITY BUILDING

Description	Total Activity Budget	2011-2012 Budget	2010-2011 Reprogram	2010-2011 Budget	External Grants	Past Year Grant Funds
Clean Water Partnership Facilitation	55,698	3,000			42,750	9,948
Estuary Corps	20,000	10,000		10,000		
NEW: Community Outreach Cost Share	10,000	10,000				
<b>Totals</b>	<b>85,698</b>	<b>23,000</b>	<b>-</b>	<b>10,000</b>	<b>42,750</b>	<b>9,948</b>

Besides community presence, watershed-based, grassroots organizations have the local knowledge of environmental resources and their stressors; volunteer leadership-building capacity; and ability to enable members to plan, implement and monitor on-the-ground projects to improve environmental conditions and connections to the community. Grassroots organizations are in a position to promote greater community awareness about the importance of the estuarine environment to a community's health, safety, economy and overall quality of life. Throughout Mobile and Baldwin Counties, grassroots organizations are the cornerstone of environmental protection at the community level.

During the next fiscal year, MBNEP will support and help build capacity of these critical groups by developing outreach and decision support materials for their use; providing specialized training and education opportunities; and initiating an Estuary Corps program to engage citizens in long-term volunteer participation. The outputs generated under this section will be largely dependent on the results of a community assessment that is currently underway. MBNEP anticipates that recovery planning and projects will be priorities to grassroots organizations and continues to develop watershed profiles for coastal hydrologic units (HUC 12s) to provide baseline environmental and socio-economic data for planning purposes. (Note: The ongoing LULC project with NASA to determine permanency of habitat change is contributing to the profiling effort).

It is anticipated that one watershed management plan will be initiated (Fly Creek) based on information in the watershed profiles. In addition, MBNEP will partner with Alabama Water Watch to expand volunteer water quality monitoring training in both counties and will work with AWW to improve data collection protocols.

Outcomes from these activities will include increased knowledge about science, monitoring, habitat management, and restoration of the Mobile Bay estuarine environment and increased community ownership and involvement in local environmental protection activities.

## TAC: COASTAL NON POINT SOURCE POLLUTION PROGRAM: CLEAN WATER PARTNERSHIP

<b>Project Number</b>	TAC01
<b>Title</b>	Coastal Non Point Source Pollution Program
<b>CCMP Objective</b>	WQ
<b>Purpose</b>	Assess, plan and implement projects to address non point source pollution through the Clean Marina Program and community based watershed management plans to guide grassroots actions aimed at addressing waterways listed on the State's 303(d) Impaired Water bodies List
<b>Performing Organization(s)</b>	BCWSD, MBNEP, A CWP, Auburn University
<b>Outputs/Deliverables</b>	One plan complete; one plan initiated; coastal HUC12 watershed profiles; 1 new Clean Marina designation
<b>Outcomes</b>	Improved ecosystem function and protection; Improved community management of ecosystem restoration and protection activities; expanded community engagement and ownership
<b>Clean Water Act Relevance</b>	Support water quality standards; Improve water quality monitoring, Support TMDL implementation
<b>10-11 EPA Funding</b>	\$0
<b>11-12 EPA Funding</b>	\$3,000
<b>Other Funding</b>	\$42,750 (BC/MC WCD-ACWP) \$9,948 (Past EPA Grant)
<b>Total</b>	\$55,698
<b>Match/Leverage</b>	Auburn University, Mississippi Alabama Sea Grant Consortium

Much progress has been made to protect water quality in Alabama which continues to improve. However, addressing non-point source pollution is a special concern because it is often difficult to ascertain sources and causes, and education and outreach have proven deficient. To address non-point pollution issues in coastal Alabama, two programs have been established to improve outreach, education and voluntary implementation of environmentally protective and cost-effective management practices.

The Mississippi-Alabama Clean Marina Program, administered by MASGC and Auburn University Marine Extension and Research Center, is a voluntary, incentive-based program that encourages marina operators and recreational boaters to protect coastal water quality by engaging in environmentally sound operating and maintenance procedures.

The Coastal Alabama Clean Water Partnership, administered by the Mobile/Baldwin Soil and Water Conservation Districts (SWCD) and managed by the MBNEP, is made up of local interests, including

agriculture, forestry, business, industry, environmental groups and local governments that coordinate, plan, and implement environmental protection and restoration efforts through non-regulatory means. The Partnership's main focus is on reducing non-point sources of pollution through voluntary measures to improve water quality in local streams, especially those listed as impaired on the 303(d) List developed by ADEM.

To better coordinate activities related to non-point source pollution reduction throughout coastal Alabama, MASGC, AUMERC, SWCD, and MBNEP have co-funded the position of a Coastal Non-Point Source Outreach Specialist to act as a lead point of contact for all issues related to non point source pollution. Christian Miller divides his time between recruiting marinas into the Clean Marina Program and developing or participating in the development of watershed management plans and projects to reduce the quantities of non-point source pollution entering coastal waterways.

This past year, watershed management plans were completed for the D'Olive and Eight Mile Creek Watersheds, and watershed profiles are being developed for the other coastal sub-watersheds for use in future watershed planning. In addition, four local marinas (Zeke's, Bear Point, LuLu's, and Florabama) are actively being recruited to become certified as Clean Marinas. During the next fiscal year, MBNEP anticipates the initiation of a watershed plan for the Volanta Gulley and the certification of one Clean Marina.

## TAC: COMMUNITY EDUCATION AND TRAINING

<b>Project Number</b>	TAC02
<b>Title</b>	Community Outreach Coordination
<b>CCMP Objective</b>	All
<b>Purpose</b>	Provide informal training to grassroots groups on issues related to ecosystem status and trends, restoration, stressors, organizational development and other topics as determined by community
<b>Performing Organization(s)</b>	MBNEP, DISL, ACF, Consultants
<b>Outputs/Deliverables</b>	Two workshops for 13 grassroots organizations
<b>Outcomes</b>	Increase knowledge about science, monitoring, habitat management, and restoration of the Mobile Bay estuarine environment; Increase community ownership and involvement in local environmental protection activities
<b>Clean Water Act Relevance</b>	Improve water quality monitoring, Improve monitoring of wetland function and coverage
<b>10- 11 EPA Funding</b>	\$0
<b>11-12 EPA Funding</b>	\$10,000
<b>Other Funding</b>	\$11,000 (10-11 Funding included in Admin Budget)
<b>Total</b>	\$21,000
<b>Match/Leverage</b>	

MBNEP's purpose is to encourage a community-based approach to watershed management by securing community involvement and ownership in the estuary's health. This past year, partly in response to a recognized need to reach out to community groups during the Deepwater Horizon incident, MBNEP hired a Community Outreach Coordinator on a temporary basis to develop, coordinate and deliver different outreach initiatives, including but not limited to: one-on-one technical support to the grassroots organizations located throughout Mobile and Baldwin Counties; public input meetings on topics related to community environmental concerns; educational materials; documentation of activities; communication of MBNEP activities and other pressing environmental issues with the objective of expanding the size and geographic area of the available volunteer base; and expanding volunteer engagement activities to promote the wise stewardship of the Mobile Bay estuarine system.

The position involved coordinating workshops and information programs focused on contact with community members through first-hand delivery. Duties included the planning and development of this programming, followed by implementation and evaluation. This position also served as a liaison between other organizations within the community that share similar goals. Unfortunately, due to increasing budget uncertainty, MBNEP was unable to make the position permanent.

During the next fiscal year, MBNEP will seek out opportunities within the community to continue this function including engagement of the 15 place-based grassroots organizations in developing programs aimed at increasing these groups' knowledge about their watersheds and ecosystem functions and the stressors that can negatively impact the system's function and value.

## TAC: ESTUARY CORPS

<b>Project Number</b>	TAC03
<b>Title</b>	Estuary Corps
<b>CCMP Objective</b>	EPI
<b>Purpose</b>	Establish a volunteer program that engages citizens in promoting the wise stewardship of the water quality and living resources of the Mobile Bay estuary
<b>Performing Organization(s)</b>	MBNEP/ACF
<b>Outputs/Deliverables</b>	25 Estuary Corps Members
<b>Outcomes</b>	Increase knowledge about science, monitoring, habitat management, and restoration of the Mobile Bay estuarine environment; Increase community ownership and involvement in local environmental protection activities
<b>Clean Water Act Relevance</b>	Improve water quality monitoring, Improve monitoring of wetland function and coverage
<b>10-11 EPA Funding</b>	\$10,000
<b>11-12 EPA Funding</b>	\$10,000
<b>Other Funding</b>	
<b>Total</b>	\$20,000
<b>Match/Leverage</b>	DISL; Alabama Coastal Foundation

Engaging volunteers in activities that improve estuary conditions is vital to the long-term sustainability of our coastal environment. Building community knowledge and ownership through citizen involvement activities lays a foundation for ongoing care of the water quality and living resources associated with this estuarine system. In the days following the Deepwater Horizon incident, over 7,000 volunteers offered their assistance to the MBNEP to help areas affected by the oil. Unfortunately, due to the hazardous nature of the oil and its residue, volunteers were largely unengaged. This fact prompted area non-profit organizations to develop ways for volunteers to stay involved, leading to the creation of the Volunteer Field Observer Program by the Alabama Coastal Foundation (ACF) and Mobile BayKeeper.

During the next fiscal year, MBNEP will partner with ACF and the Dauphin Island Sea Lab to establish an Estuary Corps. This Corps will recruit volunteers willing to be "on retainer" to carry out a range of activities for one year increments including, but not limited to water quality, living resource, and other ecological monitoring; habitat restorations; and invasive species control. As an Estuary Corps member, training opportunities will be developed to enrich the experience. Volunteers would typically be recent graduates of high school or college, but could also include people wanting time off from established careers and those looking for meaningful activities during retirement.

## 4. PROJECT DETAIL: PROGRAM IMPLEMENTATION

CCMP Development	66,974	<b>13,800</b>	(46,826)	100,000		
Current Connections Newsletter	24,000	<b>6,000</b>		6,000	12,000	
Video Series-A Redfish Tale, Interactive Kiosks	290,482	<b>50,717</b>		10,000	229,765	
Community Awareness-Stormwater Demonstrations	34,350	<b>10,000</b>				24,350
Community Awareness, Outreach & Events	56,500	<b>17,500</b>	-	39,000	-	-
Signage- Steele Creek Lodge		<b>5,000</b>				10,000
	<b>472,306</b>	<b>103,017</b>	<b>(46,826)</b>	<b>155,000</b>	<b>241,765</b>	<b>24,350</b>
Administration	817,359	<b>420,740</b>		396,619		
DISL Indirect Costs (15% of expenses)	233,824	<b>104,693</b>		129,130		

A hallmark of the National Estuary Program is the convening of a “Management Conference” to guide the **assessment of trends** in water quality, natural resources, and uses of estuary; **identification of causes** of environmental problems; **development of relationships** between pollutant loadings to the estuary and potential uses and quality of the estuary; **development of the CCMP** and other action plans for restoring and maintaining the chemical, physical, and biological integrity of the estuary; and **coordination of the collective implementation** of the CCMP.

At its last two annual retreats, MBNEP’s Executive Committee (EC) has evaluated the functioning of the current Management Conference structure and assessed progress on implementation of the current CCMP. At its most recent retreat, the EC formally initiated the next phase of CCMP planning by developing a vision, purpose, and goals for the program:

**Vision:** Alabama’s estuaries, where the rivers meet the sea, are healthy and support ecological function and human uses.

**Purpose:** The MBNEP brings together an engaged and diverse community committed to integrating environmental health with community and economy to develop consensus on what our ecosystem priorities are, how to achieve them, and how to facilitate/promote their implementation.

**Mission:** To provide necessary tools and to support community-based efforts to promote the wise stewardship of the water quality and living resources of the Mobile Bay estuary and the Mobile-Tensaw Delta

### Goals:

- Water that is fishable, swimmable, and drinkable (“meeting or exceeding State’s designated uses)
- Conservation, restoration, and protection of critical habitats
- Community who understands and supports the value of our coastal resources
- Integration of environmental health with a balanced economy

During the next fiscal year, MBNEP will continue to promote greater coordination and participation of Management Conference members during the re-writing of the CCMP, and improving program transparency, communications, and community awareness. This will be done by initiating a community process for re-writing the CCMP for the next 10-year period, development of a communications plan for community outreach, coordination of two cultivation events to expand MBNEP partnerships, development of a public awareness campaign to highlight emerging environmental issues, promotion of the public education film short, “*A Redfish Tale*,” creation of “**A Redfish Tale #2**” (**working title**), and establishment of an improved website that provides more interactivity and highlights management conference efforts.

Expected outcomes related to these activities include an increased understanding of activities undertaken by MBNEP and its partners to protect and conserve the water quality, living resources, habitats and human uses of the Mobile Bay estuary, increased recognition of the activities of the MBNEP, increased knowledge about the issues impacting the health of the Mobile Bay estuary, and improved financial planning and tracking.

## PIR: COMPREHENSIVE CONSERVATION PLANNING FOR MOBILE BAY ESTUARY

<b>Project Number</b>	PIR01
<b>Title</b>	Comprehensive Conservation Planning for Mobile Bay Estuary
<b>CCMP Objective</b>	WQ, LR, HM, HU, EPI
<b>Purpose</b>	Create new strategic framework for regional growth and resiliency that balances the needs of the human system with protection and sustainability of the natural system
<b>Performing Organization(s)</b>	MBNEP Management Conference/Consultant
<b>Outputs/Deliverables</b>	A Comprehensive Conservation Management Plan for the next ten years
<b>Outcomes</b>	Improved ecosystem function and protection; Improved community management of ecosystem restoration and protection activities; expanded community engagement and ownership
<b>Clean Water Act Relevance</b>	Support water quality standards; Improve water quality monitoring, Support TMDL implementation, Improve monitoring of wetland function and coverage
<b>10- 11 EPA Funding</b>	\$53,174 (Reprogrammed \$46,826 to Sediment Budget)
<b>11-12 Funding</b>	\$13,800
<b>Other Funding</b>	
<b>Total Funds</b>	\$66,974
<b>Match/Leverage</b>	

The Mobile Bay region is part of an urban and economic network that is connected around the globe. It is also located in a sensitive place in the world's environment, an estuarine complex subject to natural and technological disasters. Creating a framework for the future of the Mobile Bay estuary, in light of the oil spill, will require an analysis of systems behavior at the global and continental scales and the ability to telescope inside the region to the scale of regional sub-component areas. The systems that will be examined through this project are vulnerable to many stressors. "Stressors" are perturbations to a system that are either (a) foreign to that system or (b) natural to the system but applied at an excessive (or deficient) level (Barrett et al. 1976:192). For the Mobile Bay estuary, these stressors include but are not limited to stormwater runoff and other non-point source pollution. Other considerations include climate change and sea level rise. Stressors cause significant changes in ecosystem components, patterns and processes. "Resilience" is the ability of systems to withstand perturbations and bounce back to normality. A more resilient community will bounce back more quickly and suffer less economic damage, environmental damage, and social disruption than a community that

is less resilient. The MBNEP Management Conference will re-engage the community in re-write/update of the CCMP for the Mobile Bay estuary.

The objectives of this initiative include:

- Describing the patterns and dynamics of the natural system - its current status, evolution over last 20 and 50 years, and its future trends. This will involve describing the estuary region and its form and structure including the: 1) air, 2) water, 3) land, and 4) living resources (flora & fauna).
- Describing the patterns and dynamics of the human network. The human network will be studied to understand its current status, evolution over the last 20 and 50 years, and its future trends. This will involve describing the estuary region and its form and structure, including the: 1) transportation/infrastructure, 2) economic activity, 3) institutions, 4) quality of life, and 5) urbanization/governance systems.
- Describing the interactions between the systems and the critical issues that will define the future of the Mobile Bay estuary and the patterns and dynamics of urbanization.
- Determining the critical threats and opportunities for restoring and protecting the estuarine environment. Developing and analyzing alternative policy, regulatory, and investment patterns for guiding growth patterns that could minimize the impacts of growth on the Estuary and improve the region's environment and competitiveness within the global and national economy.
- Developing strategies for creating a sustainable and resilient region that balances estuarine health with patterns of urbanization and economic growth. Following the development of common strategies for the region, an implementable CCMP will be developed to address the issues of restoring and protecting the Mobile Bay estuary.

## PIR: COMMUNITY OUTREACH: NEWSLETTER

<b>Project Number</b>	PIR02
<b>Title</b>	Community Outreach Program-Newsletter
<b>CCMP Objective</b>	EPI
<b>Purpose</b>	Publish semi-annual newsletter to highlight emerging issues, project progress and other issues of interest
<b>Performing Organization(s)</b>	MBNEP, ADCNR State Lands Division
<b>Outputs/Deliverables</b>	2 Newsletters
<b>Outcomes</b>	Increase public awareness of environmental issues; Increased knowledge of environmental issues and stressors; Increased knowledge of activities being undertaken to protect estuarine resources
<b>Clean Water Act Relevance</b>	
<b>10- 11 EPA Funding</b>	\$6,000
<b>11-12 EPA Funding</b>	\$6,000
<b>Other Funds</b>	\$12,000 (ADCNR)
<b>Total</b>	\$24,000
<b>Match/Leverage</b>	

Raising environmental awareness involves translating the technical language of a natural science or related field into terms and ideas that a non-scientist can readily understand. It also involves doing it in a way that is entertaining and interesting to the public. The *Alabama Current Connection* is a joint newsletter published by the ADCNR State Lands Division - Coastal Section and the MBNEP to highlight current projects, management conference activities, and other issues of interest to coastal residents. Two newsletters will be published in the next year for distribution as hard copy as well as in electronic format.

## PIR: VIDEO SERIES: A REDFISH TALE

<b>Project Number</b>	PIR03
<b>Title</b>	"A Redfish Tale"
<b>CCMP Objective</b>	EPI
<b>Purpose</b>	To educate children and adults on the effects of nutrients and runoff to watersheds, estuaries and seas.
<b>Performing Organization(s)</b>	MBNEP
<b>Outputs/Deliverables</b>	Two educational videos, Three portable kiosks, A kiosk distribution plan
<b>Outcomes</b>	Increase public awareness of environmental issues; Increased knowledge of environmental issues and stressors
<b>Clean Water Act Relevance</b>	
<b>10-11 EPA Funding</b>	\$10,000
<b>11-12 Funding</b>	\$50,717
<b>Other Funding</b>	\$229,765 (US EPA Gulf of Mexico Program)
<b>Total</b>	\$290,042
<b>Match/Leverage</b>	DISL, Americorps, NASA, Volunteers

In response to increasing concern about the health of Gulf coast watersheds due to excessive anthropogenic nutrient loading, MBNEP has partnered with the Dauphin Island Sea Lab, the Gulf of Mexico Program, Hamline University and a local producer to develop two interactive, touring videos and three interactive, touring kiosks. This program, with English and Spanish translation, will educate children and adults about the impacts of excess nutrients on Gulf coastal waters and stimulate behavior changes. It will clarify the concepts of "watersheds" and "estuaries" and describe the various sources of nutrients, their impacts on estuaries, and actions that people can take to reduce nutrient input and impacts. When finished, the videos and kiosks can be used together to reinforce key messages. However, they still will provide comprehensive educational value if used independent of each other.

With the first installment, "*A Redfish Tale*," complete, MBNEP has begun conceptualizing a second video that will highlight both positive and negative human behaviors and their effects on our environmental resources. The leading characters of the first film, animated redfish named Jimbo and Thibodaux, will return in the second film to provide the continuing perspective of "a fish out of water" to emphasize the sense of urgency.

## PIR: COMMUNITY AWARENESS: STORMWATER

<b>Project Number</b>	PIR04
<b>Title</b>	Stormwater Demonstrations and Education Campaign
<b>CCMP Objective</b>	EPI
<b>Purpose</b>	To educate the residents of Baldwin and Mobile Counties about ways to decrease harmful stormwater runoff
<b>Performing Organization(s)</b>	MBNEP
<b>Outputs/Deliverables</b>	Production of educational materials to be distributed at community meetings, raise awareness by conducting 3 demonstration workshops
<b>Outcomes</b>	Increase public awareness of environmental issues; Increased knowledge of environmental issues and stressors
<b>Clean Water Act Relevance</b>	
<b>10-11 EPA Funding</b>	\$0
<b>11-12 Funding</b>	\$10,000
<b>Other Funding</b>	\$24,350 (Cities of Foley, Summerdale, Magnolia Springs, and Baldwin County)
<b>Total</b>	\$34,350
<b>Match/Leverage</b>	Weeks Bay NERRS, Mobile BayKeeper, AUMERC, AL Clean Water Partnership, Local Municipalities and Counties

Stormwater runoff, considered by the EPA to be the number one source of pollution to American waters, is the primary threat to water quality in coastal Alabama. Exacerbated by increased impervious surfaces associated with development, it causes flooding and carries fertilizer, pesticide, animal waste, residues from automobiles and road surfaces, organic debris, trash, and all of the residues of urban and suburban living, untreated, into creeks, streams, rivers, and ultimately the Bay and Gulf. The force generated by increased volumes and velocities of runoff degrades channels, erodes stream banks, and adds sediment loads that increase turbidity and decrease habitat quality. Baldwin and Mobile County water bodies listed on the State 303(d) list are overwhelmingly impaired by pollutants conveyed by stormwater. Local governments, already responsible for stormwater management, face increased Federal regulations with limited resources.

While the public demands better management, education is needed to promote individual, residential stormwater management; encourage changes in policy and regulations to address problems at their source; and encourage regional/watershed level management to reduce costs and increase benefits.

Spring boarding off of the failed local referendum in Baldwin County, MBNEP has joined in partnership with the many entities, including local municipalities, community groups, the Clean Water Partnership, Weeks Bay

National Estuarine Research Reserve, ACF, and BayKeeper to build a comprehensive program for educating government officials, the development community, educators and students and the general public about the impacts of stormwater runoff and changes that need to be made at the individual and community levels to improve how it is managed by watershed.

## PIR: COMMUNITY AWARENESS, OUTREACH AND EVENTS

<b>Project Number</b>	PIR05
<b>Title</b>	Community Awareness, Outreach and Events
<b>CCMP Objective</b>	EPI
<b>Purpose</b>	To educate the public about water related issues relevant to Mobile Bay
<b>Performing Organization(s)</b>	MBNEP
<b>Outputs/Deliverables</b>	Create an Outreach and Communications plan, Sponsor 5 community events, Conduct 3 public meetings/workshops
<b>Outcomes</b>	Increase public awareness of environmental issues; Increased knowledge of environmental issues and stressors
<b>Clean Water Act Relevance</b>	
<b>10-11 EPA Funding</b>	\$39,000
<b>11-12 Funding</b>	\$17,500
<b>Other Funding</b>	
<b>Total</b>	\$56,500
<b>Match/Leverage</b>	

MBNEP's purpose is to provide tools and support community-based efforts to promote wise stewardship of the water quality and living resource base of Mobile Bay, its tributaries, and the Mobile-Tensaw Delta. Public education is essential to raising environmental awareness and promoting behaviors that will lead to sustainability of the resources that draw people to the coast. Over the past several years, MBNEP has worked with the Gulf of Mexico Program, the Alabama Clean Water Partnership, and other partners to develop outreach material for use in raising awareness about the environmental issues and ecosystem stressors over which we have control, such as excess nutrients, stormwater, and nonpoint source pollution.

In the next fiscal year, MBNEP will continue development of materials for use in a multi-pronged community outreach program that includes an updated communication plan that establishes goals, identifies target

audiences, determines what information should be disseminated and how, implements actions, and evaluates results.

MBNEP will continue to support and participate in such activities as Coastal Kids Quiz, Baldwin and Mobile County Water Festivals, Wolf Bay Watershed Watch Kid's Fishing Tournament, Discovery Day, Coastal Cleanup, BirdFest, and others.

## PIR: INTERPRETIVE SIGNAGE: STEELE CREEK LODGE

<b>Project Number</b>	PIR06
<b>Title</b>	Interpretive Signage: Steele Creek Lodge
<b>CCMP Objective</b>	EPI
<b>Purpose</b>	Educate community about watershed, ecosystem characteristics and project components
<b>Performing Organization(s)</b>	MBNEP
<b>Outputs/Deliverables</b>	Three interpretive signs
<b>Outcomes</b>	Increase public awareness of environmental issues
<b>Clean Water Act Relevance</b>	
<b>10-11 EPA Funding</b>	\$0
<b>11-12 Funding</b>	\$5,000
<b>Other Funding</b>	\$10,000 (Past EPA funding of shoreline stabilization project)
<b>Total</b>	\$15,000
<b>Match/Leverage</b>	City of Satsuma

With the City of Satsuma poised to begin work at Steele Creek Lodge Marina to address drainage impacts and construct a vegetated, perched terrace to protect the western shoreline, MBNEP will develop and install three interpretive signs consistent with other MBNEP restoration projects. The signs will educate residents and visitors about the Marina's location within the Mobile Bay and Bayou Sara Watersheds, the ecosystem benefits provided by the project, and details related to project implementation.

## PIR: ADMINISTRATION AND INDIRECT COSTS

<b>Project Number</b>	PIR06	
<b>Title</b>	Program Administration	Indirect Costs (15%)
<b>CCMP Objective</b>	MPA	
<b>Purpose</b>	Develop standardized mechanisms for planning, financing, and tracking activities	Leverage resources to streamline program implementation
<b>Performing Organization(s)</b>	MBNEP	DISL
<b>Outputs/Deliverables</b>	Improved financial tracking system; new time allocation system	28% unrecovered administrative costs contributed to program as non-Federal share from DISL
<b>Outcomes</b>	Improved program management and administration	
<b>Clean Water Act Relevance</b>		
<b>10-11 EPA Funding</b>	\$ 396,619	\$ 129,130
<b>11-12 EPA Funding</b>	\$ 420,740	\$ 104,693
<b>Total</b>		

The MBNEP Program Office works closely with all of the MBNEP Management Conference members on initiatives related to the CCMP. The Management Planning and Administration (MPA) budget provides resources for the Program Office to continue program planning, development, implementation, evaluation, and reporting. The staff provides organizational and logistical support for all of the Management Conference committee meetings and coordinates/communicates as necessary with appropriate groups, including user groups, State, local, and Federal agencies, and professional groups relevant to CCMP development and implementation. Staff will provide overall coordination for implementation of the CCMP; prepare EPA-required documents; administer grants/contracts; monitor projects including coordination of work plans, progress reports, and draft/final reports with project leads; coordinate project work plans and activities with other local, State and Federal agencies; and provide for overall program coordination. This amount includes all the necessary items for program administration including salaries, benefits, rent, supplies, equipment, phone, internet services etc.

## STAFFING PLAN

Position	Employee	Responsibilities	Main Activities
Program Director	Roberta Arena Swann	General Oversight, Acceptance, and Implementation of Program	Generates financial and political support for program; participates in regional and national initiatives associated with program; engages in project identification and design; builds collaborative teams for accomplishing objectives; liaison between program and local governments and other public agency leaders; spokesperson for estuary related activities and needs throughout the community; Oversees all office activities.
Watershed Protection Coordinator	Tom Herder	Communicates scientific data to public and conducts restoration projects and educational activities	Oversight of all Restoration-related Projects including Project Design, Implementation, Coordination and Monitoring; Develop, initiate and coordinate baseline data collection; Facilitate the transfer of technical information; Prepare public outreach efforts for the general public on watershed issues; other
Communications Specialist	Joey Parker	Coordinates Public Outreach and Education Programs	Manages public information development and distribution including press, website, social media, outreach materials; develops outreach and education plans for program and specific watershed plans; prepares program activity reports for grantors/public; other
Program Administrator	Brenda Lowther	Overall business and office management	Maintains budget, project files, financial record keeping, grant reporting; coordinates logistics and promotional materials for educational outreach and special events
Coastal Basin Clean Water Partnership Facilitator	Christian Miller	Non-Point Source Pollution Specialist	Works with communities to develop watershed management plans and implement initiatives of the Alabama Clean Marina Program and the Alabama Clean Water Partnership
Community Outreach Coordinator	Contract	Support to grassroots organizations throughout the service area	Assess needs of grassroots groups; design and deliver outreach and education programs to groups; assist with development of grassroots activities; act as liaison between groups and management conference members

## TRAVEL

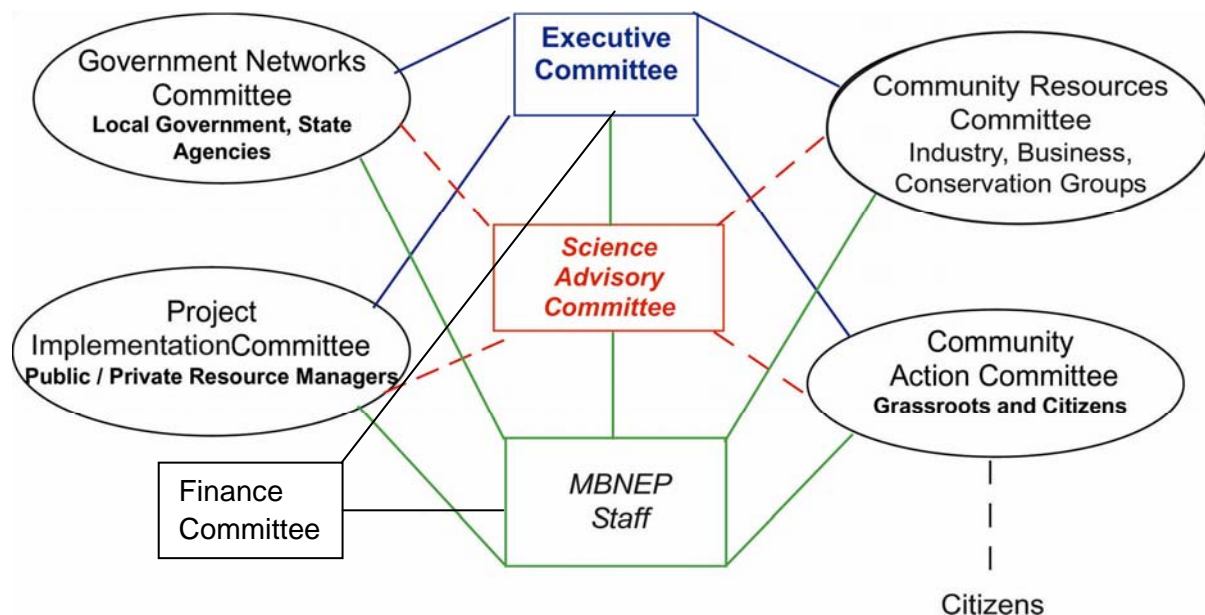
In addition, this amount includes \$16,000 (\$13,000 as required by EPA) for travel related to outreach and technology and information transfer. Program staff will participate in regional, state, and national conferences and meetings relevant to estuarine management. Attendance at Association of National Estuary Programs workshops and EPA workshops / meetings will be stressed.

Indirect Costs are charged at a rate of 15% on all cash expenditures (grant and matching funds) of the MBNEP by Dauphin Island Sea Lab. DISL allowable Indirect Cost negotiated rate with Federal Government is 43%. The un-recovered indirect of 28% is provided to the MBNEP by DISL/MESC as an in-kind matching contribution. Additional in-kind and support services not covered by indirect costs are also provided to the MBNEP by DISL on a case by case basis. *(See appendix for past year travel)*

## PARTNERS

### THE MANAGEMENT CONFERENCE

MBNEP initiated a reorganization of the Management Conference in 2006. The structure was revised to better provide a mix of Policy Makers (both public and private), Implementers (both public and private), and Grassroots (community groups and citizens) to ensure expanding support for CCMP implementation and identification and engagement of emerging issues related to CCMP objectives. The ultimate goal is an increased ability to function as a community capacity builder and provide improved public services in the environmental area to our coastal communities. The Mobile Bay NEP Management Conference now consists of four main committees: Community Action Committee, Community Resources Committee, Government Networks Committee, and Project Implementation Committee.



- The Community Action Committee is composed of representatives of environmental grassroots organizations who work together to network, share information, develop issues, and provides cooperative training.
- The Community Resources Committee brings together a balance of interested community leaders from industry, business, environmental services, and the non-profit sector to identify commonalities among sectors to resolve coastal issues that impact their interests and develop resources and funding.
- The Government Networks Committee is made up of State agency heads, regional government administrators, and local officials of the target area to more effectively communicate local needs.
- The Project Implementation Committee includes representatives of resource management agencies and organizations that undertake projects related to CCMP objectives and goals.

The Science Advisory Committee includes experts from the various scientific disciplines who provide insights and a sound basis to be used by the other committees in their decision making processes. A Finance Committee includes community leaders that are committed to assisting non-Federal matching dollars to

implement activities of the CCMP. An Executive Committee – made up of representatives from each of the four main committees, EPA, the Science Advisory Committee, the Finance Committee and three at-large members – develops policies on issues and funding, reviews/approves work plans and budgets, evaluates the performance of the Director, and sets financial goals for non-Federal share.

A key principle of the Management Conference is to coordinate and cooperate with other ongoing resource management activities to avoid unnecessary duplication. In this regard, the program office plays a major role in coordinating estuary projects and outreach activities, thus providing a more far-reaching benefit than that of simply CCMP project management. During the 2011-2012 program year, MBNEP will continue to review the efficiency of this management structure as part of an overall assessment of the program and re-writing of the CCMP.

## FEDERAL PARTNERS

### EPA ALLOCATION AND NON FEDERAL MATCHING SHARE



Each year the MBNEP receives an allocation from EPA to support activities geared toward achieving the objectives of the CCMP. The allocation for the Year 16 Plan (**2011-2012**) is **\$598,800**. This second year of funding will be added to the Year 15 allocation (**2008-2009**) **\$800,000** for a total of **\$1,398,800**. EPA requires that this total allocation be matched with non-Federal dollars in a 1:1 ratio, or an additional \$1,398,800 in cash or in-kind valuation. This match may be in the form of cash investments, donated property valuation, or in-kind equipment, professional, or volunteer services (see Match section). The combined total amount of resources that will be available to further implement the CCMP will be valued at \$2,797,600 for Year 16.

### GULF OF MEXICO PROGRAM (GOMP)



The Gulf of Mexico Program facilitates collaborative actions to protect, maintain, and restore the health and productivity of the Gulf of Mexico in ways consistent with the economic well-being of the Region. To date, MBNEP has received over \$540,324 in Gulf of Mexico Program (GOMP) grants to support a water management strategy for Eight Mile Creek, wetlands resource measurement baseline development, SAV gardening, Oyster gardening programs and the creation of a strategic assessment of priority habitats. Currently the MBNEP is in its second year of managing a **\$239,925** GOMP grant to support a real time water quality monitoring throughout Mobile Bay and **\$229,765** GOMP grant to develop an interactive educational video that would travel throughout the Gulf states addressing issues of environmental concern.

### COASTAL IMPACT ASSISTANCE PROGRAM (CIAP)

In fiscal year 2001, the U.S. congress authorized the Coastal Impact Assistance Program (CIAP) to assist states and local communities in mitigating the impacts of Outer Continental Shelf oil and gas development and production. Alabama received a onetime grant of approximately \$21,000,000, of which MBNEP received \$390,000 to fund an analysis of fish data, air deposition sample analysis, a study of Living Resources in the Delta, and Mobile Bay water monitoring.

In 2005, congress re-authorized funding for CIAP, which was established under section 384 of the Energy Policy Act (EPACT) of 2005 and authorizes the Secretary of the Interior to distribute \$250 million annually to six Outer Continental Shelf (OCS) oil and gas producing states in fiscal years 2007 - 2010. The EPACT of

2005 requires that all CIAP funds be used to directly conserve, restore, enhance or protect renewable natural resources. The Minerals Management Service (MMS) will act as the administration entity for this funding. In Alabama, the CIAP eligible recipients are the State of Alabama (through the ADCNR), the Baldwin County Commission and the Mobile County Commission. In total, the State will receive \$51,103,214.08 for fiscal years 2007 and 2008. Of this funding amount, \$33,217,089.16 will be available to the State of Alabama, \$7,894,094.64 will be available to the Baldwin County Commission and \$9,902,030.28 will be available to the Mobile County Commission. This funding will be utilized to implement projects outlined in the CIAP Plan.

In April, 2009 the State's plan was approved by MMS for the first round of CIAP funding (as described above) and activity will begin during the summer of 2009. MBNEP is currently working with county governments as well as the Alabama Department of Conservation and Natural Resources- Coastal Section develops projects under this program for the next CIAP Plan.

#### MISSISSIPPI ALABAMA SEA GRANT CONSORTIUM (MASGC)



The Mississippi Alabama Sea Grant Consortium is dedicated to activities that foster the conservation and sustainable development of coastal and marine resources in Mississippi and Alabama. Sea Grant is NOAA's primary university-based program in support of coastal resource use and conservation. The MASGC is an important partner to MBNEP in implementing many CCMP actions. MASGC provides technical expertise, program development assistance, and valuable research and is a leader of many initiatives related to CCMP objectives. At present, MBNEP partners with MASGC to co-fund a Coastal Resource specialist position. In addition, MASGC recently submitted a NOAA Economic Stimulus Restoration proposal which lists MBNEP as a partner.

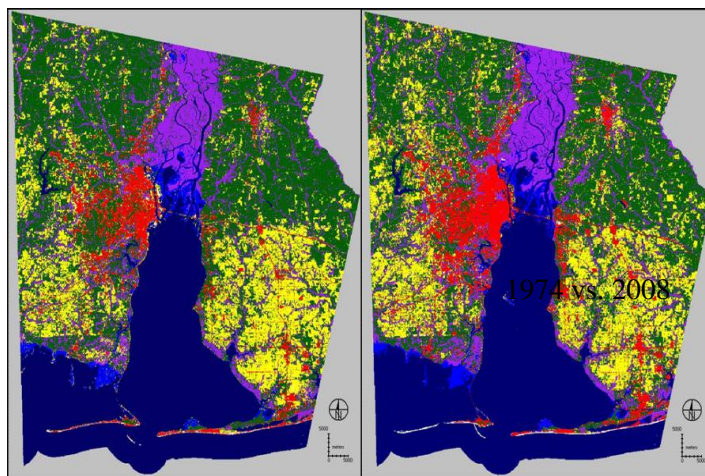
#### NOAA RESTORATION GRANTS/ GULF OF MEXICO FOUNDATION (GOMF)



The NOAA Community-based Restoration Program administered by the Gulf of Mexico Foundation funds citizen-driven habitat restoration projects which benefit living marine resources and foster local stewardship throughout the Gulf of Mexico region. In 2003, MBNEP received funding for derelict crab trap removal and creation of shellfish habitat (\$42,981), in part used to support oyster gardening. In 2004, MBNEP received a Five Star Grant (\$9,100) to further support our oyster gardening program. In 2007, a Five Star Grant (\$23,000) was awarded to MBNEP to conduct an SAV Gardening project in Little Lagoon. In addition, MBNEP received two Community Based Restoration Partnership grants: 2007- (\$38,500) to restore marshlands at Helen Wood Park and 2008-(\$26, 450) to stabilize the shoreline and conduct park improvements at Dog River/Luscher Park. In 2011, the MBNEP received a Gulf of Mexico/NOAA grant (\$58,451) to undertake habitat restoration and enhancement along Mobile Bay's western shoreline.

#### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

The NASA Stennis Space Center Applied Science Coastal Program has used and is using local interest and coastal community science needs to guide development of a strategic plan. The overarching purpose of the Applied Sciences Program is to discover and



demonstrate innovative applications of NASA Earth science research and technology and to maximize the benefits to society of the nation's investments in the NASA Earth science research program. Mobile Bay was identified as a priority area and a NASA team led by Dr. Jean Ellis partnered with MBNEP to address a priority local need by mapping and assessing Land Use-Land Cover changes in Baldwin and Mobile Counties from 1974-2008, a period of rapid development and growth using LandSat and other imagery data. The project was completed in September 2008 and products included: change detection maps in static and in digital format for several specific time intervals, Land Use-Land Cover change geospatial statistics; and a final project report. Under a separate NASA grant (\$400,000) MBNEP is now a co-investigator on a second A-28 grant, (\$398,401) to continue this project by verifying analysis results with other datasets to develop a cohesive understanding the permanency of habitat change over the time period with a focus on the coastal hydrologic units. This project will be of inestimable value in helping us assess coastal change due to development and its impact on water quality, habitat and living resource populations.

#### NORTHERN GULF INSTITUTE



The Northern Gulf Institute (NGI), a NOAA Cooperative Institute, develops, operates, and maintains an increasingly integrated research and transition program focused on filling priority gaps and reducing limitations in current Northern Gulf of Mexico awareness, understanding and decision support. Partnering with five academic institutions and NOAA, the institute is a collaboration led by Mississippi State University (MSU) that includes the University of Southern Mississippi (USM), Louisiana State University (LSU), Florida State University (FSU) and the Dauphin Island Sea Lab (DISL). The NGI was established in October of 2006. The five focus areas of the NGI are: Ecosystem-based Management, Geospatial Data/Information and Visualization in Environmental Science, Climate Change and Climate Variability Effects on Regional Ecosystems, Coastal Hazards and Resiliency.

#### U. S. ARMY CORPS OF ENGINEERS PARTICIPATION (USACE)



The US Army Corps of Engineers (USACE) actively participates in the implementation of many of the actions of the CCMP. USACE completed two Preliminary Restoration Plans (PRP) valued at approximately \$10,000 each: one for the restoration of an area on Isle of Herbes and a second for a habitat restoration along Dauphin Island Causeway. As part of the ongoing planning for Isle of Herbes, MBNEP completed a living resources characterization of the island to assist with the corps combined planning and development phase. USACE requested Section 204 funding to continue to implement the Isle of Herbes restoration but the project was stopped due to the presence of submerged aquatic vegetation (SAV). A combined planning and design report, valued at over \$80,000 was completed for the DI Causeway Restoration. However, due to a lack of suitable material and cost prohibitive staging issues, the USACE abandoned the DI Causeway restoration. Although USACE chose no further action on the project, the work done by the USACE was used as part of a grant submitted by MASGC through a NOAA stimulus grant to fund a very similar project. Another project Helen Wood Park (along the Dauphin Island Parkway) to break wave energy, thus reducing erosion has been cancelled by USACE due to the presence of SAV in the area that was identified for marsh establishment. USACE participation in CCMP activities represents a crucial resource for moving projects forward.

## STATE RESOURCES

### AL DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES STATE LANDS (ADCNR)



Because ADCNR has a long term interest in Alabama's Coastal Resources and the statutory responsibility for the conservation, management, and protection of these resources through its State Lands Division, Marine Resources Division, Wildlife and Fresh Water Fisheries Division, State Parks Division and particularly through the Alabama Coastal Area

Management Program, it has entered into a memorandum of agreement to provide annual funding to MBNEP as part of its non-Federal match requirement, as an investment toward implementation of the CCMP. MBNEP has received \$360,000 (\$60,000 per year) for the past six years and will receive \$70,000 per year beginning with the 2010 - 2011 fiscal year. In addition, through its various divisions, ADCNR has provided funding for Habitat Mapping, workshops, newsletters, Isle aux Herbes Restoration Planning, DI Public Access Feasibility study, wetlands status and trends and others on the order of \$346,000 to date. During this past year, MBNEP completed SAV imagery as part of an ongoing effort to track trends related to this valuable resource. MBNEP receives \$6,000 per year to produce *Alabama Current Connection*. *Alabama Current Connection* is a joint newsletter published by the ADCNR State Lands Division Coastal Section and the MBNEP to highlight current projects, management conference activities, and other issues of interest to coastal residents.

### STATE OF ALABAMA



MBNEP met with the head of ADECA on March 17, 2006 to request additional State funding support for the program. After much discussion and initial support by ADECA, MBNEP decided on pursuing other opportunities within State government for ongoing support. In 2007, MBNEP was added as a line item in the State budget through the auspices of the Dauphin Island Sea Lab for a designated amount of \$250,000. For the 2008 MBNEP received a reduction in this funding, or \$91,000. For the 2009 -2010 year, MBNEP received \$88,334. In 2010-2011 MBNEP received \$ 79,942 or \$68,332.

## LOCAL RESOURCES

The following local governmental entities provide continuing financial assistance to the MBNEP on an annual basis to support the implementation of the CCMP. Although these communities only allocate funding annually, MBNEP anticipates expanded support from these and other coastal communities in the future. At present MBNEP is cultivating Prichard, Satsuma, Chickasaw, Bayou La Batre, Spanish Fort, Dauphin Island, Gulf Shores and Foley. Past annual investment from municipalities includes:

City of Mobile \$ 28,800

City of Daphne \$ 3,000

City of Fairhope \$3,000 \$ 3,000

City of Gulf Shores \$ 3,000

City of Spanish Fort \$2,000

Baldwin County \$15,000

Mobile County \$ 28,350

## **IN-KIND CONTRIBUTIONS**

MBNEP depends on volunteer support and local contributions of other in-kind services to achieve program success. On a yearly basis, in-kind environmental contributions account for over half of the non-Federal share of match that MBNEP is required to raise as investment in implementing the CCMP. This in-kind support is generated from volunteer labor hours related to activities including but not limited to oyster gardening, crab monitoring, trap removals, and participation in area events. Other in-kind services include use of city owned machinery, the value of land donated for conservation purposes, and private donations to cover expenses incurred for events and activities carried out by local grassroots organizations and sponsored by MBNEP.

## **GEOGRAPHIC DISTRIBUTION**

Although the actual watershed for Mobile Bay encompasses more than two thirds of the State of Alabama and portions of Georgia, Mississippi, and Tennessee, MBNEP's primary target area is limited to southern Alabama, including all of Mobile and Baldwin Counties, from the eastern edge of coastal Alabama to its western coastal border. In addition, it extends seaward to the three-mile State jurisdictional limit. MBNEP's target area also includes Mississippi Sound, up to the Mississippi/Alabama border. Major waterways include the Tombigbee, Tensaw, Appalachee, Blakeley, Escatawpa, Mobile, Alabama, Dog, Fowl, Fish, Magnolia, Bon Secour and Perdido Rivers; Chickasaw, Norton, Three Mile, and Eight Mile Creeks; and the Intercoastal Waterway, Wolf and Perdido Bays, and Little Lagoon.

## PART TWO: ONGOING PROJECTS

### MBNEP ACCOMPLISHMENTS 2010-2011

MBNEP currently has two EPA grants open for implementing CCMP activities. During the program year the EPA grant covering Federal fiscal years ending 2007-2010; and the EPA grant covering the Federal fiscal year ending 2011. Steady and substantial progress is ongoing for these grants with expenditures maintaining pace with progress. MBNEP had some notable successes this year, including:

#### PROGRAM IMPLEMENTATION AND COMMUNITY REPORTING

##### Management Conference

The events resulting from the explosion, burning, and sinking of the Deepwater Horizon oil platform during the week of April 19, 2010 consumed the energies of a significant portion of the MBNEP Management Conference over the last 365 days. Despite the loss of eleven lives and release of 210 million gallons of oil into the Gulf of Mexico, the well was capped over a month before optimistic projections and impacts to coastal habitats in Alabama and neighboring Gulf states were far less devastating than most feared. However, activities at Unified Command and efforts related to the Natural Resource Damage Assessment, the Alabama Coastal Recovery Commission, and the Gulf Ecosystem Restoration Task Force took precedence over “normal” operations for many key MBNEP partners.

Planned activities for the MBNEP Management Conference during the past year included promotion of greater coordination and participation of Management Conference members by initiating a re-write of the CCMP. This process has begun. The **Executive Committee** has drafted mission, vision, purpose, and goals as a framework for revision to the CCMP. A Community Attitudes Questionnaire, is undergoing final revision before being posed to 550-600 recipients randomly sampled by zip code to provide a “first cut” of community input on perceived environmental problems, aspects of our coastal environment that are particularly valued, community perception of the NEP and its role, and community perception of environmental management responsibilities. This activity, (supported by non-EPA funds) represents the first phase of CCMP planning, and, coupled with the **Science Advisory Committee**’s work towards developing a Biological Condition Gradient (BCG) framework, will provide the guidance needed to develop a thoughtful and responsive updated CCMP.

The **Project Implementation Committee** and Coastal Alabama Clean Water Partnership have gathered data sets for use in the development of Watershed Profiles for selected 12-digit hydrological unit codes (HUCs).

A community outreach coordinator was retained to reach out to members of the **Community Action Committee** by attending regular meetings of Dog River Clearwater Revival, Mobile County Wildlife and Conservation Association, Friends of the Tensaw, Fort Morgan Civic Association, Little Lagoon Preservation Society, Bon Secour River Protective Association, Lake Forest Property Owners Association, Southeastern Wildlife and Conservation Group, and Wolf Bay Watershed Watch. One YSI water monitor training session was held in September, 2010, at the Weeks Bay Reserve for CAC members. Dog River Clearwater Revival working with MBNEP, National Parks Service, City of Mobile, Mobile County Department of Public Health, MAWSS, and others, celebrated the kick-off of the Dog River Scenic Blueway on April 16, 2011, a paddling

trail which runs from the Rochon Launch near the Dog River Bridge upstream eight miles to the Eslava Creek confluence.

## ECOSYSTEM STATUS AND TRENDS

### Ensuring Biological Integrity

MBNEP continues to lead efforts towards the development of indicators of estuarine health using available biological, physical, and chemical information for the Mobile Bay system. In May, 2010, Tampa Bay NEP Director Holly Greening participated in the MBNEP SAC meeting, present how Tampa Bay developed indicators for their estuarine system. Coined “Restore the Balance,” their approach compared historical extent and distribution of habitats that support important faunal guilds from an agreed-upon reference condition and time to those that currently exist. The assumption of this approach was that in restoring habitats in the same proportion, those habitat assemblages would sustain the mosaic of floral and faunal guilds represented in the area.

MBNEP SAC has been evaluating how to best communicate indicators of estuarine health since publication of the 2008 State of the Bay report. In addition to the Restore the Balance approach, it began investigating the Biological Condition Gradient Framework as a method back in 2009 for communicating the connection between biological condition and stressors to those conditions. In 2010, with assistance from EPA Region One (New England) the SAC continues to pursue use of this methodology. The Region One assistance included retaining Barry Vittor and Associates to help develop a BCG Model for the Mobile Bay Estuary. (*A BCG model is a tiered system of aquatic life use designation along a gradient that describes how biological attributes change in response to increasing levels of human disturbance. The gradient used to describe the ecological state of the attributes is divided into six tiers or levels of condition, ranging from a natural/native condition (one) to severe changes in the structure of the biotic community and major loss of ecosystem function (six).*)

### Mobile Bay Real-Time Water Monitoring

With ongoing funding, (4<sup>th</sup> year) received from the Gulf of Mexico Program in 2010, all sites, Meaher Park, Dauphin Island, Weeks Bay, and Mobile (Middle) Bay, are up and running and information generated can be viewed at [www.mymobilebay.com](http://www.mymobilebay.com). The website also contains links to the Mobile River, Fort Morgan, and the Farewell Buoy as part of the Physical Oceanographic Real-Time System of the National Ocean Service with data particularly pertinent to shipping interests. Data is also available from Weeks Bay and Grand Bay through the NOAA National Weather Service Hydrometeorological Automated Data System. In the future, the website will be connected to a larger network of stations as part of the Gulf Coast Ocean Observing System, and research reports, maps, and other information will be made available to the public.

### Shorebird Assessment

MBNEP provided \$7,500 to Conservian, Inc. and the Coastal Bird Conservation (CBC) program to fund standardized surveys and monitoring of the Alabama coast (including islands) for breeding and non-breeding shorebirds to continue provision of comprehensive population data, to supplement data gathered from 2007-2009. CBC focal survey species include Snowy Plover (*Charadrius alexandrinus*), Wilson’s Plover (*C. wilsonia*), Piping Plover (*C. melodus*), American Oystercatcher (*Haematopus palliatus*), Red Knot Tern (*Gelochelidon nilotica*), Common Tern (*Sterna hirundo*), Black Skimmer (*Rynchops niger*), Sandich Tern (*Thalasseus sandvicensis*), and Sooty Tern (*Onychoprion fuscatus*). Sites were identified that support the highest number of focal species and human created disturbances documented – whether related to oil spill

response or not – and any incidence of oiled shorebirds was documented. Signage and materials provided by specific sites/owners/managers were installed to increase protection of birds and habitats. Onsite field training was provided for partners and volunteers interested in assisting with the project. A 2010 Eastern Gulf Coast report will be delivered upon completion.

## ECOSYSTEM RESTORATION AND PROTECTIONS

### Steele Creek Lodge Shoreline Stabilization

The western shore of the Steele Creek Marina in Satsuma is experiencing rapid erosion and recession caused by a combination of storm water runoff and boat wakes. The City of Satsuma approached the MBNEP in 2009 requesting \$10,000 and guidance to remediate the shoreline and reduce the impacts. In 2010, Dr. Bret Webb of the Civil Engineering Department of the University of South Alabama delivered conceptual plans to not only stabilize the existing shoreline, in an effort to prevent further erosion, but to provide some level of mitigation for the loss of habitat in the vanishing riparian buffer. The plan was developed so that the city could use its own equipment and personnel to perform construction activities and provide in-kind match for the grant which would be used to purchase riprap to build a toe and clean sand fill to construct a perched terrace, which will be planted with native riparian vegetation with the help of the Satsuma High School Grasses in Classes Program. Construction activities are pending.

### Oyster Gardening

MBNEP continues to support the Mobile Bay Oyster Gardening Program overseen by AUMERC. In 2010, 62 volunteer oyster gardeners working from 43 different docks/locations produced 17,500 oysters for placement on/supplementation to existing oyster reefs. Reduced production in 2010 was the result of reduction in stocking capacity by 50% related to the Deepwater Horizon Oil Spill. This number was sufficient to cross the 400,000 plateau of total oyster production and planting by the Program.

### Dog River Park Shoreline Stabilization

In 2010, with installation of educational signage at Dog River Park in Mobile, implementation of the shoreline stabilization project along the erosion impacted Park shoreline was completed. Three signs were installed at the sight, each describing a different facet of the project – the first shows “Where you are in the watershed,” the second discussed implementation activities involved in the project, and the third describes ecosystem services and wildlife beneficiaries of the project.

### Mobile County Public Schools Grasses in Classes Program

Four public high schools are participating in the Mobile County Grasses in Classes Program: Baker, Satsuma, Alma Bryant, and Murphy. Satsuma and Baker are growing smooth cord grass (*Spartina alterniflora*) and black needle rush (*Juncus roemerianus*). Alma Bryant’s upland nursery is stocked with sea oats (*Uniola paniculata*), panic grass (*Panicum repens*), and several other species. In 2010, Baker, Bryant, and Murphy students participated in a dune planting project on Dauphin Island in partnership with the Parks Board, U. S. Fish & Wildlife Service, and Mobile County Soil and Water Conservation District. The grant from the U. S. Fish and Wildlife Service that supports Grasses in Classes activities will be closed on July 30, 2011.

## TECHNICAL ASSISTANCE AND CAPACITY BUILDING

### Response to Deepwater Horizon Spill

During the week following the sinking of the Deepwater Horizon oil rig, nationwide volunteer response consumed staff time, with hundreds of phone calls received in the office daily. MBNEP staff, along with Mobile BayKeeper and ACF staffs, developed a format for collection of contact information from prospective volunteers. On Sunday, May 1, MBNEP facilitated a meeting of personnel from MBNEP, ADCNR, State Lands Division, BayKeeper, and ACF to plan pre-impact beach cleanups along all Alabama beaches to reduce potential for contamination of materials when oil makes landfall. With assumption of data collection responsibilities by the Governor's Office of Faith-Based and Community Initiatives (FBCI), MBNEP turned efforts towards outreach activities associated with the event.

In cooperation with the FBCI, ACF and BayKeeper initiated a Volunteer Field Observer Program to supplement efforts by BP contractors to identify immediate areas of concern along Alabama's shoreline. Volunteer observers monitored State beaches daily during early-morning walks and alerted contractors when contamination was encountered. This activity allowed cleanup crews to an early start towards removing oil contamination before it was encountered by tourists or visitors.

In support of three Mississippi-Alabama Sea Grant Consortium-led Community Forums, one in Biloxi on June 2 and two at the Mobile Civic Auditorium on June 2 and 3, MBNEP provided staff assistance and outreach. These sessions included representatives from State resource agencies, the Small Business Administration (SBA), National Oceanic and Atmospheric Administration (NOAA) and others to answer questions and share information about the situation in the Gulf. Topics included fisheries and wildlife, monitoring and data, business and personal finance, technological disasters and mental health, and legal perspectives.

In June, MBNEP provided a presentation for Alabama Community Foundation chapters to discuss the spill, its impacts, the Natural Resource Damage Assessment, and the Oil Pollution Act of 1990. The same program was presented to the Fairhope Environmental Advisory Board in July, the Gulf and Atlantic States Shellfish Conference in August, and the Association of National Estuary Programs held in November.

On July 2 and 16, MBNEP facilitated public meetings with Dr. Paul Anastas, Assistant Administrator for the U. S. EPA Office of Research and Development and Science Advisor to the Agency, at the Five Rivers Delta Resource Center Theater to discuss EPA findings regarding the toxicity of dispersants used in efforts to deal with oil released into the Gulf. The first meeting targeted invited scientists, State health officials, and Federal and State program officials, and the second targeted environmental and community-based organization members.

MBNEP was invited to sit on the Coastal Recovery Commission of Alabama and helped develop *A Roadmap to Resilience: Towards a Healthier Environment, Society and Economy for Coastal Alabama*, which was delivered in December, 2010.

### Bays and Bayous Symposium

On Wednesday and Thursday, December 1 and 2, 2010, MBNEP, Mississippi Alabama Sea Grant and other partners hosted the 2010 Alabama-Mississippi Bays and Bayous Symposium at the Arthur R. Outlaw Convention Center in Mobile. Four hundred attendees representing over 210 different organizations came together to share topics related to the Symposium's theme: "Science, Industry, Community: Building Bridges to Coastal Health." Keynote speakers included John Hankinson, Jr., Executive Director of the Gulf Ecosystem

Restoration Task Force; Kerry St. Pe, Director of the Barataria-Terrebonne National Estuary Program; Andreas Theuer, Head of Corporate Environmental Policies for ThyssenKrupp AG; Ricky Mathews, Chair of the Coastal Recovery Commission of Alabama; and Dr. Wes Tunnell, Associate Director of the Harte Research Institute for Gulf of Mexico Studies at Texas A&M University. Presentation topics included a number of emerging coastal issues such as Deepwater Horizon Oil Spill Recovery, living shorelines, nutrient over-enrichment, and hazard mitigation.

#### *Coastal Alabama Clean Water Partnership*

The CACWP received a grant from the World Wildlife Fund to promote residential rainwater harvesting in Mobile and Baldwin Counties. Five workshops have been conducted (three in Daphne, one in Dauphin Island, and one in Weeks Bay), with approximately 20 participants per workshop receiving rain barrels (provided by Coca Cola Bottling) and storm water education. Residential Low Impact Development Demonstration Sites are near completion at Daphne City Hall and at Lake Forest.

A residential septic tank maintenance workshop, funded by as part of a 319 grant to implement a watershed action plan in Juniper Creek, was held in October, 2010 and attended by 25 participants. The Mobile Area Water and Sewer System provided free disposal to participants. Partners included MAWSS, ADEM, the Mobile County Soil and Water Conservation District, and the Mobile County Department of Public Health.

#### *Baldwin County Watershed Coalition*

Following over four years of planning by the MBNEP-facilitated Baldwin County Watershed Coalition (BCWC) and passage of enabling legislation sponsored by the local State congressional delegation, Baldwin County voters rejected Local Amendment One in the November 2, 2010 county-wide referendum. This proposed local constitutional amendment was to provide by law the formation by Baldwin County and its municipal governing bodies of a public corporation to manage storm water and levy a storm water service charge on property containing impervious surface area, exempting agricultural and forestry property. The referendum failed despite development of a fee structure in which 86% of property owners in the county would have paid three dollars per month or less to generate \$2.6 million dollars of dedicated funds for on-the-ground projects to address negative impacts of stormwater runoff. The amendment was initially supported by the county and all thirteen of its municipal governments, who are challenged to provide funding to address stormwater-related erosion, flooding or water quality problems. However, in light of the economic recession, the Oil Spill, and overall timing limitations of the referendum, many of the communities pulled their support as the vote neared.

MBNEP staff efforts towards planning and public education were extensive. The BCWC Steering Committee met monthly to develop roles of the BCWC and public corporation, as well as the fee structure, with efforts facilitated by contracted consultant Gresham, Smith, and Partners and MBNEP. The BCWC Technical Committee established a priority projects list of 123 potential projects with costs totaling around \$25 million distributed by watershed for implementation by the public corporation who would work in concert with municipal public works departments. The BCWC Education Committee prepared outreach materials and provided presentations to local groups and clubs.

Three public meetings were held in Robertsedale, Foley, and Daphne, over a two-month period leading up to the referendum. Over 100 people attended each of the public meetings, hosted in town halls in early evening hours. BCWC members provided numerous presentations to various Baldwin County organizations to educate residents about the issues related to management of stormwater at a watershed and not geopolitical boundary

scale, inadequate funding prioritization of stormwater management and about options for correcting the deficit in resources.

While passage of the referendum failed, outreach and education efforts appear to have borne fruit. The Baldwin County Commission has contracted with an engineering firm to provide a comprehensive study of the Fish River Basin in order to address stormwater management within the basin, guide the development of drainage regulations, and identify potential regional retention and detention areas. Additionally, with a Comprehensive Watershed Management Plan (CWMP) for the D'Olive and Tiawasee Creek and Joes Branch Watershed completed, the County Commission, Cities of Daphne and Spanish Fort, the Alabama Department of Transportation, MBNEP, and private property owners are partnering to seek 319 funding for restoration of the Joes Branch sub-watershed as an initial step towards overall Plan implementation.

#### *D'Olive Watershed Comprehensive Watershed Management Plan*

Funded by MBNEP, U. S. EPA, ADEM, Mississippi-Alabama Sea Grant Consortium (MASGC), Alabama Power Co., Baldwin County, the Cities of Daphne and Spanish Fort, and the Lake Forest Property Owners Association, the CWMP for the D'Olive Creek, Tiawasee Creek and Joes Branch Watersheds was published in August, 2010. Thompson Engineering organized and managed the work of the Consultant Team, which included Tetra Tech, Inc., Barry A. Vittor and Associates, Hand Arendall LLC, and the ACF. Release followed a public meeting at the 5 Rivers Delta Resource Center Theater and a 30-day comment period. The Plan includes a watershed description, watershed conditions, identification of critical areas and issues, watershed management goals and objectives, conceptual management measures and cost estimates, implementation strategies, financing alternatives, community outreach and public education, and monitoring recommendations.

#### *A Redfish Tale*

"*A Redfish Tale*," an educational movie produced by Hidden World Productions and MBNEP and funded through a grant from the Gulf of Mexico Program was delivered in April 2011. This film short features a pair of animated redfish, Jimbo and Thibodeaux, who explain the concepts of nutrient over-enrichment, eutrophication, hypoxia, and anoxia along with storm water runoff and watershed dynamics to an elementary through middle school audience. Envisioned to stimulate contributions of environmentally-themed video productions from viewers for cataloguing and availability on the MBNEP website, the film was premiered on at the Crescent Theater in Mobile. Actors/actresses were recruited from the Alabama School for Mathematics and Science student body and faculty. It will be distributed to area schools, libraries, and educational venues, available on the MBNEP website ([www.mobilebaynep.com](http://www.mobilebaynep.com)) and offered at interactive kiosks across the Gulf Coast.

#### *Waters to the Sea: Discovering Alabama*

MBNEP and the Alabama Clean Water Partnership have partnered to co-fund a multi-media watershed education tool developed by The Center for Global Environmental of Hamline University's Graduate School of Education in St. Paul, MN. *Waters to the Sea: Discovering Alabama* will explore the major river basins of Alabama, including drainages to the greater Mobile River Basin, to educate and involve Alabama citizens to remind them that everything flows downstream. Products include

- creation of a master multimedia program authored in Flash for optimal distribution via the Web and on disk;

- an online assessment function, including back-end database support, with post-module evaluations for each program segment that are correlated to State education standards and that provides evaluation results to teachers and program producers;
- a classroom activity guide, developed as a downloadable PDF document, which will support educators in using and implementing the program;
- and three MBNEP-sponsored kiosks to highlight and complement priority estuarine issues addressed by Waters to the Sea.

The products are scheduled for completion by August, 2011.

#### Web Site Redesign

A redesigned MBNEP website, [www.mobilebaynep.com](http://www.mobilebaynep.com), was launched in July, 2010 and will improve navigation and enhance web-based communication capabilities. Addition of photo and video galleries and a blog are under consideration with the addition of a Communications Specialist to the MBNEP staff. An expanded social media presence includes MBNEP Facebook and Twitter sites.

#### Newsletter

The format and distribution frequency of the *Alabama Current Connection*, the newsletter of the Alabama Department of Natural Resources, State Lands Division, Coastal Section and the MBNEP were changed in 2010. Formerly the eight-page *Current Connection* was printed in two colors on 70-lb, royal white fiber paper and distributed quarterly. The new, glossy, updated 16-page version is printed in four colors on 80-lb dull white text and distributed biannually.

#### Community Events

MBNEP facilitated, organized, and/or participated in a number of community events during the 2010 period, including Coastal Cleanup, Coastal Kids Quiz, Baldwin and Mobile County Water Festival, Discovery Day, Coastal Alabama Birdfest, Dog River Clearwater Revival Dog Paddle, and Earth Day.

## IMPLEMENTATION PROGRESS 10/1/2006 - 3/31/2010

Attached:

Budget Detail 2010-2012  
Administration Budget 2010-2011  
Expense Detail (All Grants) through 3-31-11  
Community Outreach Budget 2010-2011  
Match Status through 3-31-11  
Cost Category 2010-2011  
Contracts with Local Entities  
Travel Detail  
Narrative Status Detail (All Grants) through 3-31-11

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**Mobile Bay National Estuary Program**  
**Amended Budget for Year 16- Proposed**

Category	Action	Description	Total Activity Budget	2011-2012 Budget	2010-2011 Reprogram	2010-2011 Budget	External Grants	Past Year Grant Funds	Notes:
EST	Status-Ecosystem	BCG Support/Mapping	55,000	25,000	(45,000)	75,000			Improvements to Habitat/Watershed Tool, GIS products to support development of BCG Framework/Monitoring Program
EST	Status-Sediment	NEW: Status- Sediment Budget for Mobile Bay	100,000		91,826			8,174	Partnership with USACE, NGI, DISL (NSF Grant) to develop sediment budget, circulation model, transport model and decision support tool for local managers for assessing impacts of restoration projects and other
EST	Status-Sediment	NEW: ALDOT-D'Olive Sediment Study	26,800				26,800		Assessment of streamflow and sediment loading upstream of D'Olive Creek at I-10 crossing to develop baseline for future construction projects and assess impacts from Timber Creek development.
EST	Status-Habitats	Land Use Land Cover Change Analysis (NASA)	22,725				22,725		Phase Two: Coastal watershed permanent habitat change; Projection of urbanization in area watersheds
EST	Monitoring-LR	NEW: Manatee Monitoring Network	15,000	15,000					Interim support for monitoring program established with MBNEP funds
EST	Monitoring-LR	Annual Alabama Shorebird Assessment		5,000				13,000	Continued support for annual shorebird assessments for noted species of concern
EST	Monitoring-Water	Real Time Meteorological Monitoring	239,925				239,925		Second year of two year GOMP Grant
<b>EST Total</b>			<b>459,450</b>	<b>45,000</b>	<b>46,826</b>	<b>75,000</b>	<b>289,450</b>		
ERP	Habitats-Wetlands	City of Chickasaw-Brooks Park Restoration	20,000			20,000			Local Restoration Partnership
ERP	Habitats-Wetlands	City of Fairhope- Volanta Watershed Restoration	50,000			50,000			Local Restoration Partnership
ERP	Habitats-Wetlands	City of Foley- Wolf Creek Restoration	82,500			82,500			Local Restoration Partnership
ERP	Habitats-Wetlands	City of Orange Beach-161 Wetlands Restoration	27,500			27,500			Local Restoration Partnership
ERP	Healthy Communities	City of Daphne- LID Green Infrastructure	15,000			15,000			Local Restoration Partnership
ERP	Healthy Communities	City of Orange Beach- Canal Rd. overlay district	30,000			30,000			Local Restoration Partnership
ERP	Water Quality	NEW: Mobile County Watershed Restoration	90,000	90,000					TBD- Working with County to develop
ERP	Habitats-Shoreline	GOMF-Mon Louis Island	141,493	10,000			118,450	13,043	Demonstration project to determine State policy changes for conducting living shoreline activities within riparian right zones of private property owners; EPA funding to be used for engineering assistance
ERP	Habitats-Stream	Three Mile Creek Restoration	30,700	5,000			20,000	5,700	Restoration of historic streambed in underserved urban neighborhood, includes invasive species control
<b>ERP Total</b>			<b>487,193</b>	<b>105,000</b>	<b>-</b>	<b>225,000</b>	<b>138,450</b>	<b>18,743</b>	
TAC	Training	Clean Water Partnership Facilitation	55,698	3,000			42,750	9,948	Sponsorship of Coastal Basin Facilitator-Cost Share with AUMERC/MASGC
TAC	Training	Estuary Corps	20,000	10,000		10,000			Partnership with DISL -Discovery Hall Program and ACF to develop citizen stewardship and education

**Mobile Bay National Estuary Program**  
**Amended Budget for Year 16- Proposed**

Category	Action	Description	Total Activity Budget	2011-2012 Budget	2010-2011 Reprogram	2010-2011 Budget	External Grants	Past Year Grant Funds	Notes:
TAC	Training	NEW: Community Outreach Cost Share	10,000	10,000					Contract position to act as liaison with Community groups, manage the CAC, and develop training opps. for these groups with partner agencies
<b>TAC Total</b>			<b>85,698</b>	<b>23,000</b>	<b>-</b>	<b>10,000</b>	<b>42,750</b>	<b>9,948</b>	
EPI	Planning	CCMP Development	66,974	13,800	(46,826)	100,000			Support for studies related to development of BCG,
EPI	Outreach	Current Connections Newsletter	24,000	6,000		6,000	12,000		Joint Newsletter with ADCNR-Coastal Section
EPI	Outreach	Video Series-A Redfish Tale, Interactive Kiosks	290,482	50,717		10,000	229,765		FishSlap, Internet accessible kiosks
EPI	Outreach	Community Awareness-Stormwater	34,350	10,000				24,350	Continued support for raising awareness and conducting demonstration workshops
EPI	Outreach	Community Awareness, Outreach & Events	56,500	17,500	-	39,000	-	-	
EPI	Outreach	Signage- Steele Creek Lodge		5,000				10,000	Interpretive Signage to compliment shoreline stabilization project
<b>EPI Total</b>			<b>472,306</b>	<b>103,017</b>	<b>(46,826)</b>	<b>155,000</b>	<b>241,765</b>	<b>24,350</b>	
MPA	Admin	Administration	817,359	420,740		396,619			Rent and other facility costs; salaries and other operational costs; note all project delivery costs are incorporated in the administrative line
MPA	Admin	DISL Indirect Costs (15% of expenses)	233,824	104,693		129,130			26.7 % unrecovered is used as match toward program
<b>MPA Total</b>			<b>1,051,183</b>	<b>525,433</b>	<b>-</b>	<b>525,749</b>			
<b>Grand Total</b>			<b>2,555,830</b>	<b>801,450</b>	<b>-</b>	<b>990,749</b>	<b>1,424,830</b>	<b>137,256</b>	

Total EPA/Non Federal Funds Available  
 Surplus/Deficit

801,450  
 (0)  
 233

**Mobile Bay National Estuary Program  
Proposed Administrative Budget 2010-2011**

	<b>Year 15 Budget Detail</b>	<b>Year 15 Budget</b>	<b>Year 16 Budget Detail</b>	<b>Year 15 Budget</b>
<b>Program Planning and Administration</b>				
<b>Salaries</b>		<b>226,000</b>		<b>231,000</b>
Director	85,000		85,000	
Program Administrator/Support	40,000		40,000	
Watershed Project Coordinator	50,000		50,000	
Communications & Outreach Manager	35,000		43,000	
Community Outreach Coordinator	11,000			
Americorps Volunteer	5,000			
Temporary Support (403)			13,000	
<b>Fringe</b>		<b>92,660</b>		<b>93,740</b>
<b>Staff Support</b>		<b>29,000</b>		<b>33,000</b>
Professional Development	5,000		5,000	
Professional Services/Contract Support	5,000		10,000	
Conferences & Meetings	3,000		2,000	
Travel	16,000		16,000	
<b>Program Supplies</b>		<b>18,957</b>		<b>19,500</b>
Postage	3,000		3,000	
Reproduction/Publishing	5,457		3,000	
Materials & Supplies	4,000		3,000	
Equipment- Computer	2,000		5,000	
Subscriptions/Dues	3,500		3,500	
Service Contracts	1,000		2,000	
<b>Facility Related</b>		<b>30,002</b>		<b>43,500</b>
Communications (Telephone/Internet)	6,000		9,000	
Building Rent	23,000		33,000	
Bldg/Content Ins.	1,002		1,500	
<b>Total Program Planning and Administration</b>		<b>396,619</b>		<b>420,740</b>

**DISL Administrative Fee (15% total program budget)**

**129,130**

**104,693**

**Mobile Bay National Estuary Program**  
**Budget vs. Actual as of 3-31-2011**

PE Cat	Action	Description	Year 15 Budget	Reprogrammed Funds from Year 15	Actual Expenses/ Encumbered	Balance
EST	Status	453-Status and Trends: BCG	75,000.00	(45,000.00)		30,000.00
EST	Status	453-Sediment Budget for Mobile Bay		100,000.00		100,000.00
EST	Monitoring-birds	435-Shorebird Assessment	7,500.00		7,500.00	-
EST	Monitoring-air	435-Air Deposition Monitoring	67,632.00		67,632.00	-
EST	Monitoring-water	449-Real Time Meteorological Monitoring	239,925.00		239,925.00	-
EST	Status-sediment	451-ALDOT-D'Olive Sediment Study	26,800.00		26,800.00	-
EST	Status- sediment	435-Fly Creek/Dog River Sediment Study	40,000.00	(12,850.00)	27,150.00	-
EST	Status- LULC	452-NASA/USC-LULC Analysis	22,725.00		22,725.00	-
<b>EST Total</b>			<b>479,582.00</b>	<b>42,150.00</b>	<b>391,732.00</b>	<b>130,000.00</b>
ECOR	Habitats- Oysters	435-Oyster Gardening	15,000.00		9,861.29	5,138.71
ECOR	Habitats-shoreline	435-General Public Access-signage	10,000.00		1,590.00	8,410.00
ECOR	Habitats-shoreline	442-ANEP-Dog River Park CRP	26,450.00		26,450.00	-
ECOR	Habitats-shoreline	435-Steele Creek Satsuma	10,000.00		10,000.00	-
ECOR	Habitats-shoreline	454-GOMF-Mon Louis Island	71,494.00		71,494.00	-
ECOR	Habitats-Stream	435-Three Mile Creek Restoration	5,700.00		-	5,700.00
ECOR	Habitats-Stream	447-WA-Three Mile Creek Restoration	20,000.00		-	20,000.00
ECOR	Habitats-Stream	435-Trash Barrier-Cancelled	20,324.00	(20,324.00)		-
ECOR	Habitats-wetlands	432-USFWS-Grasses In Classes	50,000.00		37,459.84	12,540.16
ECOR	Habitats-wetlands	City of Chickasaw-Brooks Park Restoration	20,000.00		20,000.00	-
ECOR	Habitats-wetlands	City of Fairhope- Volanta Watershed Restoration	50,000.00		50,000.00	-
ECOR	Habitats-wetlands	City of Foley- Wolf Creek Restoration	82,500.00		82,500.00	-
ECOR	Habitats-wetlands	City of Orange Beach- 161 Wetlands Restoration	27,500.00		27,500.00	-
ECOR	Healthy Communities	City of Orange Beach- Canal Rd. overlay district	30,000.00		30,000.00	-
ECOR	Healthy Communities	City of Daphne- LID Green Infrastructure Regs.	15,000.00		15,000.00	-
<b>ECOR Total</b>			<b>453,968.00</b>	<b>(20,324.00)</b>	<b>381,855.13</b>	<b>51,788.87</b>
TACB	Tools	448-TNC-Habitat Tool Development	13,000.00		13,000.00	-
TACB	Training	455-Clean Water Partnership Facilitation	22,500.00		22,500.00	-
TACB	Training	435-Estuary Corps	10,000.00		10,000.00	-
<b>TACB Total</b>			<b>45,500.00</b>	<b>-</b>	<b>45,500.00</b>	<b>-</b>
EPI	Education	435-Waters to the Sea-CWP	10,000.00		10,000.00	-
EPI	Outreach	453-Community Outreach- Community Events	15,000.00		3,150.00	11,850.00
EPI	Outreach	453-Community Outreach- Promotions,	14,000.00		-	14,000.00
EPI	Outreach	453-Community Outreach- CCMP Database	10,000.00		10,000.00	-
EPI	Outreach	435-Baldwin County Stormwater Mgmt	154,361.56		130,012.04	24,349.52
EPI	Outreach	<b>435-American Public Works Assn. Convention</b>	25,000.00	25,000.00	25,000.00	25,000.00
EPI	Outreach	443-Newsletter	6,000.00		6,000.00	-
EPI	Outreach	453-Communit Outreach- Newsletter	6,000.00		6,000.00	-
EPI	Outreach	435-DIMS & Website	40,210.24		40,210.24	-
EPI	Outreach	435-Interpretive Signage	51,000.00		51,000.00	-
EPI	Outreach	435-Signage for Chickasabogue Park	5,000.00		5,000.00	-
EPI	Outreach	435-Clean Marina Program	27,029.95		26,357.78	672.17
EPI	Outreach	435-Signage for Reading Park, Prichard	5,000.00		5,000.00	-
EPI	video	453-Community Outreach- Video Series	10,000.00		10,000.00	-
EPI	video	446-GMP-Video Series (Nutrient+)	239,925.00		239,925.00	-
<b>EPI Total</b>			<b>618,526.75</b>	<b>25,000.00</b>	<b>567,655.06</b>	<b>75,871.69</b>
MPA	Admin	453-Administration	525,000.00		495,192.00	29,808.00
MPA	Planning	453-CCMP Development	100,000.00	(46,826.00)	19,000.00	34,174.00
<b>MPA Total</b>			<b>625,000.00</b>	<b>(46,826.00)</b>	<b>514,192.00</b>	<b>63,982.00</b>
<b>Grand Total</b>			<b>2,222,576.75</b>	<b>-</b>	<b>1,900,934.19</b>	<b>321,642.56</b>

Mobile Bay National Estuary Program  
Community Outreach Budget

Category	Action	Description	Total Activity Budget	2011-2012 Budget	2010-2011 Reprogram	2010-2011 Budget	External Grants	Past Year Grant Funds	
EPI	Outreach	CCMP Accomplishments Database-Evaluation, Data Entry	15,000	5,000		10,000			Continued evaluation and updating of CCMP database
EPI	Outreach	Community Events & Outreach	20,000	5,000		15,000			Support for local community events that promote citizen connection to coastal
EPI	Outreach	Community Awareness-Promotional Materials	17,500	6,033		10,000			Production of factsheets, brochures, and other for distribution at community
EPI	Outreach	Partnership Cultivation/Development	4,000			4,000			Management conference development and support
	Total Community Awareness, Outreach,		56,500						

Mobile Bay National Estuary Program  
453 Match Status

Name/Description	Year 15 Budgeted	Year 15 Committed Funds	Year 15 Surplus/Deficit	Year 16 Budgeted	Year 16 Committed Funds	Year 16 Surplus/Deficit	2 Year Total Budgeted	2 Year Total Committed Funds	2 Year Total Surplus/Deficit
Match Reserve Transfers			\$0.00			\$0.00	\$0.00	\$0.00	\$0.00
State of AL	\$70,000.00	\$67,648.00	-\$2,352.00	\$70,000.00		-\$70,000.00	\$140,000.00	\$67,648.00	-\$72,352.00
ADECA -Not Received			\$0.00			\$0.00	\$0.00	\$0.00	\$0.00
ADCNR	\$60,000.00	\$70,000.00	\$10,000.00	\$70,000.00		-\$70,000.00	\$130,000.00	\$70,000.00	-\$60,000.00
City of Mobile	\$32,000.00	\$28,800.00	-\$3,200.00	\$28,800.00		-\$28,800.00	\$60,800.00	\$28,800.00	-\$32,000.00
Baldwin Co. Commission	\$10,000.00		-\$10,000.00	\$10,000.00		-\$10,000.00	\$20,000.00	\$0.00	-\$20,000.00
Mobile County	\$10,000.00	\$23,850.00	\$13,850.00	\$23,850.00		-\$23,850.00	\$33,850.00	\$23,850.00	-\$10,000.00
City of Fairhope	\$3,000.00		-\$3,000.00	\$3,000.00		-\$3,000.00	\$6,000.00	\$0.00	-\$6,000.00
City of Spanish Fort	\$2,000.00		-\$2,000.00	\$2,000.00		-\$2,000.00	\$4,000.00	\$0.00	-\$4,000.00
City of Gulf Shores			\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00
City of Daphne	\$3,000.00	\$3,000.00	\$0.00	\$5,000.00		-\$5,000.00	\$8,000.00	\$3,000.00	-\$5,000.00
Private Donations*			\$0.00			\$0.00	\$0.00	\$0.00	\$0.00
			\$0.00			\$0.00	\$0.00	\$0.00	\$0.00
435 Match TOTALS	\$190,000.00	\$193,298.00	\$3,298.00	\$212,650.00	\$0.00	-\$212,650.00	\$402,650.00	\$193,298.00	-\$209,352.00

**Mobile Bay National Estuary Program****Cost Category**

<b>Component</b>	<b>Contract</b>	<b>Salaries</b>	<b>Fringe</b>	<b>Travel</b>	<b>Supplies &amp; Equipment</b>	<b>Other</b>	<b>Indirect</b>	<b>Grand Totals</b>
Ecosystem Restoration	105,000							105,000
Ecosystem Status and	45,000							45,000
Technical Assistance and Capacity Building	23,000							23,000
Program Implementation and Reporting	103,017	231,000	93,740	16,000	6,000	74,000	104,693	628,450
	<b>276,017</b>	<b>231,000</b>	<b>93,740</b>	<b>16,000</b>	<b>6,000</b>	<b>74,000</b>	<b>104,693</b>	<b>801,450</b>

# Mobile Bay National Estuary Program

## Contracts with Local Entities

Title	Organization	Project Description	Amount	Start Date	End Date	Award Funding Source
Assessment of Stream Flow and Sedimentation for D'Olive Creek	Geological Survey of Alabama	to prepare a proposal for monitoring and sediment load estimation for D'Olive Creek upstream from the Interstate 10 crossing.	\$18,800.00	June-10	December-11	Alabama Department of Transportation
Coastal Bird Conservation: Species Population Assessments and Survey	Conservian, Inc.	to conduct species population assessments and surveys, with the primary goal of enhancing site managers efforts to physically protect nesting areas with mapping, increased monitoring, and	\$7,500.00	July-10	June-11	U.S. Environmental Protection Agency, local funding
Assessment of Sedimentation in the Dob River Watershed, Mobile County, AL	Geological Survey of Alabama	to prepare a proposal for monitoring and sediment load estimation for ten monitoring sites in selected tributaries of Dog River.	\$27,150.00	January-11	April-12	U.S. Environmental Protection Agency, local
Nutrient Education Multimedia Resource	Hamline University	to create three kiosks with multimedia, Spanish-translation-available programs installed that incorporate the MBNEP "A Redfish Tale" video components and characters, called "Too Rich for Gulf	\$74,000.00	July-12	June-11	U. S. Environmental Protection Agency Gulf of Mexico Program
Shoreline Stabilization of Steele Creek Lodge, Satsuma	City of Satsuma	to stabilize the shoreline of Steele Creek Lodge in Satsuma, AL	\$10,000.00	October-10	September-11	U.S. Environmental Protection
Community Attitudes Study Research for Mobile and Baldwin	Research Strategies	to help determine the attitudes of residents in Mobile and Baldwin Counties toward Mobile Bay, the Gulf of Mexico and the	\$19,000.00	April-11	June-11	U.S. Environmental Protection
Project Coordination Assistance-Implementation D'Olive Watershed Management Plan	Thompson Engineering	to provide assistance to the Mobile Bay National Estuary Program to help facilitate implementation of the D'Olive Watershed Management Plan.	\$20,000.00	May-11	September-11	U.S. Environmental Protection Agency, local funding
Brooks Park Wetlands Restoration	City of Chickasaw, AL	this project will construct 300 feet of boardwalk and 1,000 feet of gravel trails allowing public access and provide public education by creating and installing signage along the boardwalk. It also involves debris removal and eradication of invasive species to improve wetlands.	\$20,000.00	June-11	May-12	U.S. Environmental Protection Agency, local funding
Low Impact Design/Green Infrastructure Regulations	City of Daphne, AL	this project will spearhead the process of developing LID/GI practices to be used to supplement the City Subdivision Regulations and to provide alternatives to traditional stormwater management	\$15,000.00	June-11	May-12	U.S. Environmental Protection Agency, local funding

# Mobile Bay National Estuary Program

## Contracts with Local Entities

Title	Organization	Project Description	Amount	Start Date	End Date	Award Funding Source
Volanta Gulley Watershed Management	City of Fairhope, AL	to develop the Volanta Gulley watershed Management Plan, a sustainable planning tool that promotes low impact development in a coastal community, to address nonpoint source pollution entering Fly Creek due to stormwater runoff. It will also construct at least two projects specified in the Plan to reduce stormwater volume	\$50,000.00	June-11	May-12	U.S. Environmental Protection Agency, local funding
Wolf Creek Stream Restoration	City of Foley, AL	this project will reverse impacts to this section of Wolf Creek caused by urban development, provide greater habitat for increased species diversity, implement urban watershed management practices, and serve as an example of holistic	\$82,500.00	June-11	May-12	U.S. Environmental Protection Agency, local funding
Highway 161 Wetland Enhancement	City of Orange Beach	address stormwater management and wetland restoration and enhancement by altering the contour of the east Highway 161 right-of-way to create a serpentine wetland system that will greatly improve the receiving waters of Cotton Bayou. Additionally, interpretive signage will be installed along a well-established pedestrian and biking trail that runs	\$27,500.00	June-11	May-12	U.S. Environmental Protection Agency, local funding
Canal Road Overlay District	City of Orange Beach	this project will analyze usage along Canal Road and design a plan to provide for expanded traffic usage in a way that promotes infiltration, keeps impervious pavement to a minimum, and is both pedestrian and bicycle friendly.	\$30,000.00	June-11	May-12	U.S. Environmental Protection Agency, local funding

# Mobile Bay National Estuary Program

Staff Mileage 4/1/10 - 3/31/11

Date	Destination	Reason	Expense
<b>Roberta Swann</b>			
4/1/2010	Battlehouse Hotel	Rotary Club of Downtown Mobile Meeting	\$4.40
4/8/2010	Café Royal	MBNEP Executive Committee Retreat	\$9.90
4/9/2010	Five Rivers Delta Center	Baldwin County Environmental Advisory Board	\$9.90
4/12/2010	Regions Bank-Robertsdale	BCWC Fees meeting	\$44.00
4/13/2010	Baldwin County Administration Bldg- Bay Minette	Baldwin County Worksession	\$38.50
04/15/10	Board of Realtors- Robertsdale	Board of Realtors meeting- BCWC	\$42.90
04/30/10	Regions Bank-Robertsdale	BCWC Steering Committee meeting	\$44.00
05/05/10	Five Rivers Delta Center	Science Advisory Committee Meeting	\$9.90
05/05/10	Riverview Hotel, Mobile	Coastal Summit Planning-	\$4.40
05/10/10	Grand Bay NERRS	B&B Program Committee	\$33.00
05/12/10	International Trade Club, Mobile	Alaska Sea Grant- Oil Spill Round Table	\$4.40
06/02/10	Biloxi Collesium	Public Forum, Oil Spill	\$0.00
06/03/10	Mobile Civic Center	Public Forum, Oil Spill	\$3.85
06/07/10	Mama Lu's, Robertsdale	Friends of Baldwin County- Stormwater	\$33.00
06/07/10	Mobile Government Plaza	City of Mobile-2011 Budget	\$3.85
06/08/10	Dauphin Island Sea Lab	MSAL Sea Grant Review- Advisory Council	\$27.50
06/18/10	Baldwin County Annex-Robertsdale	BCWC meeting	\$44.00
06/22/10	City of Prichard	EightMile Creek Watershed Plan -City Council	\$8.80
06/29/10	Five Rivers Delta Center	D'Olive Watershed	\$9.90
07/01/10	Mobile Area Chamber of Commerce	Sustainability Planning- Win Hallett	\$4.40
07/02/10	Five Rivers Delta Center	EPA Dispersant Meeting- Dr. Anastas	\$9.90
07/07/10	Bimini Bob's- Daphne	ThyssenKrupp- Bays and	\$13.20
07/08/10	Regions Bank Robertsdale	BCWC Steering Committee	\$44.00
07/09/10	Daphne City Hall	BCWC Education Committee	\$19.25
07/12/10	Panama City Beach	First Lady- Oil Spill Event	\$0.00
07/13/10	Fairhope Elks Club	Association of General Contractors	\$24.20
07/14/10	Fairhope City Hall	Fairhope Environmental Advisory Board	\$23.10
07/15/10	Garden Inn, Daphne	Coastal Habitats Coordinating Team Meeting	\$14.30
7/16/2010	Five Rivers Delta Center	Dispersants Meeting-Dr.	\$9.90
7/20/2010	Alabama Coastal Foundation	BCWC Presentation	\$4.40
7/21/2010	Admiral Semmes, Mobile	Optimist Club-Oil Spill	\$3.85
7/22/2010	St. Rose of Lima Church, Mon Louis Island	Mon Louis Island Comm. Mtg Planning	\$23.10
7/23/2010	Faulkner St., Gulf Shores	Peer Listening Training	\$32.86
7/26/2010	Foley Satellite Courthouse	Baldwin County Revenue Commissioner Mtg-BCWC	\$42.90
07/26/10	Jesses Restaurant, Magnolia Springs	Friends of Baldwin County BCWC Meeting	\$39.60
07/29/10	St. Rose of Lima Church, Mon Louis Island	Mon Louis Island Comm. Mtg	\$11.55

# Mobile Bay National Estuary Program

Staff Mileage 4/1/10 - 3/31/11

Date	Destination	Reason	Expense
08/02/10	Nan Gray Davis Theodore, AL	Secretary Mabus-Community Meeting	\$14.85
08/04/10	Beau Rivage Hotel, Biloxi MS	Gulf of Mexico Alliance	\$66.00
08/05/10	Mobile BayKeeper, Mobile	BCWC Presentation	\$3.85
08/11/10	International Trade Club	Low Sulfur Fuel Meeting	\$4.40
08/13/10	Foley City Hall	BCWC Presentation	\$44.00
08/19/10	Bay Minette City Hall	Mayor Tillery Meeting BCWC	\$37.40
08/19/10	Moe's Eastern Shore, Malbis	Nutrient Video Meeting	\$4.95
08/23/10	Alabama Coastal Foundation	Restoration Planning meeting- ACF, MBK, TNC	\$3.85
08/24/10	Baldwin County Administration Bldg Bay Minette	Baldwin County Workshop Meeting	\$37.40
08/26/10	Mobile Press Register , Mobile	Editorial Board- BCWC	\$4.40
08/31/10	Bay Minette City Hall	BCWC Steering Committee Meeting	\$37.40
09/01/10	Regions Bank Robertsdale	Baldwin County Chambers- BCWC Presentation	\$37.40
09/02/10	Battlehouse Hotel, Mobile	Downtown Alliance Luncheon	\$4.40
9/7/2010	Baldwin County Administration Bldg Bay Minette	Baldwin County Commission Meeting- BCWC	\$37.40
9/8/2010	Perdido Beach Resort, Orange Beach	Al. Water Resources	\$63.80
9/9/2010	Perdido Beach Resort, Orange Beach	Al. Water Resources	\$0.00
9/14/2010	Five Rivers Delta Center	CHCT Meeting	\$0.00
9/16/2010	Baldwin County Annex- Robertsdale	BCWC Public Meeting	\$44.00
9/28/2010	Five Rivers Delta Center	Coastal Recovery Commission Meeting	\$9.90
10/01/10	Foley Gift Horse	Foley Rotary Club-BCWC	\$39.68
10/06/10	Bay Minette Rotary Village	Bay Minette Rotary Club-	\$38.11
10/12/10	Foley Civic Center	Foley Community Meeting-	\$39.92
10/16/10	Lillian Optimist Club	Lillian Optimist Club- BCWC	\$54.55
10/18/10	Daphne United Methodist Church	Daphne Spanish For Rotary- BCWC	\$15.03
10/19/10	Baldwin County Admin. Bldg-Bay Minette	Baldwin County Commission Mtg-Award	\$34.33
10/19/10	Gulf Shores Community Center	Little Lagoon Preservation	\$49.92
10/20/10	Fairhope Yacht Club	Eastern Shore Republican Women	\$22.18
10/21/10	Association of REALTORS, Robertsdale	Association of REALTORS- BCWC	\$28.26
10/26/10	Mama Lu's	Robertsdale Rotary Club-	\$29.00
10/27/10	Mobile Area Chamber of Commerce	Civic Leadership Roundtable	\$4.00
11/05/10	Five Rivers Delta Center	Executive Committee Meeting	\$9.00
11/22/10	Five Rivers Delta Center	NRDA Meeting	\$9.00
1/5/11	Five Rivers Delta Center	ADCNR Meeting with Staff	\$9.18
1/12/11	WebOperations Net	Website Management Meeting	\$4.08
1/13/11	Mobile County	Meeting with Environmental Services Dept.	\$4.08
1/18/11	Grand Bay NERRS	GOM Atlas Workshop	\$30.57
1/19/11	Daphne City Hall	Service Road Meeting- Daphne City Council	\$17.85
1/20/11	Bluefish Design	Website Management Meeting	\$17.34
1/21/11	Five Rivers Delta Center	NASA SAV Team Meeting	\$9.18
2/1/11	6 St. Joseph St.	Mobile United- Natural Resources Committee	\$4.08
2/4/11	Original Oyster House	Executive Committee Retreat	\$9.54
2/25/11	Felix Fish Camp	Second Interview- Joey Parker	\$9.18

# Mobile Bay National Estuary Program

Staff Mileage 4/1/10 - 3/31/11

Date	Destination	Reason	Expense
3/10/11	R&R Seafood	Second Film Meeting GOMP Grant	\$8.67
3/23/11	Battlehouse, Mobile	NRDA Meeting	\$4.08
3/25/11	International Trade Bldg	Executive Committee Meeting	\$4.08
3/30/11	Eastern Shore Overlook Center	D'Olive Watershed Restoration Meeting	\$12.24
3/31/11	Five Rivers Delta Center	Gulf Coast Restoration TF Public Meeting	\$9.18
<b>Total Local Travel for Roberta Swann</b>			<b>\$1,678.42</b>
Date	Destination	Reason	Expense
<b>Megrez Mosher</b>			
04/05/10	Lynn Rabren's Office Orange Beach from Fairhope	Editing Film	\$39.00
04/07/10	Lynn Rabren's Office Orange Beach from Fairhope	Editing Film	\$39.00
04/09/10	Lynn Rabren's Office Orange Beach from Fairhope	Editing Film	\$39.00
04/13/10	Lynn Rabren's Office Orange Beach from Fairhope	Editing Film	\$39.00
04/14/10	Lynn Rabren's Office Orange Beach from Fairhope	Editing Film	\$39.00
04/16/10	Lynn Rabren's Office Orange Beach from Fairhope	Editing Film	\$39.00
4.19.10	Fairhope-Orange Beach	Editing Redfish Tale film	\$39.00
4.22.10	MBNEP-Alabama School of Math and Science (ASMS)	Pre-screening Film	\$4.10
4.21.10	Fairhope-Orange Beach	Editing Redfish Tale film	\$39.00
4.28.10	Fairhope-Orange Beach	Meeting for Redfish Tale distribution	\$39.00
5.03.10	NEP-DISL	Oil Clean-up	\$35.10
5.05.10	NEP-DISL	Oil Clean-up	\$35.10
5.06.10	NEP-DISL	Oil Clean-up	\$35.10
5.08.10	Fairhope-Orange Beach	Pick-up of DVD from Lynn Rabren's House	\$39.00
5.10.10	NEP-ASMS	Drop off of DVD to Board of Director's Meeting	\$4.10
5.12.10	NEP-Recycling Center	Recycle MBNEP's recycling	\$3.70
5.13.10	Fairhope-Orange Beach	Redfish Tale Meeting and	\$39.00
5.14.10	Fairhope-Orange Beach-MBNEP	Editing a.m., and then Redfish Tale Meeting in p.m.	\$52.50
5.26.10	Fairhope-Orange Beach	Preperation for DISL benefit concert @ Lulu's	\$35.00
5.28.10	Fairhope-Orange Beach	Set-up for benefit DISL benefit concert @Lulu's	\$35.00
5.29.10	Fairhope-Orange Beach	Benefit concert for DISL	\$35.00
6.02.10	Fairhope-Orange Beach	Editing benefit concert for DISL	\$39.00
6.16.10	Fairhope-Orange Beach	Update for Redfish Tale, distribution, post-production	\$39.00
<b>Total Local Travel for Megrez Mosher</b>			<b>\$781.70</b>

# Mobile Bay National Estuary Program

Staff Mileage 4/1/10 - 3/31/11

Date	Destination	Reason	Expense
Date	Destination	Reason	Amount
<b>Tom Herder</b>			
04.17.10	DISL	Discovery Day	\$37.00
04.24.10	Storage Facility on Rangeline Road	Drop off MBNEP materials	\$13.00
05.03.10	Dauphin Island - Cadillac Square	Oil Spill Cleanup	\$37.00
05.04.10	Dauphin Island - Cadillac Square	Oil Spill Cleanup	\$37.00
05.05.10	5 Rivers Delta Resource Center	SAC Meeting	\$9.00
05.06.10	Dauphin Island - Marina	Oil Spill Cleanup	\$37.00
05.11.10	DRCR Meeting	DIP Public Library	\$4.00
06.10.10	5 Rivers Delta Resource Center	Coastal Cleanup Meeting	\$9.00
08.10.10	Auburn University	Presntation on BCWC (RT)	\$250.00
08.15.10	Orange Beach (Island House)	2010 Gulf & S. Atlantic States Shellfish	\$60.00
09.08.10	Orange Beach (Perdido Resort)	24th Alabama Water Resources Conf.	\$60.00
09.14.10	Five Rivers Delta Resoruce Center	CHCT Meeting	\$9.00
09.29.10	Five Rivers Delta Resoruce Center	Confer with Carl Ferraro	\$9.00
10.14.10	USA-Westminster Village	Dr. Webb's lab/BCWC Presentation	\$25.00
10.19.10	Prichard City Hall	8 Mile Creek WMP Meeting	\$7.50
10.20.10	FedEx/Kinko's	Mail check to Ron the Sign	\$8.50
02.17.11	St. Rose of Lima Parish Hall	MLI Property owners meeting	\$23.46
03.17.11	Grand Bay NERRS	SLAMM Meeting	\$30.60
03.18.11	Helen Wood Park	100-1000 Meeting	\$8.67
03.28.11	Westminster Village	Joe's Branch Watershed	\$14.28
03.28.11	5 Rivers Delta Resource Center	Gulf Restoration Task Force Meeting	\$9.18
04.16.11	Dog River Park from home (round trip)	Dog River Blueway Kick-off Celebration	\$5.61
04.18.11	Tillman's Corner Community Center	Oxfam/Christian Coalition	\$11.22
04.20.11	Point Clear	Shoreline Property Owners Meeting	\$28.05
<b>Total Local Travel for Tom Herder</b>			<b>\$743.07</b>
Date	Destination	Reason	Amount
<b>Sara Shields</b>			
5/11, 12, 13/10	Mobile Convention Center	COAST Meeting	\$12.00
5/21/2010	Daphne City Hall	BCWC Meeting	\$16.00
6/8/2010	Bellwether Group	Meeting with Kinnon Phillips	\$8.00
6/15/2010	Staples	Print Watershed Mangement	\$5.80
6/24/2010	Artcraft Press	Pick up Thank You cards	\$3.25
6/25/2010	Daphne City Hall	BCWC Meeting	\$16.00
6/29/2010	5 Rivers Delta Center	D'Olive Public Meeting	\$16.35
7/2/2010	Trophy Shop	Pick up plaque for Helen Wood Park	\$16.00
7/9/2010	Daphne City Hall	BCWC Meeting	\$16.00
7/16/2010	5 Rivers Delta Center	Paul Anastas Meeting	\$10.00
7/17/2010	Mobile County Revenue Commission	Pick up Mon Louis Island Maps	\$8.00
7/29/2010	St. Rose of Lima Church, Coden	Mon Louis Island Meeting	\$20.00
8/3, 4/2010	Beau Rivage	GOMA All Hands meeting	\$128.00
8/13/2010	Daphne City Hall	BCWC Meeting	\$16.00
8/17/2010	Mobile Baykeeper Office	EPA Oil Spill Briefing	\$5.00
9/3/2010	Bella Terra RV Resort	PR for Donation	\$51.50
9/10/2010	Daphne City Hall	BCWC Meeting	\$16.00
<b>Total Local Travel for Sara Shields</b>			<b>\$363.90</b>

# Mobile Bay National Estuary Program

Staff Mileage 4/1/10 - 3/31/11

Date	Destination	Reason	Expense
Date	Destination	Reason	Amount
<b>Brenda Lowther</b>			
7/9/2010	DISL	Meet with Daphne Wood	\$36.00
7/9/2010	AT & T Tillman's Corner	Purchase Phone for R. Swann	\$10.00
7/15/2010	Daphne, AL Hilton Garden Inn	Drop off Check for Habitat Tool	\$13.00
7/22/2010	Foley, AL	Meeting	\$29.00
<b>Total Local Travel for Brenda Lowther</b>			<b>\$88.00</b>
<b>Beth Walton</b>			
6/10/10	Gulf Shores	Mtg w/ Little Lagoon	\$35.50
7/1/10	Weeks Bay Foundation	Mtg w/Water Earnest	\$16.00
7/20/10	Gulf Shores	Mtg w/ Little Lagoon	\$35.50
7/29/10	Weeks Bay Reserve	Mtg w/ Mike Shelton & Larry	\$16.00
7/29/10	Mon Louis Island	Habitat Stabilization	\$34.00
8/9/10	Fort Morgan	Ft. Morgan Civic Assn	\$52.00
8/10/10	DIP Library	Dog River Clearwater Rev.	\$16.00
8/16/10	Weeks Bay Foundation	Homer Singleton	\$16.00
8/17/10	Wolf Bay Watershed Watch	Stormwater Mtg	\$37.00
8/19/10	Chickasaw Chamber of Commerce	Watershed Management Plan	\$6.00
8/25/10	Weeks Bay Reserve	drop off YSI meter to Larry	\$16.00
9/1/10	Weeks Bay Foundation	BCWC MOU meeting with Little	\$16.00
9/22/10	Daphne		\$16.00
9/29/10	Spanish Fort Elementary	Mark Langner and educational	\$6.00
9/30/10	Weeks Bay Resource Center	YSI training workshop	\$16.50
10/4/10	Episcopal Church, Ft. Morgan	BCWC presentation with Little	\$40.00
10/12/10	Foley Civic Center	Stormwater Public Meeting	\$30.00
10/27/10	Mobile	Bryan Pearce Mtg	\$6.50
11/16/10	Weeks Bay Reserve	Grant Writing Workshop	\$16.00
11/24/10	Perdido	Secure Gift Donations	\$50.50
12/7/10	Mobile	Mobile County Wildlife and Conservation Association	\$11.50
1/11/11	DIP Library	Dog River Clearwater Rev.	\$16.83
1/18/11	River Shack, Mobile	Dog River Clearwater Rev.	\$28.05
1/19/11	Daphne City Hall	County Road 13 Mtg	\$5.10
2/8/11	Gulf Shores	Environmental Education Mtg	\$20.40
2/8/11	Weeks Bay	Water Festival Training	\$10.20
2/25/11	MAWSS	Scenic Blueway Mtg	\$5.10
2/26/11	Mon Louis Island	Habitat Restoration Mtg	\$34.68
3/15/11	DIP library, Mobile	Dog River board meeting	\$16.83
4/12/11	DIP library, Mobile	Dog River board meeting	\$16.83
04/13/11	Weeks Bay	YSI meter pickup	\$18.36
<b>Total Local Travel for Beth Walton</b>			<b>\$661.38</b>
<b>Total MBNEP Local Travel 4/1/10-3/31/11</b>			<b>\$4,316.47</b>

**Mobile Bay National Estuary Program**  
**Project Narrative Status**

Description		Cash Balance as of 3/31/11	Summary of Deliverables	Associated Milestones 2010-2011	Estimated Completion/ Delivery Date	Organization Lead	Partners
ERP HC	Brooks Park Wetlands Restoration, Chickasaw	20,000	to construct 300 feet of boardwalk and 1,000 feet of gravel trails allowing public access and provide public education by creating and installing signage along the boardwalk. It also involves debris removal and eradication of invasive species to improve wetlands	Contract in progress	June-11	City of Chickasaw	MBNEP
ERP HC	Volanta Gulley Watershed Management, Fairhope	50,000	to study, develop, and implement low impact stormwater management projects and practices in Fairhope. Specifically, this project will result in the Volanta Gulley Watershed Management Plan, a sustainable planning tool that promotes low impact development in a coastal community, to address nonpoint source pollution entering Fly Creek due to stormwater runoff. It will also construct at least two projects specified in the Plan to reduce stormwater volume downstream	Contract in progress	June-11	City of Fairhope	MBNEP
ERP HC	LID/Green Infrastructure Regulations, Daphne	15,000	to spearhead the process of developing LID/GI practices to be used to supplement the City Subdivision Regulations and to provide alternatives to traditional stormwater management practices	Contract in progress	June-11	City of Daphne	MBNEP
ERP HC	Canal Road Overlay District, Orange Beach	30,000	to analyze usage along Canal Road and design a plan to provide for expanded traffic usage in a way that promotes infiltration, keeps impervious pavement to a minimum, and is both pedestrian and bicycle friendly	Contract in progress	June-11	City of Orange Beach	MBNEP
<b>Ecosystem Restoration - Human Uses Total</b>		<b>115,000</b>					

**Mobile Bay National Estuary Program**  
**Project Narrative Status**

Description		Cash Balance as of 3/31/11	Summary of Deliverables	Associated Milestones 2010-2011	Estimated Completion/ Delivery Date	Organization Lead	Partners
ERP LR	Oyster Gardening	5,832	oysters will be grown and placed onto local reefs	researchers from Dauphin Island Sea Lab checked Baldwin County planting locations and monitored progress. In Mobile County, the planting site was selected based on supporting conditions.	ongoing	MBNEP	Auburn University, MASGC, ADCNR-MRD, ADPH
<b>Ecosystem Restoration - Living Resources Total</b>		<b>5,832</b>					
ERP HM	Wolf Creek Stream Restoration, Foley	82,500	to reverse impacts to this section of Wolf Creek caused by urban development, provide greater habitat for increased species diversity, implement urban watershed management practices, and serve as an example of holistic watershed restoration.	Contract in progress	June-11	City of Foley	MBNEP
ERP HM	Hwy 161 Wetland Enhancement, Orange Beach	27,500	address stormwater management and wetland restoration and enhancement by altering the contour of the east Highway 161 right-of-way to create a serpentine wetland system that will greatly improve the receiving waters of Cotton Bayou. Additionally, interpretive signage will be installed along a well-established pedestrian and biking trail that runs through the project area	Contract in progress	June-11	City of Orange Beach	MBNEP
<b>Ecosystem Restoration - Habitat Management Total</b>		<b>110,000</b>					

**Mobile Bay National Estuary Program**  
**Project Narrative Status**

Description		Cash Balance as of 3/31/11	Summary of Deliverables	Associated Milestones 2010-2011	Estimated Completion/ Delivery Date	Organization Lead	Partners
ERP WQ	Storm Water Education	24,730	To lead Baldwin County, Alabama, and other communities that are members of the Stormwater Working Group (SWWG) through a facilitated set of meetings concerning the advisability of forming a regional stormwater funding mechanism/program concept. The end product will be a Stormwater Action Plan, agreed upon by members of the SWWG		ongoing	MBNEP	ACF, Weeks Bay Reserve, twelve municipalities of Baldwin County, Baldwin County
ERP WQ	Three Mile Creek Restoration	20,000	to restore flow in the original creek channel to improve the aquatic ecosystem	develop resources to prepare design and construction specifications; construct	ongoing	MBNEP	Waterkeeper Alliance
ERP WQ	Coastal AL Clean Water Partnership	15,457	to provide funding for a watershed facilitator to coordinate outreach efforts, meetings, data, environmental indicators, funding received, corrective action project implementation schedules, success stories, and recommendations for further action.	coordinated and facilitated quarterly basin meetings, coordinated local watershed planning efforts and participated in extension outreach activities. worked with local marina operators to institute best management practices which improve coastal water quality through participation in the Mississippi-Alabama Clean Marina Program.	ongoing	MBNEP	Mobile & Baldwin Counties Water and Sewer Boards
<b>Ecosystem Restoration - Water Quality Total</b>		<b>60,187</b>					

**Mobile Bay National Estuary Program  
Project Narrative Status**

Description		Cash Balance as of 3/31/11	Summary of Deliverables	Associated Milestones 2010-2011	Estimated Completion/ Delivery Date	Organization Lead	Partners
EST	Ensuring Biological Integrity	\$ 75,000.00		receiving technical assistance from Vittor & Associates	ongoing	MBNEP	Vittor & Associates
EST	D'Olive Watershed Mgt Plan Implementation	\$ 20,000.00	to provide assistance tho the Mobile Bay National Estuary Program to help facilitate implementation of the D'Olive Watershed Management Plan.	hired Thompson Engineering: grant development in progress in progress for Joe's Branch subwatershed	ongoing	MBNEP	Thompson Engineering
EST	Real Time Water Monitoring-Bay: 4 Stations	\$ 192,266.51	Continuous data on hydrological and meteorological conditions at four different stations located around the bay	continue monitoring effort of four stations throughout bay- pursue alternative funding sources for long term	ongoing	MBNEP	DISL, ADCNR, ACES,
EST	Assessment of Stream Flow and Sediment for D'Olive Creek Interstate 10 Crossing Project	\$ 9,503.49	to prepare a proposal for monitoring and sediment load estimation for D'Olive Creek upstream from the Interstate 10 crossing.	GSA currently assessing stream flow and sedimentation	November-11	MBNEP	AL DOT, GSA
EST	DIMS (Data Information Management System)	20,072	MIS support for water quality, living resource and habitat management activities; Provides tracking of these types of activites	Website design	ongoing	MBNEP	MASGC, DISL, CHCT
<b>Ecosystem Status and Trends Total</b>		221,842					
PIR	Estuary Corp	10,000	to increase knowledge about science, monitoring, habitat management, and restoration of the Mobile Bay estuarine environment; Increase community ownership and involvement in local environmental protection activities through trained volunteer members	Delayed due to Oil Spill		MBNEP	DISL, ACF,
<b>TA/Capacity Building - Direct Assistance Total</b>		10,000					
TAC Tool	Wolf Bay Watershed/Interpretive Signage	21,596	to educate the public about vital resources with project area; stilulate and encourage sustainable tourism; complement and coordinate the objectives of the partners.	design & build signs; identify sites; installation	September-11	GCVB	Wolf Bay Watershed Watch, MBNEP
<b>TA/Capacity Building - Tools Total</b>		21,596					

**Mobile Bay National Estuary Program  
Project Narrative Status**

Description		Cash Balance as of 3/31/11	Summary of Deliverables	Associated Milestones 2010-2011	Estimated Completion/ Delivery Date	Organization Lead	Partners
PIR	AL Clean Oceans	4,729	to improve overall health of Alabama's Coastal Waterways; reduce wildlife deaths from plastics and other pollutants; and to promote good stewardship by involving the community coastal cleanups.	expand monofilament recycling program; conduct coastal clean ups in targeted areas	June-11	Southeastern Wildlife Conservation Group	MBNEP, ADCNR
PIR	Outreach Activities- newsletter, etc.	1,963	publication of quarterly newsletter and other materials to educate general public about environmental issues of concern	quarterly newsletter published, Stormwater brochure, MBNEP brochure	ongoing	MBNEP	
PIR	Current Connections Newsletter	1,510	publication of quarterly newsletter	quarterly newsletter published	ongoing	MBNEP	ADEM
PIR	Special events/awards	14,500	funding to support special events throughout area that promote enviromentally responsible behavior	supports area events including Bird fest, Coastal Cleanup, Coastal Kids Quiz, Water Smart	ongoing	MBNEP	
PIR	Interactive Touring Video	149,340	to create an interactive 15 to 20 minute video about the impacts of excess nutrients on Gulf coastal ecosystems and waters for visitors and students	"A Redfish Tale" finished and ready for distribution: Contracted with Hamline University for kiosk development: Contract in progress for	November-11	MBNEP	GOMA
PIR	Grasses In Classes	27,460	to establish tidal brackish and fresh marsh on bars and flats in Mobile Bay and delta, and to promote marsh grass education through the Mobile Public High Schools Grasses in Classes program.	Four public schools are growing grasses and have helped with plantings: program expanded to Baldwin County	July-11	MBNEP	US Fish and Wildlife Service
PIR	CCMP #2 Development	100,000		data mining process in progress			
PIR	Management and Program Administration	326,982					
PIR	DISL Indirect Charges	101,693					
<b>Program Implementation/Reports Total</b>		<b>728,177</b>					
<b>Grand Total</b>		<b>1,272,634</b>					