

Mobile Bay National Estuary Program

CCMP Work Plan Year 14
Fiscal Year 2010



prepared May, 2009

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Part One: The Program, Accomplishments, Goals for 2010

PREFACE

This document provides annual financial and task-based information to meet U.S. Environmental Protection Agency (EPA) National Estuary Program Work Plan requirements. The focus of this Work Plan continues to be the implementation of the Comprehensive Conservation and Management Plan (CCMP), approved by EPA on April 22, 2002.

On June 3, 2005, Suzanne Schwartz, Director of the Oceans and Coastal Protection Division of the EPA issued guidance for the development of the FY 05-06 Work Plans and related reporting requirements. This guidance applies to FY 2009-2010 Work Plans as well. These assistance agreement policies include:

EPA Order N. 5700.7-- Environmental Results under EPA Assistance Agreements

This order ensures that EPA assistance agreements are results-oriented and aligned with EPA's strategic goals, such that, all annual Work Plans be aligned with the goals and objectives of EPA's Strategic Plan and the Governments Performance and Results Act; included well-defined outputs and, to the maximum extent practicable, well defined outcomes.

EPA Order No. 5700.5A1- Policy for Competition and Assistance Agreements

In the event that Mobile Bay National Estuary Program competes for a portion of its CWA Section 320 funds, it must comply with all Competition Order requirements.

EPA Order No. 5700.8- EPA Policy on Assessing Capabilities of Non-Profit Applicants for Managing Assistance Awards

This pre-award order establishes controls for determining the administrative and programmatic capability of non-profit organizations applying for EPA assistance agreements and enhances post-award oversight of those agreements. The pre-award order applies to all awards to non-profit organizations made on or after March 31, 2005. There is a \$200,000 threshold above which a pre-award review for administrative capability is required.

In addition to the above policies, EPA issued two other policies recently. Those include:

EPA Order No. 5700.6A2- Policy on Compliance, Review, and Monitoring

This order went into effect January 1, 2008 and describes policies regarding 1) Agency standards for the oversight, monitoring, and closeout of EPA assistance agreements, and 2) requirements for the review of compliance with applicable grants management policy and regulations.

EPA Policy 5700(2)(01) Subawards under EPA Assistance Agreements

The purpose of this Directive is to strengthen the management of subawards made by recipients under Environmental Protection Agency (EPA) assistance agreements, *i.e.*, grants and cooperative agreements. Areas addressed include the establishment of an administrative national term and condition, eligibility, special considerations for specific types of subawards, subaward competition, and distinctions between procurement contracts and subawards.

This is the **Fourteenth Annual Work Plan** for the Mobile Bay National Estuary Program (MBNEP). It describes the work items to be carried out for Fiscal Year 2010 under grant # CE96456906. It also includes continuing tasks that are projects funded through other external grant sources.

The FY2010 Plan is the fourth year of a four year EPA grant. This Work Plan provides for tasks that support implementation of actions identified throughout the past three years and for new projects

identified for the coming year. The Management and Program Administration sections support all CCMP Action Plans and the continuance of support for the Management Conference.

The organization of this work plan is designed to allow easy comparison with the MBNEP CCMP. This organization allows a reader to quickly understand how the work items proposed for this year will contribute to the accomplishment of CCMP objectives. A review of the tables included is key to understanding this Work Plan. These tables taken as a whole satisfy the requirements of the funding guidance.

- **Table 1: Budget Status of EPA and Externally Funded Existing Projects** provides budget, expenditure and balance information on all open projects currently being managed by MBNEP.
- **Table 2: Narrative Status of Existing Projects** provides further detail about those projects that are in progress.
- **Table 3: 2008-09 Projects Budget** provides budgetary information on projects to be initiated this coming year with EPA 2008-2009 funding.
- **Table 4: Local Entity Support** provides information on MBNEP contract awarded to local non-profits, professional service or science researchers to further activities of the CCMP.
- **Table 5: Non-Federal Match Sources** provides detail information about which activities have generated match and what type of match is expected during the coming program year.
- **Table 6: Administration Budget** provides detailed information on the program office funding for the 2008-2009.
- **Table 7: Travel Summary** provides a log of all travel activities of program staff for 2007-2008.
- **Table 8: CCMP Activities by EPA Cost Category** breaks funding out by cost categories stipulated by EPA.

The MBNEP Program Office is located at 4172 Commanders Drive, Mobile, Alabama on the Brookley Campus of the University of South Alabama. As of March 1, 2002, the Dauphin Island Sea Lab / Marine Environmental Sciences Consortium (DISL) became the EPA grantee in its role as administrative sponsor of the MBNEP. This change in grantee was made pursuant to the direction of the Management Conference and the particulars are detailed in a three party Memorandum of Agreement between the State of Alabama, DISL and the MBNEP. The activities outlined in this work plan were approved by the Executive Committee of the Management Conference on May 7, 2009 and is available to the public upon request and accessible at <http://www.mobilebaynep.com>.

Mobile Bay National Estuary Program Overview

Purpose, Goals, Objectives

The Mobile Bay National Estuary Program's (MBNEP) mission is to lead the wise stewardship of water quality and living resources of the Mobile Bay and Tensaw Delta. Established as part of the Clean Water Act and funded by the US Environmental Protection Agency, MBNEP serves as a catalyst for activities of estuary stakeholders, building community based organizational capacity for sound resource management and leveraging commitment and investment to ensure the estuary's sustainability.



MBNEP's purpose is to encourage a community-based approach to watershed management by empowering citizens, grassroots organizations, government agencies, and educational establishments to work together to address local environmental challenges. MBNEP's objectives are to 1) engage these groups in the development and implementation of a comprehensive conservation management plan (CCMP), 2) act as a catalyst to leverage greater funding for the implementation of this CCMP, and 3) educate the communities surrounding the estuary about how to best treat Mobile Bay and its surrounding watersheds to ensure their 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. This plan capitalizes on their insight.

Economic opportunities must be available- Our coast is an economic engine, creating well over three billion dollars in wealth for our state each year through such activities as trade through the Port of Mobile, commercial fishing, tourism, hunting and coastal homebuilding. This plan incorporates economic impacts and promotes smart growth practices where ever and whenever possible.

Environmental Stewardship efforts depend on each other- The Mobile Bay estuary benefits from the efforts of many diverse partnerships, collaborations, consortiums and associations. These groups of disparate interests come together, in part through the MBNEP's watershed based management process, to develop comprehensive solutions to challenges that threaten the estuary's sustainability. This plan promotes this "watershed based management" cooperation, acknowledging the need for multiple purpose programming.

It happens in the river, in the sea, and on the street- Involvement of citizens in carrying out environmental activities aimed at improving the Bay and its watersheds is paramount to ensuring the long-term health and vitality of the Mobile estuary. This plan encourages citizen input, involvement, and education, recognizing that ultimately, 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.

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.

Federal Resources

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 14 Plan (2009-2010) is **\$600,000**. This fourth year of funding will be added to the Year 13 allocation (2008-2009) **\$591,750**, Year 12 allocation (2007-2008) **\$418,000** and Year 11 allocation (2006-2007) **\$492,600** for a total of **\$2,102,350**. EPA requires that this total allocation be matched with non-federal dollars in a 1:1 ratio, or an additional \$2,102,350 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 **\$4,204,700** for Year 14.

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 **\$136,022** 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 US 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 one time 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 develop 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.

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 it's non-federal match requirement, as an

investment toward implementation of the CCMP. MBNEP has received \$300,000 (\$60,000 per year) for the past five years and anticipates a continuation of this funding stream. 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 a Wetlands Status and Trends research project and is currently under contract to acquire SAV imagery as part of an ongoing effort to track trends related to this valuable resource.

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 will receive \$88,334.

Local Resources

Municipalities/Counties

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 investment from municipalities includes:

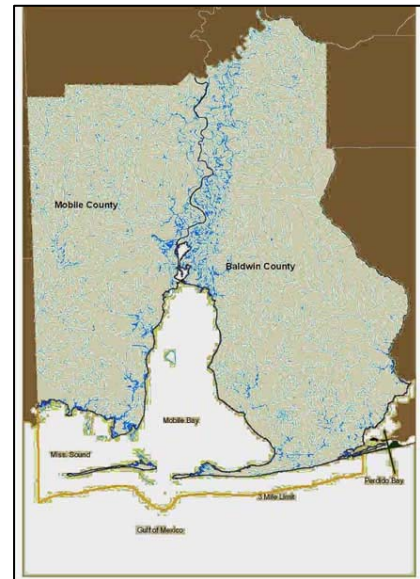
City of Mobile	\$ 32,000 (requested)	City of Daphne	\$ 3,000
City of Fairhope	\$ 3,000	City of Gulf Shores	\$ 3,000
City of Spanish Fort	\$2,000	Baldwin County	\$15,000
Mobile County	\$26,500		

Private Funding

During the Year 14 program year, MBNEP anticipates developing a stronger private sector funding. The goal of this committee is to raise additional private resources as a local investment (match) toward the implementation of the CCMP. During the 2006-2007 program year, MBNEP received \$7,645 in private donations, including \$5,000 from the Coastal America Foundation. Other contributors included Alabama Power, AMEC, Ecosystems, and Holcim, Inc.

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 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 environmental 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.

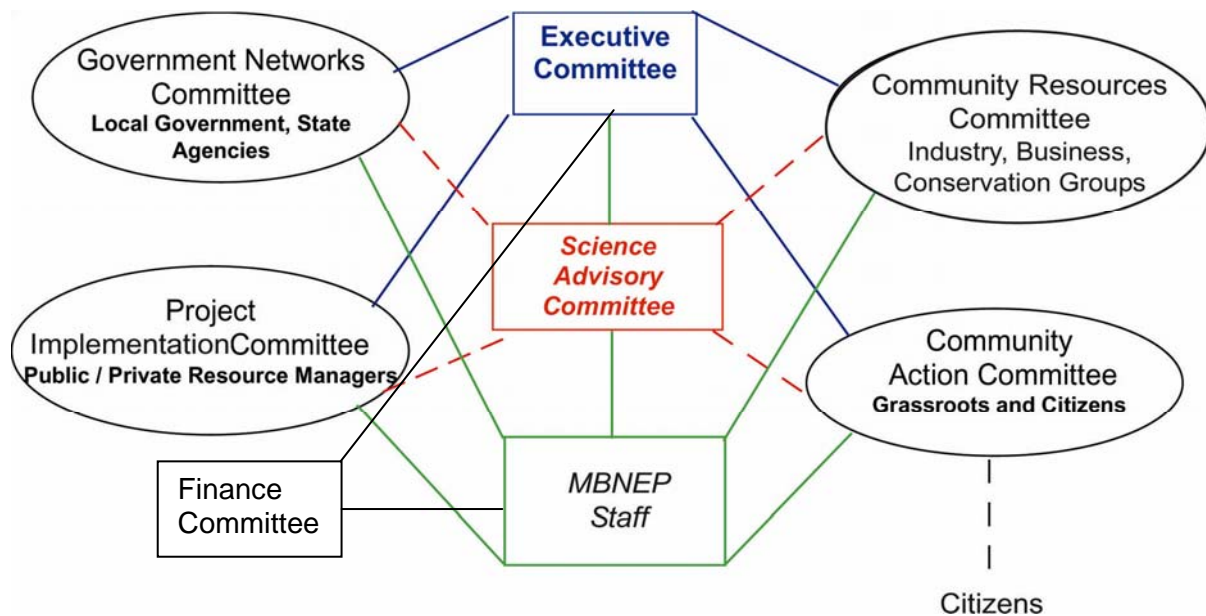
Geographic Distribution

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 boarder. Major waterways include the Tombigbee, Tensaw, Appalachee, Blakeley, Escatawpa, Mobile, Alabama, Dog, Fowl, Fish, Magnolia, Bon Secour and Perdido rivers; the Chickasaw, Norton, Three Mile, and Eight Mile, creeks; and the inter-coastal waterway, Wolf and Perdido Bays, and Little Lagoon.

Community Partnerships: 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 comprised 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.

A 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.

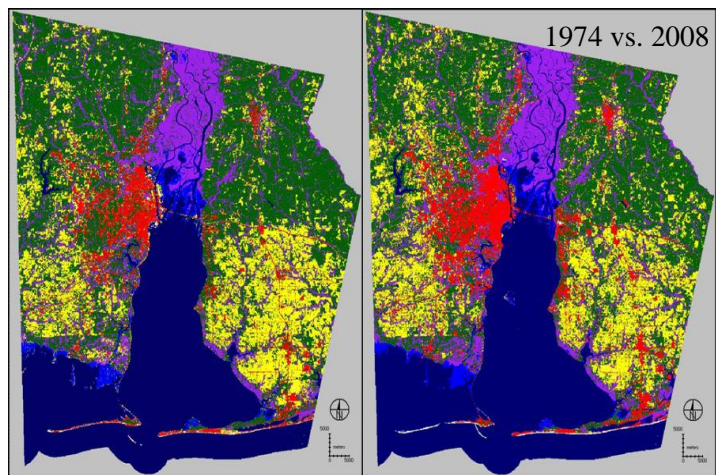
A key principle of the Management Conference is to coordinate and cooperate with other ongoing resource management activities to avoid unnecessary duplication. In this regard, the program office plays a major role in coordinating estuary projects and outreach activities, thus providing a more far-reaching benefit than that of simply CCMP project management.

During the 2009-2010 program year, MBNEP will review the efficiency of this new management structure as part of an overall assessment of the program.

Other Partners

NASA Mapping and Assessing Land Use-Land Cover changes in Baldwin and Mobile Counties

from 1972-2007 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 3-5 year Strategic Plan. NASA is seeking feedback from the Gulf of Mexico coastal management community to determine which issues are important to the region over the next few years. 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 the Mobile Bay National Estuary Program 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. A proposal is now pending at NASA to continue this project by verifying analysis results with other datasets to develop a cohesive understanding of habitat change over the time period. 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.

NOAA *OHC/CSC/TNC Cooperative Habitat Protection Partnership Pilot Project Mobile Bay, Alabama* A joint project of the NOAA Office of Habitat Conservation (OCH), the NOAA Coastal Services Center (CSC), and The Nature Conservancy Global Marine Initiative (TNC GMI) will provide technical support and seed funding to help communities form new and diverse local partnerships for coastal and marine habitat conservation planning and implementation. Because natural areas are converted to other uses parcel by parcel at the local level, approaches to conservation are needed that are motivated by local needs, yet grounded in holistic assessments of the ecological value of protected lands at scales ranging from regional to watershed to community. Working through the Cooperative Habitat Protection Partnerships (CHPPs) program of NOAA OHC, this initiative helps community-based groups build technical capacity for spatially explicit and regionally ground-truthed conservation planning and implementation of on-the-ground and in-the-water habitat protection projects.

During the fall of 2008, The Cooperative Habitat Protection Partnership (CHPPs) pilot was established in connection with MBNEP. In 2004-2005, Mobile Bay NEP worked with The Nature Conservancy (TNC) to develop an Acquisition and Restoration Priorities Plan for Mobile and Baldwin Counties, Alabama. The plan is actively being used to guide acquisition in the area, but lacks a spatial component. That, and the fact that the area is changing so rapidly (steel mill and other growth pressures) underscore the need to improve and update this plan. They also did not engage NOAA Fisheries in the earlier effort. Updating this plan through improved data and tools and expanding functionality would provide an opportunity to guide conservation and restoration activities in the area by adding interactive capabilities for ongoing planning applications.

This pilot will be a specific effort to improve and update a plan that is already being used to guide acquisition in Mobile Bay. However, the completion of such a plan will have the added benefit of informing the conservation component of the long-range planning effort that is underway in Mobile (Michael Gallis approach), helping them account for the resilience of environmental systems that are a part of healthy human communities-- humans live in an environment and care about its quality, which is a function of its health and resilience. The pilot project should connect to the Gulf of Mexico Alliance (GOMA) priorities and be informed by several conservation plans that have been developed for Mobile Bay, including TNC's Eco-regional Assessment, the Coastal and Estuarine Land Conservation Program (CELCP) plan, MBNEP's Comprehensive Conservation and Management Plan (CCMP), and the Michael Gallis planning process. The project may also benefit from linking upland priority areas with submerged areas using benthic habitat data and incorporate marine spatial planning. These linkages could strengthen local fishery stocks, making them more sustainable to support healthy ecosystems and commercial fisheries that have experienced hurricane and economic impacts. Partners include: local TNC, NERRS, Sea Grant, OR&R, Mobile Bay NEP, NOAA Fisheries, Baldwin County and Mobile County and academia, Alabama Coastal Area Management Program, GOMA. Current resources devoted are estimated at: \$60,000 plus staff support from several partners.

NORTHERN GULF INSTITUTE (NGI) Northern Gulf Institute (NGI), a [National Oceanic & Atmospheric Administration \(NOAA\)](#) 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.

MBNEP Accomplishments 2008-2009

Program Accomplishments and Transferable Success Stories 2007-2008

MBNEP currently has one EPA grant open for implementing CCMP activities. During the program year the EPA grant covering federal fiscal years 2004-2006 was completed and closed out. The current EPA grant covers years 2007-2010. During 2008, in addition to funding available of over \$1.5 million, the MBNEP was included in the State Budget for the second year in an amount of \$91,000 dollars as a non-federal matching share to the program. In addition to these funds, MBNEP regularly receives funding from the following entities: Mobile County- \$26,500, City of Mobile- \$32,000 and Baldwin County- \$15,000. Added to these funding sources, MBNEP has been very successful in securing local funding for projects and applying for grants related to specific projects.

Steady and substantial progress is on going for this grant and expenditures are maintaining pace with progress. The Mobile Bay National Estuary Program had some notable successes this year. Notable accomplishments include:

Management Conference

MBNEP's Management Conference consists of the following committees- Community Action Committee, Community Resources Committee, Government Networks Committee, Project Implementation Committee, Science Advisory Committee, Finance Committee, and an Executive Committee. During 2008, the following activities took place:

The Community Action Committee organized, identified volunteer water quality monitoring as their main focus, developed a grassroots organization based mini grant program, and conducted the first round of this peer reviewed funding program. The first projects to be undertaken in 2008 were Little Lagoon Preservation Society (LLPS) - Signage, educational speaker, lab equipment; Wolf Bay Watershed Watch (WBWW) - Automated Water Monitoring Instrument; Dog River Clear Water Revival (DRCR) -Dog River Park Restoration. Four organizations, DRCR, LLPS, WBWW, and the Weeks Bay Foundation, each applied for and received YSI 556 multi-parameter Instruments to enhance water monitoring efforts in their home waters as a second round of their peer reviewed funding program.

The Community Resources Committee charged MBNEP staff with the preparation of an informative four color, tri-fold pamphlet, *Clean Water Is Everybody's Business – Protecting our Water Quality from Stormwater Begins at Home*, and an educational Powerpoint presentation, *Stormwater Runoff and Mobile Bay – What Does It Have to Do With Me?*, essentially “Stormwater 101.” The pamphlet debuted at the Festival of Flowers and is being distributed at various locations throughout the two county area and at local events. The Powerpoint presentation has been presented at various service club meetings, schools, and continuing education venues in part to support efforts by the Baldwin County Stormwater Working Group in preparation for a November, 2010 referendum. They also charged the Program Office with developing a locally focused presentation on the impact of plastic bags on our environment for 2008 BirdFest.

The Project Implementation Committee has initiated activities in the Fish River, currently on the State's 303(d) list of Impaired Water Bodies, to identify sources of pathogens, to conduct a shoreline characterization, and to develop an interdisciplinary assessment of population growth and development impacts on the Fish River Basin coastal community.

The Science Advisory Committee oversaw the process of using fifteen estuary indicator areas to generate a *State of the Bay Report*, which was initially distributed on December 7, 2008 with the Sunday Press-Register followed by a specific distribution through the mail to elected officials, federal, state, and local agency representatives, and others.

The Finance Committee began implementation of a community investment plan aimed at soliciting investment from each of the municipalities in the two county area plus both counties based on the number of community residents. MBNEP have begun to reach out to the cities of Prichard, Saraland, Bayou La Batre, Chickasaw and Satsuma.

The Executive Committee focused its activities on guiding the program through the transition to a new director. As Captain David Yeager retired in June, the committee worked to revise the job description and recruit a qualified successor. Dr. Toby Bolton was hired in December, 2008 and assumed the position in April, 2009.

Water Quality

Mobile Bay Real-time Water Monitoring

With on-going funding (2nd year) received from the Gulf of Mexico Program in 2008, 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. 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.

Sub-Estuary Monitoring

MBNEP completed its commitment of support to monitoring activities throughout the estuary. Through a three year contract with the Alabama Department of Environmental Management (ADEM), water quality assessments of three sub-estuaries along the perimeter of Mobile Bay were accomplished. ADEM monitored parameters including, but not limited to, in situ water chemistry, turbidity, ammonia, DRP (orthophosphates), chlorophyll-a, and pathogens. In addition, sediment sampling was conducted for approximately 15 metals of concern, polyaromatic hydrocarbons, and pesticides. During the year 2008 the third of three sub-estuaries (along with Weeks Bay and Bayou le Batre), the Dog River watershed, was completed.

Eight Mile Creek

Maintaining a focus on the Eight Mile Creek Watershed, MBNEP is working with Charlene LeBleu, Assistant Professor in the Community Planning Program at Auburn University to undertake a Graphical Characterization Report of the lower Eight Mile Creek watershed. The objectives of this project seek to: 1) characterize the ecosystems and shoreline stream conditions occurring along Eight Mile Creek in Prichard, Alabama from St. Stephens Rd (Hwy. 45) to I-65; 2) assess stream health; 3) design walking trail extensions to Reading Park; 4) identify greenspace opportunities; and 5) propose educational opportunities for surrounding and abutting communities. The characterization will be graphic in nature and include information on aquatic, plant, animal and human communities. Existing stream conditions will be inventoried including current land use. With the project 80% complete, a community meeting is being planned for the summer of 2009 to initiate watershed planning based on the products of their work.

Coastal Alabama Clean Water Partnership

MBNEP holds the contract with the Alabama Clean Water Partnership to host the Coastal Alabama Basin Facilitator. During this past year, the Clean Water Partnership received a 319 grant to implement a watershed action plan targeting water quality improvements in Juniper Creek, a tributary of Big Creek Lake. Actions included fencing along the creek to keep cows out, the purchase and installation of an agitator pump in the waste lagoon of a dairy to remove the waste for proper disposal. A field day demonstrating the septic tank pump-outs was conducted on July 10, 2008. A septic tank seminar is scheduled for local landowners for fall 2009. With the assistance of the Southeast Watershed Forum, the CWP also developed Fact Sheets on Urban Forestry, Wetland Ordinances, Wetland Buffer Zones, Riparian Forests, and Floodplain Management. The Fact Sheets are 95% complete and will be ready for distribution soon. Finally, the CWP participated in the Wolf Bay Watershed 10 Year Celebration and the annual CWP Statewide Conference.

Clean Marina Program

The Alabama- Mississippi Clean Marina Program was developed as a voluntary program and implemented by the Mississippi-Alabama Sea Grant Consortium and its partners (Alabama Department of Natural Conservation and Resources, State Lands Division, Coastal Section, Alabama Department of Environmental Management, Auburn University Marine Extension and Research Center, Mississippi Department of Marine Resources, Mississippi Department of Environmental Quality, and the Mobile Bay National Estuary Program) to promote environmentally responsible marina and boating practices. In 2008, River Delta Marina was awarded "designated" status, joining two other Alabama Clean Marinas. Designation pledge cards have been received from Dauphin Island Marina, Bear Point Marina, and San Roc Cay Marina. All are working toward making facility improvements in anticipation of undergoing Clean Marina evaluations soon. Dauphin Island and Bear Point Marinas, both, installed pump-outs in 2008. Sportsman Marina and Orange Beach Marina were also preliminarily evaluated by the Clean Marina Coordinator in 2008 for designation purposes, but both have significant siting and design issues that must be overcome in order to qualify.

Living Resources

Oyster Gardening

During the 2008 Oyster Gardening season, 34 volunteers grew over 59,000 oysters which were collected and then planted on Fish River, Boykin, and Shellbanks Reefs around Mobile Bay. Volunteers from Mobile County raised approximately 15,000 oysters, and Baldwin County volunteers raised approximately 44,000.

Habitat Management

The Mississippi-Alabama Habitats Database

During the summer of 2005, MASCG and MBNEP worked with the DISL to develop an online habitat conservation, restoration, and enhancement database to track habitat conservation activities in the eleven coastal counties of Mississippi and Alabama. A mechanism was thereby established for tracking data such as 1) habitat projects planned, in progress, or completed along the northern Gulf of Mexico; 2) types of habitat conserved; 3) conservation techniques employed; 4) the variety of funding sources used; and 5) the locations of such projects. The database's development was funded by MASGC, and it resides on a Microsoft SQL server managed by the DISL at <http://restoration.disl.org/database>. During 2008, MBNEP partnered with NOAA and The Nature Conservancy in an effort to enhance the interactivity of the database and add GIS mapping capabilities and habitat prioritization tools. In December, a meeting of the Coastal Habitats Restoration Team was convened to plan, discuss, and implement these features. This project is ongoing and will be complete by the end of 2009.

Habitat Mapping

The U.S. Geological Survey's National Wetlands Research Center has collaborated with the Mobile Bay National Estuary Program through cooperative agreements for the past five years. These agreements have been for the National Wetlands Research Center to acquire aerial photography of Mobile County and to produce Digital Orthophoto Quarterquads of Mobile County, and Digital Quadrangles for Baldwin County from aerial photography for use by the USGS, the State of Alabama, Mobile and Baldwin counties, and the National Estuary Program. The agreements have also included the mapping of wetlands and uplands of Mobile and Baldwin counties from the aerial photography acquired to add to the USGS Gulf of Mexico database, and the National Wetlands Inventory geodatabase. In January 2008, the MBNEP received three large format maps/posters (Mobile County, Baldwin County, and comparative) from this ongoing effort. In February of 2008, MBNEP entered into another contract with USGS, to complete an accuracy assessment report and to prepare a comparison report of USGS data with USGS 2001 Landsat-derived MRLC data and the 2001 NOAA C-CAP Landsat-derived data set to address concerns that the MBNEP expressed about what was presented in the previous three-map set. The contract was entered into with an understanding that a third contract would be issued in the future to complete and publish a Wetland Status and Trends technical report. The accuracy assessment/comparison report was received by the MBNEP in December, 2008.

Complementary to the USGS effort, MBNEP collaborated with NASA and Science Systems and Applications, Inc. at the Stennis Space Center to complete a report – Land Use and Land Cover Change from 1974 to 2009 Around Mobile Bay, AL – which quantifies and assess geospatial land use/land cover changes in the coastal counties of Mobile and Baldwin, AL. The Mobile Bay estuary was selected by MBNEP's partners because of the observed anthropogenic changes there and its environmental diversity and ecological importance.

Submerged Aquatic Vegetation (SAV) Mapping

SAV mapping has proved challenging due to the many weather related variables that cannot be controlled. Efforts to acquire imagery of Submerged Aquatic Vegetation (SAV) throughout Mobile and Baldwin Counties in the summer 2008 were unsuccessful due to factors that included wind, rain, turbidity, and flight crew unavailability. Representatives of the contractor, Vittor and Associates, met with DISL, MBNEP and ADCNR, State Lands Division staff in September 2008 to discuss strategies for acquiring imagery that included as many SAV species as possible. The group determined that a two part SAV mapping effort would be undertaken to capture southern points with fall 2008 flyover and a second flyover in spring 2009 to capture Delta species. Imagery was acquired successfully in the first of the two flyovers.

Coastal Bird Assessment

In 2008 MBNEP and ADCNR in partnership with the National Audubon Society through its Coastal Bird Conservation Program completed the second year of a 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 included: 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 at sites on Bon Secour National Wildlife Refuge, Dauphin Island, West Dauphin Island, Isle Aux Herbes, Pelican Island, Cat Island, Gulf State Park, and Barton Island Peninsula. Some protective signage was installed to notify visitors of the presence of nesting birds.

Little Dauphin Island Vegetation Restoration

Little Dauphin Island, part of the Bon Secour Wild Life Refuge System, is a fragile barrier feature along the rapidly developing Alabama Gulf Coast. It is host to a diverse assemblage of beach, coastal dunes and associated uplands, salt marsh, and wetlands at the mouth of Mobile Bay. These habitats support a

variety of threatened and endangered species, including the piping plover, sea turtles, and more than 370 species of migratory birds.

During the latter part of 2007 through April 2008, MBNEP partnered with the Bon Secour Refuge to conduct a dune planting along the eastern end of the island to stabilize sand and promote increased shore accretion to support piping plover habitat and tree plantings farther west to provide habitat and stabilize this dynamic island landscape which protects the northern shore of Dauphin Island from the impact of storms and flooding. More than 40 volunteers planted 650 native trees to restore migratory bird habitat. Unfortunately, flooding from Hurricanes Gustav and Ike wiped out all of the trees that were planted. Areas restored with dune plants were unaffected and continue to thrive.

Mobile County Wildlife and Conservation Association Marsh Planting

In June, 2008 the MBNEP partnered with the U. S. Fish & Wildlife Service and the Mobile County Wildlife and Conservation Association to establish a salt marsh on a mud flat directly across the Tensaw Channel from Battleship Park. Approximately 4,000 plants, bull tongue (*Sagittaria lancifolia*) and giant bulrush (*Scirpa californica*), and black needlerush (*Juncus romereanus*) were planted to supplement 700 black needlerush planted by the same partnership in November 2007. Future plantings by this partnership are planned for 2009.

Human Use Issues

D'Olive Creek Watershed Planning

In November, 2008, a Request for Qualifications was issued to prepare a Comprehensive Watershed Management Plan for the watersheds of D'Olive Creek, Tiawasse Creek, and Joe's Branch in Baldwin County, AL. This action was taken in response to a study undertaken in 2007 by GSA in partnership with ADCNR, State Lands Division, to assess the impacts of land-use change in this quickly developing area that determined more than two- to over 200-fold greater annual sediment loads in most of these streams when compared to estimated natural geologic erosion rates (without human impact or alteration). Consultant selection and plan development will continue throughout 2009.

Regional Stormwater Management

The Baldwin County Watershed Coalition (formerly the Baldwin County Stormwater Working Group) led by MBNEP, all 13 municipalities in Baldwin County, and the County Commission overcame an initial hurdle to the establishment of a regional stormwater utility when HB58 was passed in a special session of the Alabama State Legislature. This bill enacted an amendment to the Constitution of Alabama of 1901, pertaining only to Baldwin County, to authorize the Legislature to provide by local law the formation by county and municipal governing bodies of a public corporation to manage storm water and levy a storm water service charge on property containing impervious surface areas, exempting agricultural and forestry property. Steering, Education, and Technical Committees have been formed and are working towards a county-wide referendum, scheduled for November, 2010, to approve the establishment of this entity.

Sediment Loading in the Magnolia River Watershed

In September, 2008 the MBNEP contracted Town of Magnolia Springs to hire Marlon Cook of the GSA to assess sediment loading (both suspended and bed loads) in the Magnolia River watershed. The information from this report will be used in the Town's application for status as an Alabama's Outstanding Water.

Coastal Community Planning

During the 2008 period, MBNEP initiated a relationship with the City of Prichard to provide organization capacity building so that the city could develop a watershed management plan that would identify future

actions the community could take to improve water quality throughout the City. This planning effort coincides with the Lower Eight Mile Creek Graphical Ecological Characterization discussed above.

An effort to develop a Community Plan for the city of Bayou La Batre was funded by the MBNEP and initiated by Mac Martin, a graduate student in Auburn University's Community Planning Program. The Community Plan, developed through a series of visioning workshops with the city's Planning Commission, utilizes "SmartCode" (form-based zoning) and promotes 20-year development that is sustainable, attractive, pedestrian friendly, mixed-use in nature, and considerate of the sensitive wetland habitat that surrounds the city. The final draft of the Community Plan has the support of the Planning Commission and is currently pending review by the City Council.

Outreach and Education

State of the Bay Report

The State of Mobile Bay – A Status Report on Alabama's Coastline from the Delta to Our Coastal Waters was completed and distributed to 114,000 people with the Sunday, December 7, 2008 Mobile Press-Register. This report, which assesses the health of the Mobile Bay estuary and surrounding waters in Baldwin and Mobile Counties, is the culmination of four years of work by the MBNEP, its Science Advisory Committee, and many partner organizations. The analysis of 15 indicators sheds light on how community growth has impacted coastal Alabama - how we have altered the coastal environment where we live, work and play. This report will provide the Science Advisory Committee with a baseline for developing a coordinated monitoring system to track changes throughout the coastal environment. The initial distribution garnered considerable attention and was followed with specific distribution to federal, state, and local lawmakers, administrators, business entities, and agency personnel.

Events

MBNEP facilitated, organized, and/or participated in a number of events during the 2008 period, including: Earth Day, Coastal Clean-up, Coastal Kids Quiz, Discovery Day, Coastal Alabama Birdfest, Derelict Crab Trap Recovery, The Dog River Paddle, Baldwin County Groundwater Festival, Environmental Studies Center Open House among others. Attendance varied widely from 300 to nearly 5,000 participants.

Fairhope Gullies Brochure

The MBNEP was contacted by the Fairhope Environmental Advisory Board for help developing an educational, pictorial brochure about the numerous gullies found in their community. The brochure written and produced by Program staff, explains the geologic origins, historic perspective and functional significance to the community, threats, and recommendations for their preservation. It will be printed with funding from the Single Tax Colony and distributed by the City of Fairhope in early 2009.

Major Goals and Focus for 2009-2010

During this program year, MBNEP will conduct an overall assessment of the program with a focus on developing a three year strategy that will begin in October of 2010. To that extent, MBNEP will continue and add funding to previously ongoing activities or fund activities that will provide prerequisite data for the strategic planning effort. In particular, MBNEP will continue to support sediment analyses, citizen involvement activities, monitoring activities and will begin to study sediment deposits as part of a larger Change analysis of Mobile Bay looking forward 50 -100 years.

MBNEP will target its funding to specific areas including:

Capacity Building

MBNEP will continue to promote community efforts to expand environmental stewardship. Programs that will be supported during the 2009-2010 program year will support community efforts to plan for environmental sustainability, activities that build community environmental stewardship through volunteering, and support for a regional watershed management coalition in Baldwin County.

Habitat Management

Although no EPA funding has been designated for habitat management activities, MBNEP will continue to develop decision support tools for habitat restoration purposes in partnership with NOAA, NASA, and The Nature Conservancy. One activity will focus on the development of a robust GIS online viewing portal that highlights priority habitat patches in relation to other land based datasets (parcel information, urbanization, etc.) A second activity will focus on strengthening the understanding of habitat changes in Mobile and Baldwin County for the period of 1974 through 2008.

Monitoring

Monitoring of estuary conditions has historically been a priority area for MBNEP investment. During this program year, MBNEP will continue and expand monitoring efforts through support of real time monitoring activities in the bay, completion of SAV mapping for 2008-2009, a re-focus on data information management systems by supporting increased coordination of and access to a variety of datasets and improved understanding of activities being undertaken on a local as well as regional scale.

On the Ground Projects

One of the most effective ways of promoting stewardship is through citizen involvement in restoration projects. During the 2009-2010 program year, MBNEP will support on the ground projects that include involvement of citizens taking action through clean ups, plantings, or other activities.

Outreach

An ongoing role for the MBNEP is in raising awareness of those who live, visit or work in and around Mobile bay. Our program does this through distributing outreach materials at special events, conducting presentations to community groups, and during the 2009-2010 program year, MBNEP will begin planning for the 2010 Bays and Bayous Symposium which will be held in November of 2010.

Part Two: MBNEP Work Plan 2009 - 2010

Overview

During the summer of 2005, MBNEP initiated a strategic planning process that included an assessment of the original CCMP including its five issue areas: Water Quality, Living Resources, Habitat Management, Human Uses, and Education/Public Involvement; the 29 sub-objectives within those five areas; and the various activities included to implement those sub-objectives. The assessment included modifications, streamlining, and in some instances, deletion of certain actions included in the original document. In addition, the 29 sub-objective areas were prioritized, and target output/outcomes for them were developed. Although this Strategic Plan is currently in draft format, MBNEP anticipates its official adoption by the Executive Committee of the Management Conference this summer. Therefore, the MBNEP Work Plan for 2008 is based on this Strategic Plan.

The MBNEP CCMP identifies its work plan activities within the five issue areas, the 29 sub-objectives, and the actions associated with those objectives. The numbering (i.e., WQ A1.1) for each activity associates with the Strategic plan as follows: WQ- Water Quality, A1- the sub-objective under Water Quality and .1- relates to the action outlined for that section. This document contains the 29 sub-objectives of the Strategic Plan in summary format. The entire document can be viewed at <http://www.mobilebaynep.com>.

Available EPA Funding for the 2008 Work Plan

EPA Grant # CE 96456906 (435)

At present MBNEP is managing one EPA grant:

CE96456906-2 - This grant covers years 11 (2007), 12 (2008) and 13 (2009) and will be amended to cover year 14 (2010) in this Work Plan.

The financial tables found in the appendix are as follows: Table 1: EPA Budgets Overview; Table 2: EPA Budget vs. Actual 3-31-09; Table 3: Match Sources and Status; Table 4: CCMP /EPA Cost Categories; Table 5: Narrative Status of Activities; Table 7: Contracts with Local Entities; and Table 7: Travel Activities 2007-2008.

Table 2: Ongoing Projects Narrative Status, provides an update in narrative form of milestones achieved, any delays that have occurred, and any notable products available related to all projects underway. During the Fiscal Year 2009/Year 12 the following base funding will be available to implement projects:

(435)EPA Grant CE 96456906-0: Balance as of 3/31/2009	506,038
(435)Matching Funds Balance for CE 96456906-0	491,824
<i>Subtotal Existing EPA Grant</i>	<i>997,862</i>
Minus total amount of EPA funds currently under contract:	(895,355)

Total Available Existing EPA Grant	102,505
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(435) EPA Grant CE96456906-3: Funding added for 2009-2010	600,000
(435) Match Projected to be available 2009-2010	222,224

Grand Total EPA/Match Funding available 2009-2010	924,730
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MBNEP Work Plan: Project Detail 2009-2010

This section is divided into five main subsections, 1) Water Quality, 2) Living Resources, 3) Habitat Management, 4) Human Uses and 5) Education/Public Involvement. Each subsection is introduced by stating the objective for that issue area. Individual activities are then listed under the appropriate sub-objectives. Some activities may contain elements that contribute to other issue area objectives. The activity is listed under the issue area for which it is most relevant.

I. Water Quality

Attain and/or maintain water quality sufficient to support healthy aquatic communities and designated human uses by 2010.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-A1	Assess Data to Identify Water Quality Problems	*Atmospheric Mercury *NPDES Loadings *Sediment Chemistry *Tissue Chemistry *Enterococcus Monitoring *Harmful Algal Blooms *Fecal Coliform *Chlorophyll a *Secchi Depth *Dissolved Oxygen *Light Attenuation	* Increase in understanding of Water Quality Issues *Improved identification of and response to point and non-point sources of pollution that negatively impact water quality *Decrease concentrations of toxic substances	ongoing

WQ-A1.2 Real-Time Water Monitoring in Mobile Bay (Continuing)

Performing Organization	DISL
Project Lead	Mike Dardeau
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 25,223 (reduced for match deficit)
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 25,223
Match	donated labor hours- \$10,000
Leverage	GOMP- \$136,000- (\$68,000 x 2 years)
NEP Prior Year Funds	\$34,777
Prior Year Match	
Prior Year Leverage	\$25,000 MBNEP CIAP, \$40,000 WBNERR, \$30,000 USA/ACES Oyster Restoration funding in FY04 for monitoring instrumentation
Related Priority Issue(s)	All
MBNEP Coordinator	Director

This is a continuation of the Water Monitoring Program begun in the Year Seven (FY 2003) Work Plan and funded by CIAP. The Water Monitoring Program consists of developing and implementing a comprehensive, bay-wide, water quality monitoring 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 and lab analyzed water samples will be reported in the local newspaper. The 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. During the 2010 program year, MBNEP will continue to support this program.

Project Objectives: Implement a multi-faceted approach for comprehensive water quality monitoring for the Bay and establish additional monitoring sites; establish agreed upon sample collection, handling, storage and analysis protocols for implementing the monitoring plan; collect water quality samples at designated sampling sites consistent with agreed upon protocols; maintain analyses results in a database and report them on a prescribed basis to MBNEP DIMS, ADEM, the general public, or any other appropriate agency, and place them in EPA's Storet water quality data management system.

WQ-A1.2 Sub-Estuary Monitoring (COMPLETE)

Performing Organization	ADEM
Project Lead	Mark Ornelas
FY 07 NEP Funding (11)	\$ 0 (40,000 reprogrammed- cancelled due to capacity limitations)
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
Total Current Plan Funds	\$ 0
Match	
Leverage	
NEP Prior Year Funds	\$162,500 (Bon Secour, Bayou La Batre, Dog River)
Prior Year Match	
Prior Year Leverage	\$
Related Priority Issue(s)	All
MBNEP Coordinator	Deputy Director

This program would have expanded a three year effort of ADEM to conduct water monitoring in tributary streams for Mobile Bay as outlined and identified in the accepted MBNEP Monitoring Plan. The original three year effort will be complete by 12/31/08. Monitoring activities have been completed for Bon Secour and Bayou La Batre and are currently being undertaken in Dog River. This Task is identified in prior year Work Plans as "Monitoring Program Implementation".

Project Objectives: Project Expansion cancelled.

WQ-A1.2 Installation of Trash Barriers: Moore & Montlimar Creeks (Continuing)

Performing Organization	Dog River Clear Water Revival/City of Mobile
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 20,324
FY 10 NEP Funding (14)	
Total Current Plan Funds	\$ 20,324
Match	\$20,324 donated labor, equipment
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	Human Uses
MBNEP Coordinator	Science Coordinator

Dog River and its tributaries drain most of the City of Mobile as well as function as an important recreational waterway. Sixty percent of the Dog River watershed is located within the City of Mobile and forty percent in Mobile County. Many factors have severely degraded the quality of this important waterbody. A major factor is the litter problem. In 2006, the citizen action group, Dog River Clearwater Revival, raised the funding necessary to install a trash barrier along Esclava Creek. This group asked and received support from the City of Mobile for maintaining/emptying the curtain. The City of Mobile has pledged their support for the installation of a second barrier and has agreed to clean out the barrier on a regular basis.

Project Objectives: Reduce trash inputs to Dog River tributaries as a method of improving water quality. Support community efforts to monitor water quality.

WQ-A1.5 Air Deposition Monitoring (Continuing)

Performing Organization	National Atmospheric Deposition Program
Project Lead	ADEM
FY 07 NEP Funding (11)	\$ 35,000 (match dollars)
FY 08 NEP Funding (12)	\$ 32,632 (reduced for match deficit)
FY 09 NEP Funding (13)	\$ 15,000 (reallocated)
FY 10 NEP Funding (14)	
Total Current Plan Funds	\$ 82,632
Match	
Leverage	22,000 (ADEM personnel)
NEP Prior Year Funds	\$109,000
Prior Year Match	Un-recovered but allowable indirect costs (DISL), cash
Prior Year Leverage	ADEM Personnel (Federal) \$33,000 (\$11,000/3yrs)
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director

Continue operation of two sites in Mobile and Baldwin Counties for mercury and nutrient monitoring which will complement data gathered at a new NOAA funded site at Grand Bay. These funds support a contract with the University of Illinois and the National Atmospheric Deposition Program to provide chemical analysis of air samples collected at these sites to identify problems related to toxic chemicals and nutrient and/or organic enrichment from various sources to further promote water quality improvements within the MBNEP area. During the 2009 program year, MBNEP will investigate partnership opportunities with the Northern Gulf of Mexico Institute to assist with identifying potential collaborative scientists who can share data and local ecological knowledge and data on mercury concentration to further research mercury deposition and impacts on coastal waters and living resources.

Project Objectives: Maintain the monitoring sites to include sample collection and analysis according to standard protocols. Sampling includes: Ca, Mg, Na, K, NH₄, NO₃, Cl, SO₄, pH, inorganic nitrogen, and total mercury. Report analyses results on a prescribed basis to EPA, ADEM, the general public, and any other appropriate agency through NADP website. As appropriate, deliver this information into the to the public.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-A2	Incorporate Loadings Information Into Non Pollutant Discharge Elimination System	NPDES Loadings	*Improved NPDES *Decrease concentrations of toxic substances	ongoing

MBNEP has no activities planned this period.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-A3	Maintain Groundwater Quality	*NPDES Loadings *Sediment Chemistry *Fecal Coliform	*Improved groundwater quality *Decrease concentrations of toxic substances *Increase safety of water for body contact	ongoing

MBNEP has no activities planned this period.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-A4	Ensure Protection and Maintenance of High Quality Waters	*Enterococcus Monitoring *Harmful Algal Blooms *Fecal Coliform *Chlorophyll a *Secchi Depth *Dissolved Oxygen *Light Attenuation	*Increase in # of classified Outstanding Alabama streams and waterways	

MBNEP has no activities planned this period.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-B1	Reduce Excessive Nutrient Loading Within the MBNEP area	*Dissolved Oxygen *Chlorophyll a *Turbidity	*Improved water quality to sustain aquatic life *Improved management of stormwater	ongoing

WQ-B1.1 Storm Water Management (Continuing)

Performing Organization	Baldwin County Commission/Mayors Association
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 22,500 (\$2,500 add reprogram)
FY 08 NEP Funding (12)	\$ 22,500
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 25,000
Total Current Plan Funds	\$ 70,000
Match	\$41,650 (Cities, County, WBNERR, AL Coastal Foundation)
Leverage	
NEP Prior Year Funds	\$ 5,000
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	
MBNEP Coordinator	Deputy Director

MBNEP will continue to work with local governments in Baldwin County to develop alternatives for stormwater detention and retention in order to reduce nutrient and/or organic loadings. During the 2007 program year, an assessment of the feasibility of forming a regional stormwater authority was conducted. This study was followed up with the Baldwin County Stormwater Consortium, or BCSC (representing 12 municipalities, the County, and other stakeholders), generating support throughout the community for enabling legislation to form such an entity. During the 2008 Alabama legislative season, House Bill 929 was passed, providing enabling legislation that would allow citizens of Baldwin County to vote on the establishment of a regional stormwater authority.

In April of 2008, the Alabama Legislature passed Act 08-507, enabling legislation that allows for the creation of a public service corporation and collection of fees on property containing impervious surface to address stormwater runoff county-wide. This legislation gave the Baldwin County Watershed Coalition permission to conduct a local referendum by November of 2010 that would ask voters if they would approve of establishing a fee to address stormwater management challenges on a regional basis.

During the 2009-2010 year, MBNEP will continue to facilitate the BCWC efforts to get this local referendum passed, including funding for a series of voter assessment surveys and the development of a GIS based inventory that compiles capital and other stormwater management information from each of the 13 municipalities and the county for use in determining future project priorities on a watershed scale.

Project Objectives: Coordinate Baldwin County and its cities for the purpose of developing a storm water management authority and act to establish such an entity.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-B2	Address Upstream Nutrient & Sediment Inputs (and other sources of non-point source pollution)	*Sediment Chemistry/ loadings *Harmful Algal Blooms *Chlorophyll a *Secchi depth *Dissolved Oxygen *Light Attenuation	*Improve safety of water for body contact *Improve water quality to sustain aquatic life	

WQ-B2.1 Comprehensive Sediment Loading Analyses for Magnolia River (Continuing)

Performing Organization	Town of Magnolia Springs
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 34,250
Total Current Plan Funds	\$ 34,250
Match	\$34,250 donated labor, equipment, cash
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	Human Uses
MBNEP Coordinator	Director/Deputy Director

Changes in land use have a dramatic impact on water quality. South Baldwin County has experienced a tremendous increase in development. Housing starts, new businesses, and new industry along with concomitant roadwork all have an impact on sedimentation in the Magnolia River. As a result, turbidity in the river has significantly increased. Volunteers of this community along with the Weeks Bay National Estuarine Research Reserve have been sampling water quality in the Magnolia River for over 10 years and compiled water quality data during that time that indicate an increase in turbidity at more frequent intervals with less intense rainfall events. This project will identify point sources including man-made and natural drainage ways that contribute significant sources of sediment loading to Magnolia River.

Project Objectives: Identify significant sources of sediment loading and recommend engineering solutions; quantify seriousness of sediment loading at target locations; educate community in methods of volunteer monitoring

WQ-B2.1 Comprehensive Sediment Loading Analyses for Fly Creek/Dog River (New)

Performing Organization	Geological Survey of Alabama
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 40,000
Total Current Plan Funds	\$ 40,000
Match	\$34,000 (GSA share of project)
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	Human Uses
MBNEP Coordinator	Director/Deputy Director

Changes in land use have a dramatic impact on water quality. Both Mobile and Baldwin Counties have experienced increases in development that are impacting their waterways. Housing starts, new businesses, and new industry along with concomitant roadwork all have an impact on sedimentation in the estuary. As a result, turbidity and siltation has significantly increased in certain tributaries including Dog River and Fly Creek.

The proposed sediment assessment by the Geological Survey of Alabama is designed to characterize land-use, erosion, and sedimentation in the throughout the two watersheds and to identify sources of sediment. The monitoring project will assess suspended and bed sediment transport rates in Fly Creek and Dog River and selected tributaries (a total of at least 10 monitoring sites per watershed). Monitoring is based on precipitation and resulting stream discharge and includes basic physical and water-quality parameters as well as sediment. These data may be used to determine impacts of land-use change and to focus resources in areas of greatest need of remedial action. The data may also be used to assist municipal and state erosion and sedimentation inspection programs.

The project will utilize modeling techniques to determine bed and suspended sediment loads. This project will identify point sources of sediments including man-made and natural drainage ways that contribute significant sources of sediment loading in Fly Creek and Dog River.

Project Objectives: Identify significant sources of sediment loading and recommend engineering solutions; quantify seriousness of sediment loading at target locations; educate community in methods of volunteer monitoring.

WQ-B2.1 Study of Land Use Impact on Fish River- Auburn University (Continuing)

Performing Organization	Auburn University
Project Lead	Mississippi Alabama Sea Grant Consortium
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 20,000
FY 10 NEP Funding (14)	
Total Current Plan Funds	\$ 20,000
Match	
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	Human Uses
MBNEP Coordinator	Director/Deputy Director

Weeks Bay, one of only three designated *Outstanding National Resource Waters* in the State of Alabama, is under stress due to population growth and urbanization in its watersheds. High proportions of impervious surface, a typical consequence of urbanization, can lead to increased nutrient and sediment loading into streams. Urban developments have also shown to increase heavy metals, bacteria loadings, and stream temperatures. The assessment of the impact of land use land cover changes and build out on the quality of its major water supplier, the Fish River, is therefore of paramount importance for the future management of the Bay area.

During the 2009 program year, MBNEP will partner with Mississippi Alabama Sea Grant Consortium and Auburn University to undertake a two year research project to implement an interdisciplinary approach to quantify the impact of land use/cover changes on the water quality parameters, NO₃-N, Total-P, and TSS in the Fish River Basin, and disseminate this knowledge to local community and decision makers through outreach activities to preserve and improve the environmental and ecosystem health of the Weeks Bay area.

Project Objectives: Collect flow and water quality data (NO₃-N, Total-P, and TSS) from Fish River sub-watersheds to be combined with data collected in past to identify linkage between water quality and LULC; post-validate SWAT model (developed under another project) with new data to appraise credibility in estimating the impact of LULC alteration on water quality; estimate future water quality conditions based on future build-up and LULC scenarios; educate citizens about water quality problems and solutions; demonstrate use of low-impact design strategies.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-C1	Reduce Opportunities for Pathogen Introduction	*Enterococcus Monitoring *Fecal Coliform	*Improve quality and safety of water for body contact	ongoing

WQ-C1.1 Impaired Water Bodies- Pathogen Source Identification- Redirected

Performing Organization	ADEM/Private Contractor
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 20,000 (add 20,000- subtract 40,000)
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
Total Current Plan Funds	\$ 0
Match	donated labor, equipment
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	Human Uses
MBNEP Coordinator	Director/Deputy Director

Section 303(d) of the Clean Water Act and EPA’s Water Quality Planning and Management Regulations (40 CFR Part 130) require states to identify water bodies which are not meeting their designated use and to determine the Total Maximum Daily Load (TMDL) for pollutants causing the use impairment. TMDLs are the sum of individual wasteload allocations for point sources (WLA), load allocations (LA) for nonpoint sources including natural background levels, and a margin of safety (MOS).

Juniper Creek in Mobile County near Fairview, Alabama lies within the Upper Big Creek Sub-watershed of the Escatawpa River Basin. Its use classification is Fish & Wildlife (F&W). Juniper Creek was put on the State of Alabama’s §303(d) use impairment list in 1996 for pH. However, pH was removed from the 1998 list because low pH values are due to natural conditions caused by acid clay soils and tannic acid from decaying vegetation which are typical of coastal blackwater streams. Juniper Creek has been on the State of Alabama’s §303(d) use impairment list since 1998 for Pathogens (Fecal Coliform).

During the spring of 2008, the CACWP submitted a grant under the state’s 319 program to conduct pathogen source identification at Juniper Creek. This grant was awarded in June, and as a result, MBNEP is reallocating these funds. MBNEP will continue to be involved in this project through the CACWP facilitator who is on MBNEP staff.

Project Objectives: Project funding cancelled.

WQ-C1.1 Impaired Water Bodies- Pathogen Source Identification- FISH RIVER (Continuing)

Performing Organization	Weeks Bay Foundation/WBNERR
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 22,000
FY 10 NEP Funding (14)	
Total Current Plan Funds	\$ 22,000
Match	\$ 26,000 donated labor, equipment
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	Human Uses
MBNEP Coordinator	CACWP Facilitator/Deputy Director

Fish River in the Weeks Bay watershed, Baldwin County, Alabama, is included on the Clean Water Act 303 (d) list for pathogen contamination. Pathogen contamination in the river and the potential human health threat associated with these bacteria is identified as an environmental problem in the Weeks Bay Watershed Management Plan. The Weeks Bay Foundation has funded bacterial monitoring in cooperation with the volunteer water monitoring group Weeks Bay Water Watch and the Weeks Bay Reserve. Current fecal coliform monitoring includes locations spanning much of the accessible reaches of Fish River and several tributaries. Counts of bacteria in the upper Fish River remain periodically high and violate the limits of its water use classifications, Swimming and Fish and Wildlife (ADEM). These high counts are typically present after rain events. This project will identify likely sources of pathogens at baseflow and high water events in the upper Fish River in an effort to develop better management decisions.

Project Objectives: Establish sampling sights; measure rain fall events to sample pathogens at baseflow and high water events, sample pathogens in upper Fish River under baseflow conditions and during high water events; identify likely sources of E. coli during both baseflow and high water events; confirm presence of source using alternative indicator bacteria- enterococcus and bateroidetes.

WQ-C1.1 Clean Marina Program/ Coastal Alabama Clean Water Partnership (Continuing)

Performing Organization	MBNEP
Project Lead	ADEM/NRCS
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 17,000
FY 10 NEP Funding (14)	\$ 5,000
Total Current Plan Funds	\$ 22,000
Match	
Leverage	\$ 74,261 CWP funds
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	Human Uses
MBNEP Coordinator	CACWP Facilitator/Coastal Specialist

Much progress has been made to protect water quality in Alabama and water quality 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 are deficient. To address non-point pollution issues along 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 the Mississippi Alabama Sea Grant Consortium (MASGC) and Auburn University (AUMERC), 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 Mobile Bay National Estuary Program (MBNEP), is made up of local interests, including agriculture, forestry, business, industry, environmental groups and local governments that coordinates, plans and implements 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 streams listed as impaired (the 303(d) list) by the Alabama Department of Environmental Management. To better coordinate activities related to reducing non-point source pollution 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.

Project Objectives: Support co-funded position that leverages the work of the CACWP facilitator with other non-point source pollution initiatives and continue to recruit “Clean Marinas”.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-D1	Assess Problems Related to Sediment Quality	*Atmospheric Mercury *Sediment Chemistry *Tissue Chemistry *Turbidity *Chlorophyll A	*Decrease in concentrations of toxic substances and pollutants in water	ongoing

MBNEP has no activities planned this period.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
WQ-D2	Provide for Safe Disposal of Hazardous Waste	NPDES Loadings	*Decrease in concentrations of toxic substances and pollutants in water	ongoing

MBNEP has no activities planned this period.

II. Living Resources

Maintain native populations within historical ranges and natural habitat and restore populations that have declined.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
LR-A1	Improving Monitoring of Key Living Resources	*Birds- pelicans, waterfowl, neotropical migrants; *Bottom Dwelling-blue crabs, oysters, flounder; * Mid-Water- largemouth bass, red drum, mullet *Number of osprey, eagles; *Number of species listed on special concern list; *Number of species listed on threatened/endangered list; *Acreage of land converted to alternate use * HABs *Chlorophyll A	*Improve the stability of fish and wildlife populations *Improve the populations of threatened and endangered species *Increased Citizen awareness, accessibility to data, and improved management and coordination of local activities	ongoing

LR-A1.1 West Indian Manatees, Mobile Bay, AL: Research/Public Outreach (Continuing)

Performing Organization	DISL
Project Lead	Dr. Ruth Carmichael
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 25,849
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 25,849
Match	\$ 31,526 labor and supplies
Leverage	
NEP Prior Year Funds	\$
Prior Year Leverage	
Related Priority Issue(s)	
MBNEP Coordinator	Deputy Director/Science Communicator

Once common along the Gulf of Mexico coast, populations of the endangered West Indian manatee (*Trichechus manatus*) are now confined largely to peninsular Florida and southeastern Georgia in the winter, with poorly defined migrations north and east during summer. In recent years, there have been a greater number of manatee sightings in areas west of Florida, suggesting increased use of fringe habitats.

Knowledge of manatees in fringe habitats has become increasingly important in recent years as extra-limital populations may be the first to show measurable responses to a variety of natural and human induced environmental changes. Knowing when and how manatees use fringe habitats is highly important to immediate and longer-term conservation, management, and monitoring efforts.

During the 2010 program year, MBNEP will continue to support efforts to monitor manatees in Mobile bay by extending an existing collaboration that the DISL has established with the Wildlife Trust (WT) in Florida. This support will allow the operation of the Mobile Manatees Sighting Network to continue and will allow for greater data collection and public education and outreach.

Project Objectives: Determine where manatees occur and how they use habitat and food resources in Mobile Bay; to develop and carry out a comprehensive public education program that integrates primary research and outreach.

LR-A1.5 Data Information Management System (DIMS) (Continuing)

Performing Organization	DISL/Contractor
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 20,000 (\$10,000 reprogrammed)
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 25,000
Total Current Plan Funds	\$ 45,000
Match	un-recovered indirect charge on DIMS
Leverage	Community Agency funded data set development
NEP Prior Year Funds	\$ 172,178
Prior Year Match	\$67,561; DISL waives administration charge on GIS/DIMS and provides 43% in-kind match, Equipment and hardware provided by DISL; Mobile Bay Watch Water monitoring Database
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Director

This activity will involve the continued development of data management systems that capture information from a variety of agencies and activities to provide a basis for the monitoring and status reporting of living resources, water quality conditions, and CCMP activities.

MBNEP will continue to develop data management systems that capture information from a variety of agencies and activities to provide a basis for the monitoring and status reporting of living resources, water quality conditions, and CCMP activities. Two online databases have been developed: a Habitat Conservation, Restoration, and Enhancement Database. Plans are establish web and other electronic linkages to make DIMS accessible; identify Data Management needs and assess methods/organizations and/or technology needed; continue Data Discovery associated with Environmental Monitoring; continue development of protocols, participate in regional data monitoring activities/organizations.

Project Objectives: Establish web and other electronic linkages to make DIMS accessible; identify Data Management needs and assess methods/organizations and/or technology needed; continue Data

Management associated with Environmental Monitoring; continue development of protocols, participate in regional data monitoring activities/organizations.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
LR-A2	Improve Monitoring of At Risk Species	*Bottom Dwelling-blue crabs, oysters, flounder * Mid-Water- largemouth bass, red drum, mullet	*Improve the populations of fisheries resources	ongoing

MBNEP has no activities planned this period.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
LR-B1	Develop Management Plan for Nuisance Species	*Frequency of occurrence of non-native species e.g. crabs, non-native submacrophytes, others	*Improve understanding of the impact of non-native species on the environment *Reduce the populations of non-native species	Initiated

LR-B1.1 City of Daphne Village Point Park: Invasive Species Control (Complete)

Performing Organization	City of Daphne
Project Lead	City of Daphne
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 10,000
FY 10 NEP Funding (14)	
Total Current Plan Funds	\$ 10,000
Match	\$ 12,000 labor and supplies
Leverage	
NEP Prior Year Funds	\$
Prior Year Leverage	
Related Priority Issue(s)	
MBNEP Coordinator	Director/Deputy Director

Village Point Park –Bay Front Park is located in Baldwin County, Alabama (Township 4 South, Range 2 East, Section 37). It is located on the west side of Scenic 98, South Main Street, in the City of Daphne. The park consists of approximately 80 acres of forested uplands, forested wetlands, cleared wetlands, coastal beach, and Yancey Branch. The “*Historic Village Point Inventory and Checklist of the Trees, Shrubs and Woody Vines*”, written by Fred Nation and Harry Larsen, documents that over one hundred

different species have been found in the Village Point Park. Along with the vast array of native species, the park has a problem with invasive (exotic) species. The inventory documented that there are eleven invasive species in the park at the present time. During the summer of 2007, the City of Daphne entered into a partnership with MBNEP to remove and control invasive species within Village Point Park. The City agreed to use the Village Point Park-Bay Front Park Invasive Species Plan to aid in restoring ecological relationships within the park. This partnership aims to remove and treat all documented invasive species. However, the primary focus will be on the most predominate which are the Popcorn Tree, Japanese and Chinese Privet, Japanese Climbing Fern, Wild Tarot, and Cogon grass.

Project Objectives: Remove the invasive species, which presently inhabit the Village Point Park; Purchase Glyphos Aquatic herbicide, Surfactant, and Dye to aid in the control of invasive species in the park; Purchase a variety of native trees and shrubs species to re-vegetate the open areas which will help prevent re-growth of the invasive in the cleared areas.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
LR.C1	Efficiently measure fishing effort			

MBNEP will work with Science Advisory Committee to review additional measures that may need to be taken.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
LR-C2	Increase Fisheries Resources	*Bottom Dwelling- blue crabs, oysters, flounder * Mid-Water- largemouth bass, red drum, mullet	*Improved fisheries resources	ongoing

LR-C2.2 Oyster Gardening (Continuing)

Performing Organization	DISL/Contractor
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 10,000
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 5,000
Total Current Plan Funds	\$ 15,000
Match	\$5,000 volunteer labor
Leverage	
NEP Prior Year Funds	\$ 30,000
Prior Year Match	volunteer labor
Prior Year Leverage	
Related Priority Issue(s)	Habitat Management
MBNEP Coordinator	Americorps Volunteer

The Oyster Gardening Program is a continuation of an initiative that was started in 2001 as a community involvement activity. Volunteers are trained to grow oysters under piers or in open waters, measure their growing progress and harvest them for placement on Mobile Bay Reefs. The purpose of the program is to teach citizens about oysters and their importance to bay water filtration and habitat creation and to restore relic oyster reefs in Mobile Bay.

During the 2009-2010 program year, Auburn University Marine Extension and Research Center will partner with MBNEP to develop a Master Oyster Gardening Program with the volunteers recruited into the program.

Project Objective: Engage volunteers in growing oysters as an environmental stewardship activity and for reef restoration.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
LR-C3	Manage Recreational and Commercial Fishing Effort	*Bottom Dwelling-blue crabs, oysters, flounder * Mid-Water-largemouth bass, red drum, mullet	*Improved management of fisheries to decrease stresses on recreational and commercial species	ongoing

MBNEP has no activities planned this period.

III. Habitat Management

Provide optimum fish and wildlife habitat in the Mobile Bay system by effectively preserving, restoring, and managing resources to maintain adequate extent, diversity, distribution, connectivity, and natural functions of all habitat types.

CCMP	IMPLEMENTATION ACTIVITIES (REVISED 2006)	INDICATORS	OUTCOMES	STATUS
HM-A1	Develop a Coastal Habitats Coordinating Team to prioritize conservation habitats and develop programs to encourage preservation.	*Acres of Habitat Protected or Restored *Acres of Habitat by Quantity or Type *Land Use/Land Cover Changes	Increase in the number of acres of unfragmented habitat that serves multiple species of wildlife	Initiated

HM-A1.2 CHCT Habitat Conservation Projects (Cancelled)

Performing Organization	MBNEP
Project Lead	TBD
FY 07 NEP Funding (11)	\$ 30,000 (subtract 30,000)
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$
Match	\$ 0
Leverage	
NEP Prior Year Funds	\$ 56,742
Prior Year Match	\$ 50,000
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

MBNEP will continue capitalization of a fund to provide non-regulatory incentives for the acquisition and/or restoration of prioritized sites of particular sensitivity, rarity, or value throughout the MBNEP focus area as identified by the Coastal Habitats Coordinating Team. MBNEP will issue requests for proposals or partner with other agencies to conduct habitat restoration projects. Selection of projects will be guided by the habitat/living resource benefit to be derived compared to cost effectiveness of the proposal. The intent of this restoration program is habitat improvement with some degree of permanence (25 years or greater).

During the 2007 program year, MBNEP partnered with Baldwin County to restore a cultural, ecological, and sociological landmark, “The Springs”, in Magnolia Springs, AL. The objectives of this project were to stabilize the existing site from further degradation due to on-site erosion and storm water infiltration and restore the wetland, riparian, and stream habitat to its natural state. The diverse array of coastal

wetland and estuarine ecosystems along Alabama’s coast provide numerous ecological and economic benefits, including improved water quality, nurseries for fish, wildlife habitat, flood buffers, erosion control and recreational opportunities. While the sustainability of the Alabama’s coastal wetlands is under increasing pressure from erosion, subsidence, rising sea levels and land development, opportunities exist to protect and restore wetlands, marshes, bayous, and sea grass meadows. However, at this time, MBNEP is in the process of working with agencies such as NASA and NOAA to better prioritize habitats in need of restoration assistance. To that extent, this activity has been delayed.

HM-A1.2 Assessment and Facilitation of Small Tract Coastal Land Trust (Continuing)

Performing Organization	Auburn University Marine Extension and Research Center
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 4,140
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 4,140
Match	\$ 4,394
Leverage	
NEP Prior Year Funds	\$
Prior Year Leverage	
Related Priority Issue(s)	
MBNEP Coordinator	Deputy Director

The CCMP recognizes that the Mobile Bay watershed is home to a variety of unique and important habitats, and that a leading cause of habitat loss in the area is due to development of the watershed. Such development has led to a fragmentation of habitats and makes the availability of large contiguous parcels of habitat rare and expensive. Unfortunately, some of these parcels represent important coastal habitats and provide ecosystem functions of value to the area.

Land trusts, such as Forever Wild and The Nature Conservancy, accept large land tracts as donations and conservation easements for the purposes of long-term protection and management; however, no such entity exists to accept smaller land parcels in coastal Alabama, specifically Mobile County.

During the 2009-2010 program year MBNEP will work with Auburn University to assess the feasibility and facilitate the creation of a coastal land trust focused on accepting conservation easements on small, fragmented parcels of valuable or sensitive habitats and the management of those properties- particularly in Mobile County.

Project Objectives: Determine the infrastructure requirements to implement a coastal land trust; evaluate existing trusts, their holdings, objectives, sources of funding, and maintenance procedures; identify partners, form land trust

HM-A1.2 Emergent Grasses and Grasses in Classes Restoration (Continuing)

Performing Organization	MBNEP
Project Lead	TBD
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 473 (reallocated)
Total Current Plan Funds	\$ 473
Match	\$
Leverage	\$ 25,000 (USFWS Grant)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Science Communicator

The loss of marsh in Mobile Bay has been documented in several wetland trend studies. Marsh losses in Mobile Bay were attributed to industrial development-navigation, commercial/residential development, natural succession and erosion - subsidence. Since 1997, the US Fish and Wildlife Service has established marsh on several tidal bars in upper Mobile Bay using a variety of species. The most successful plants utilized to date were hard-stemmed bulrush (*Scirpus californicus*), bull tongue (*Sagittaria lancifolia*) and black needle rush (*Juncus roemerianus*). This marsh establishment project is being implemented to offset previous marsh loss, provide fish and wildlife habitat, absorb nutrients, and trap sediment.

The created marsh will be utilized extensively by waterfowl, including blue-winged teal, mottled ducks, gadwall, shoveler, and widgeon as well as a host of shore and wading birds. Fishery resources will also benefit by the creation of marshes including shrimp, blue crab, flounder, red fish, and spotted sea trout. The proposed project is an important component of the CCMP and supports the North American Waterfowl Management Plan. This project will also have benefits to listed species under the Endangered Species Act including the Gulf sturgeon, manatee, bald eagle, and Alabama red-bellied turtle.

During the 2009-2010 program year, MBNEP will work with Mobile County Wildlife and Conservation Association and the Clean Water Partnership to continue planting activities.

The Baldwin County Grasses in Classes (BCGIC) program was started in January 2005 to facilitate the establishment and maintenance of nurseries by Baldwin County school students to grow native plants for submerged, wetland and dune restoration projects. Funding from the Gulf of Mexico Community-based Restoration Partnership allowed the program to expand by providing training for interested teachers and by establishing nurseries at their high schools.

The BCGIC program provides a volunteer base for implementation of restoration projects and promotes student involvement in community-based restoration activities. With guidance from teachers and experts, the students maintain and monitor the nursery at their school. Students also assist local scientists with monitoring the restoration sites during the school year whenever possible.

In 2006, the BCGIC projects included a dune planting at the Bon Secour Wildlife Refuge- *Panicum amarum*, *Spartina patens* and *Uniola paniculata* was planted by student volunteers on Refuge property;

an invasive species removal at the Weeks Bay Reserve- Phragmites spp. and replant *Spartina alterniflora* and *Juncus roemerianus* grasses were removed along Weeks Bay; and an emergent wetland plants restoration at Barner Branch- *Vallisneria americana* and other emergent wetland plants were planted.

The BCGIC program promotes individual stewardship and understanding of coastal ecosystems by providing students with meaningful hands-on activities designed to teach investigative and problem solving skills. In recent years coastal habitats in Alabama have been damaged due to storms and/or infestation of invasive exotic plant species. In response to this damage many federal, state, county and city restoration projects have been planned. By raising native plants to maturity and keeping half of the stock for future propagation, the BCGIC program will help defray the costs of restoration projects by providing an inexpensive source of plants as well as a volunteer base to assist with the implementation.

Based on the successful program in Baldwin County, MBNEP has partnered with the Mobile County Environmental Studies Center in 2006 to expand the Grasses to Classes program to the western shore of Mobile Bay. There are three Mobile County Public High Schools participating: Baker and Satsuma are growing Smooth Cordgrass (*Spartina Alterniflora*) and Black Needlerush (*Juncus Roemerianus*) and Murphy is growing Panic Grass (*Panicum Amarum*), Morning Glory (*Ipomoea pes-caprae*) and Sea Oats (*Uniola Paniculata*).

Partners for the Mobile County *Grasses in Classes* Program include the Environmental Studies Center, U.S. Fish and Wildlife Service, Dauphin Island Sea Lab, Weeks Bay NERR, Alabama Coastal Foundation, Alabama State Lands Division, and Mobile County Parks.

Project Objectives: Promote individual stewardship and understanding of coastal ecosystems through community-based restoration activities; Facilitate the establishment and maintenance of native plant nurseries by Mobile County school students; Provide students with meaningful hands-on activities which will provide investigative and problem solving experience; Provide federal, state, and local agencies with plants and a volunteer base for implementation of restoration projects

Project Objectives: To establish marsh vegetation throughout Mobile Bay.

CCMP	SUBOBJECTIVE	INDICATORS	OUTCOMES	STATUS
HM-B1	Protect or Restore SAV Habitat	*Light Attenuation *Acres of habitat protected or restored *Shoreline/Riparian changes	Increase acreage of SAV habitat	ongoing

HM-B1.1 SAV Mapping (Continuing)

Performing Organization	MBNEP/Contractor
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 84,882 (reduced for match deficit)
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 84,882
Match	\$104,000 (ADCNR)
Leverage	
NEP Prior Year Funds	\$ 9,674
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Deputy Director

Since 2002 when data were collected to generate this report, no further efforts have been undertaken to map the distribution of SAV in the MNEP study area. The 2002 data were used to document historical SAV distribution in a 2005 report based upon comparisons to digitized, geo-referenced aerial photography of areas within the MBNEP study area from 1940, 1955, and 1966. Results from this investigation affirmed dramatic decreases in SAV since the mid-20th century. The prominent decline and apparently persistent disappearance in acreage since that time suggests that human activity has altered habitats capable of supporting SAV. Since 2002 increased developmental pressures have significantly impacted Mobile Bay and surrounding waters, so the proposed study will facilitate direct comparisons to ascertain current trends.

During the 2010 program year, MBNEP will, with funding assistance from ADCNR, complete imagery acquisition for both the upper and lower areas of the bay that documents the extent and composition of SAV using the methodology and study area in the two coastal counties as the 2002 study.

Project Objectives: To create a current set of SAV maps that can be used to continue to develop a status and trends of SAV in coastal Alabama.

HM-B1.1 Little Lagoon SAV Restoration (Cancelled)

Performing Organization	MBNEP/Contractor
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 25,000 (reprogrammed)
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 0
Match	
Leverage	\$ 20,000 NFWF grant
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

The Little Lagoon Watershed (LLW) is located in South Baldwin County and is a portion of the much larger Wolf Creek hydrologic unit, as described by the US Geological Survey. Little Lagoon itself is connected to the Gulf of Mexico by an inlet that is currently maintained by an ALDOT dredging program. It encompasses 20 square miles extending west approximately 17 miles along the Fort Morgan peninsula. Submerged aquatic vegetation, historically abundant throughout Little Lagoon, has disappeared in recent years. It can be surmised that climate, human usage, and development increases have contributed to its demise.

In 2008, MBNEP received a 5 Star grant from the National Fish and Wildlife Foundation to contract with Dr. Just Cebrian of the Dauphin Island Sea Lab to restore SAV at Little Lagoon including the planting of shoalgrass (*Halodule wrightii*) at the Bon Secour National Wildlife Refuge. Although the project initially failed due to stingray holes, it will be revamped using widgeongrass (*Ruppia maritima*), whose leaves, stems and roots are not anchored to the sediment but grow in the water-column loosely attached to the bottom. In this way the problem of sediment bioturbation created by stingray holes and other organisms will be avoided. The location for planting will be the same area in Little Lagoon where the first restoration effort was done. That area is protected from wave action and has excellent water quality conditions for SAV growth. The widgeongrass will be enclosed in stainless chickenwire cages and planted in grids to keep sting rays out.

During the 2010 program year, MBNEP will work with Dr. Just Cebrian to complete the planting and monitoring of a 10,000 sq ft plot planted in Little Lagoon.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HM-C1	Maintain and/or Improve Beneficial Wetland Function	*Acres of habitat protected or restored *Acres of habitat quantity by type *Land Use/Cover Changes *Hydrologic/bathy metric change	Improved wetland functions Increase in habitat for living resources	ongoing

HM-C1.1 Wetlands Status and Trends Report (Cancelled)

Performing Organization	USGS
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 30,000 (reduced for match deficit)
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 0
Match	
Leverage	\$ 25,000 ADCNR
NEP Prior Year Funds	\$ 529,263
Prior Year Match	\$
Prior Year Leverage	\$ 363,000 (170,000 GOMP, \$18,000 ADEM, \$150,000 ADCNR)
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

In 2001 MBNEP partnered with USGS to undertake habitat mapping of the MBNEP area. The focus of this project was to gather digital color-infrared geo-referenced photography of Mobile and Baldwin Counties to determine a baseline. Photography was collected and digital ortho quads were completed for Mobile County. Color infrared photography was acquired during the winter December 2003-February 2004 for Baldwin County. The photography met national map accuracy and GIS standards. The resulting photography for both counties was mapped to provide classification of wetland and upland habitats using Cowardin, et.al wetland classification system, and uplands using Anderson/Handley level II upland classification scheme. This was a multi-year project. All habitats larger than 1 meter were identified.

In 2006, MBNEP entered into a \$21,739 contract (funded by a grant from ADCNR) with USGS to produce three large format posters (Mobile, Baldwin, and comparative) and to complete 50% of an accuracy assessment for the 2001/02 wetland and upland habitat maps for Mobile and Baldwin counties. This project was completed in January of 2008 and the product included the three maps. In February of 2008, MBNEP entered into another contract with USGS, again with ADCNR funds, to complete the accuracy assessment report begun in the previous contract and to prepare a comparison report of USGS data with USGS 2001 Landsat derived MRLC data and the 2001 NOAA C-CAP Landsat derived data set to address concerns MBNEP voiced about what was presented in the previous contract's map set. This

contract was entered into with an understanding that a third contract would be issued in the future to complete and publish a Wetland Status and Trends technical report.

Concurrently to USGS undertaking the contracted work, NASA approached the MBNEP and offered (free of charge) to conduct a land use land cover change analysis that would synthesize NASA Landsat data with NOAA C-CAP, National Wetlands Inventory and USGS mapping of 2001/2002. This product was completed in September of 2008.

Each of these reports is states different changes in habitat types, primarily loss vs. gain of wetlands, and loss vs. gain of upland forest. Many variables exist between the two efforts, including how habitats were categorized, amount of land analyzed, etc. To further study this issue, MBNEP has joined forces with Dr. Jean Ellis and applied for funding through NASA to further develop their previous product. For that reason, the funding set aside for a wetlands status and trends report has been deobligated.

Project objectives: Complete accuracy assessment of points acquired in earlier activities; Provide an accuracy assessment report for the 70 1:24,000 quadrangles for the interpreted and mapped NWI classification habitat data; Produce a report to evaluate available current remote sensing land cover data using the comparison of the 2001/02 wetland and upland habitat mapping data with the USGS 2001 Landsat derived MRLC data and the 2001 NOAA C-CAP Landsat derived data set. This report will provide a cross-walk of classification schemes between the NWI and MRLC and C-CAP.

HM-C1.1 Salt Marsh Restoration Strategies to Optimize Habitat Use by the Blue Crab (Continuing)

Performing Organization	DISL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 43,316
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 43,316
Match	\$50,067
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Habitat Management
MBNEP Coordinator	Science Communicator

Salt marshes provide ecosystem services that include critical habitat for commercially important crustaceans and fish, and energy export to adjacent estuarine habitats. In the northern Gulf of Mexico, the black needlerush, *Juncus roemerianus*, dominates high marsh zones and the smooth cordgrass, *Spartina alterniflora*, is limited to fringing bands and disjunct patches along the water's edge. Marsh restoration along the Gulf Coast often involves replanting *Spartina* with the underlying assumption that natural ecosystem function will follow. This assumption generally has not been corroborated, nor is it clear whether and when planting *Juncus* is the preferable alternative.

The marsh periwinkle, *Littoraria irrorata*, is an abundant and conspicuous herbivore in *Spartina* marshes along the Gulf Coast. The blue crab, *Callinectes sapidus*, is the basis of

important commercial fisheries, is the keystone predator of salt marshes, and is the primary predator of *Littoraria*. By controlling *Littoraria* populations, *Callinectes* prevents cascading ecosystem effects, which can include overgrazing and loss of *Spartina* (Silliman and Zieman 2001). Coastal eutrophication, a common condition within the MBNEP study region, can magnify these effects. The long-term success of restoration depends on establishing and maintaining trophic linkages such as this *Callinectes*–*Littoraria* interaction. Conventional approaches to tracking ecosystem development in restored marshes, such as assessing faunal abundance and diversity, are costly and time-intensive, and are rarely applied following restoration. We have developed metrics of the predator–prey relationship between *Callinectes* and *Littoraria*, which integrate among-site variability and are inexpensive, time efficient proxies for assessing the development of ecological function in restored salt marshes.

The olive nerite, *Neritina reclinata*, replaces *Littoraria* as the primary herbivore in low salinity, estuarine settings dominated by *Juncus*. The ecological role of *Neritina* is similar to that of *Littoraria* and it is frequently preyed upon by *Callinectes*.

During the 2010 program year, MBNEP will support scientists at the Dauphin Island Sea Lab in completing this study to determine whether *Littoraria*–*Spartina* and *Neritina*–*Juncus* communities are ecologically redundant and, therefore, indistinguishable to *Callinectes*, or whether the replacement of one system by the other would have an impact on population densities of this commercially important crab species. This study will enable us to cover a broad range of conditions under which marshes provide critical habitat and prey resources for *Callinectes* in the NEP study area. The project will include an extensive outreach component, involving field and classroom participation by K–12 students as well as a program of voluntary participation by and engagement of the community.

Project Objectives: Conduct a research program in Weeks Bay; apply our predation metrics to *Spartina* marshes in the southern half of the bay, and extend our focus northward to include monotypic stands of *Juncus* near the mouth of Fish River; study trophodynamics at existing sites; provide a long-term (4- to 5-yr) data set to evaluate ecosystem development in created *Spartina* marshes.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HM-D1	Assess Beach and Dune Habitat Loss	*Acres of habitat protected or restored *Shoreline/Riparian change trends	Increase in nonfragmented habitats	ongoing

MBNEP has no activities planned this period.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HM-D2	Regional Sediment Management (previously Determine Impacts of Dredging on Coastal Habitats)	*Acres of Habitat protected or restored	Improved sediment	initiated

MBNEP has no activities planned this period.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HM-D3	Address Shoreline Erosion	*Acres of habitat protected or restored *Shoreline/Riparian Changes	Reduction of shoreline lost	ongoing

HM-D3.2 Boat Wake/Erosion Study (Cancelled)

Performing Organization	USACE
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 10,000 (subtract 10,000)
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
Total Current Plan Funds	\$ 0
Match	
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

It is widely recognized by resource managers that further study must be conducted on the extent and causes of erosion along coastal Alabama. During the 2008 year, ADCNR will partner with the Geological Survey of Alabama to begin a comprehensive shoreline mapping of Mobile Bay and other estuarine shorelines. This project will start in Mobile and Weeks bays and expand from there. Due to the long-term nature of this project, MBNEP has cancelled this program. Project Objectives: Cancelled.

HM-D3.4 Shoreline Stabilization at Helen Wood Park (Continuing)

Performing Organization	DISL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 29,664
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 29,664
Match	\$26,468 in kind services
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

Restoration of estuarine habitats has proceeded at an accelerated pace over the last two decades and will likely expand as the public becomes more aware of the need to protect the environment. The relatively recent use of oysters reefs to actively restore estuarine habitats while adding ecological benefit is a function of the increasing recognition of the importance of oyster reefs in estuarine ecosystems. The eastern oyster, *Crassostrea virginica*, is a key component of coastal ecosystems and local economies along the Gulf coast. Reefs formed by the aggregation of this species provide habitat for numerous species of fishes and invertebrates. These reefs also serve as filters for estuarine water. Further, shallow subtidal and intertidal oyster reefs can facilitate the maintenance and expansion of emergent and submerged vegetation. For emergent shoreline vegetation like *Spartina patens* and *S. alterniflora*, nearshore reefs may reduce wave energy that would normally result in shoreline erosion.

During the 2010 program year, MBNEP will support the completion of a DISL project that will examine the potential benefit of restoration of shallow subtidal oyster reefs on adjacent nearshore habitats. The project when complete will expand the current and ongoing efforts that began at Point aux Pines and along the Dauphin Island Causeway, by adding a replicate site along a state owned shoreline that will allow the project to serve as a public demonstration site.

Project Objectives: Document changes in the shoreline configuration and the physical setting of study sites resulting from the addition of oyster reefs; quantify oyster recruitment and density on created reefs; quantify juvenile and adult fish and mobile invertebrate utilization of created oyster reefs and adjacent habitats; and quantify marsh vegetation after the removal of *Phragmites australis*.

HM-D3.4 Shoreline Stabilization at Dog River Park (NEW)

Performing Organization	DISL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$
Match	\$
Leverage	\$ 26,460 (NEP CRP Grant)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

Dog River (Luscher) Park is a Mobile City Park of approximately six acres bordered on the north by North Dog River Drive, on the west by Park Avenue, and on the south by the Dog River. The park facilities include four boat ramps, a pavilion, and football and baseball fields that are used regularly by the public. The southeastern shore of the park, from about 200 feet south of the boat ramps to a point at the southernmost terminus of the peninsula, has experienced erosion due to wakes from boat traffic. The city has placed scrap concrete and asphalt along some sections of the shoreline in an unsuccessful attempt to prevent the erosion. Growth of native grasses and vegetation is impaired by the persistent wave energy, resulting in progressive erosion and habitat loss. Just north of the boat ramps are three abandoned and deteriorating boat launches, where city attempts to remove riprap and a concrete drive were abandoned as cost prohibitive. Some native plants and grasses have established, but not enough to prevent erosion or create habitat.

This project will involve three phases: 1.) site assessment and design, 2.) installation of erosion control structures and vegetative planting, and 3.) installation of educational signage and monitoring.

HM-D3.4 Shoreline Stabilization along Mon Luis Island (NEW)

Performing Organization	DISL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 13,043
Total Current Plan Funds	\$ 13,043
Match	\$
Leverage	\$ 40,000 (potential grant funding through CRP)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

MBNEP will work with community property owners along the bay front of Mon Luis Island to develop a pilot living shorelines/shoreline stabilization project that includes monitoring activities and community capacity building. MBNEP will apply for NOAA Community Restoration Program funding during summer of 2009.

HM A1.2 TNC/NOAA Habitat Database Online Viewer (NEW)

Performing Organization	DISL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$
Match	\$
Leverage	\$ 15,000 (potential grant TNC)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

The Mobile Bay National Estuary Program is working through a new local-state-federal partnership to update its habitat acquisition and restoration priorities for coastal Alabama. The partnership is a pilot effort of NOAA Fisheries' Office of Habitat Conservation's Cooperative Habitat Protection Partnerships (CHPPs), an initiative developed to engage stakeholders and equip local communities with the tools and information needed to protect coastal and marine fish habitat. The project brings together the local knowledge and expertise of more than sixty state and local entities concerned with habitat protection in

coastal Alabama, together with the geospatial, ecoregional, and technical expertise of The Natural Conservancy and NOAA Fisheries and Coastal Services Center at the national level.

The project is building upon an existing acquisition and restoration priorities atlas that was developed in 2004-2005 by the Mobile Bay NEP and TNC, in cooperation with a number of federal, state, and local stakeholders. The resulting report and static maps are being revised to incorporate new and additional habitat and land use data, information on habitat stressors (such as long-term temporal stressors of climate change and sea level rise), and consideration of a range of implementation strategies. The Mobile Bay CHPPs project is using the interactive functionality of a geographic information system (GIS) and NOAA Coastal Services Center’s Habitat Priority Planner tool to strategically identify habitats for protection and allow users to assess priorities in light of ongoing landscape change. The project is also producing an interactive, GIS-based resource of results to guide local habitat protection actions strategically at local and regional scales.

During the 2010 program year, MBNEP will contract with TNC to conduct training of resource managers on the online tool and initiate the re-establishment of a GIS Coordinating Team to ensure periodic updates and expansion of datasets for the tool.

HM A1.2 Land Use Land Change Analysis-NASA (Continuation)

Performing Organization	DISL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$
Match	\$
Leverage	\$ 15,000 (potential grant TNC)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

In 2007 MBNEP partnered with Dr. Jean Ellis, a NASA contractor to develop a Land Use Land Cover Change analysis of Mobile and Baldwin Counties. The primary research objective of the Pilot Project was for NASA SSC to create historic and current LULC change detection products to provide to the coastal environmental managers and to the public of Mobile Bay. A multi-decadal time-series (1974-2008), coastal land-use and land-cover product encompassing Mobile and Baldwin counties and unique to NASA SSC was the major project deliverable. The geographic extent and nature of change was quantified for the upland herbaceous, barren, open water, urban, upland forest, woody wetland, and non-woody wetland-dominated landscapes. Within this objective, we also focused on change detection products, decadal-scale urban expansion, and isolating change with Mobile Bay NEP’s target areas (D’Olive Bay, Fish River, Three Mile Creek, and Northern Big Creek). The target areas correspond with local watershed where MBNEP has current projects. The classes were determined with the guidance from Mobile Bay NEP.

At present, MBNEP is a co-investigator on a NASA grant to expand this work. The first task within this project will be to build upon previous efforts to assess accuracy of the regional- and watershed-scale LULC products. Products will be validated with field survey data collection, soil surveys, high spatial resolution multispectral satellite, and aerial image data. Locations on LULC monitoring products will be randomly sampled for product accuracy assessment compared to available reference data. A portion of the sample locations will be field visited. In addition, recent LULC change and non-change areas within the region and within targeted watersheds will be assessed for accuracy at the regional and watershed scales.

HM D2.2 Surface Elevation Table Monitoring (NEW)

Performing Organization	DISL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 50,652
Total Current Plan Funds	\$ 50,652
Match	\$
Leverage	\$
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

The structure of coastal environments can be altered by changes in sea level. The degree of change is largely a function of how much sediment can be accommodated on the seafloor (directly related to increases or decreases in sea level) and how much organic and mineral sediment actually accretes on the sea floor. Examinations of potential levels of inundation of coastal environments under different sea level rise and storm surge conditions are currently being developed by the USGS for the Gulf coast. While tide heights are routinely measured in many areas of the coast, sediment accretion or subsidence are not. The geological record indicates that in some coastal environments changes in sea level can be balanced by changes in sediment accretion, leading to little change in the structure of coastlines. However, in some coastal environments where sediment accretion has not balanced an increase in sea level, there have been rapid reorganizations of the structure of the coast line. The geological record shows that one such event was responsible for the formation of Mobile Bay 8000 years before the present. Therefore, MBNEP proposes to direct funding towards the installation of Surface Elevation Tables (SETs) to measure sediment accommodation and accretion in Mobile Bay. These devices are being installed in Weeks Bay reserve and Grand Bay by NERR in the summer of 2009. We will co-ordinate our efforts with this agency and receive technical assistance with their deployment. The data generated by these devices will be incorporated into the modeling being conducted by the USGS. The results will provide insight into the level of risk that coastal environments around Mobile Bay face from changes in sea level and storm surge events over extended time periods. These data can be used by resource planners and industry to guide their activities.

Project Objectives: Install 6-10 surface elevation tables (SET) throughout the Mobile Bay watershed .

HM D2.2 Dauphin Island Causeway Restoration (NEW)

Performing Organization	DISL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$
Match	\$
Leverage	\$ 40,000 (NOAA Stimulus Grant Pending)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Director/Deputy Director

In 2004 the U.S. Army Corps of Engineers (USACE) completed a Preliminary Restoration Plan (PRP) For Dauphin Island Parkway Aquatic Ecosystem Restoration, Mobile County, AL under Section 204, Beneficial Use of Dredge Material in Conjunction with a Federally Authorized Navigation Project, to restore approximately 4,000 ft of the approximately 15,000 ft causeway. The USACOE proposed aquatic ecosystem restoration project involved a protective engineered reef wave break, emplacement of approximately 2,250 yds³ of hard bottom substrate for oyster habitat, and planting of wetland habitat along 4,000 ft of shoreline. The proposed wave break involved were to be semi-submerged engineered reef structures placed adjacent to and in conjunction with approximately 4,000 feet of shoreline. The semi-submerged structures were to be placed approximately 200-300 feet offshore in water depths averaging 3-ft. Although the project received additional funding through the Corps for further study and design, the economic and resource impacts of Hurricane Katrina caused the Corps of Engineers to abandon the project due to other more pressing needs.

In early 2009, MASGC with co applicants including MBNEP resurrect and modified this USACOE project under the NOAA Economic Stimulus Recovery Act. This proposed project aims to stabilize unconsolidated sediments in the shallow near-shore waters. The project site and the use of engineered breakwaters will be the same. However, we propose to use two rows of breakwaters in an offset segmented design rather than a single row in an un-segmented design. Another difference will be the expansion of the hard bottom substrate from 2,250 yds³ to 8,000 yds³, in order to create more long-term shellfishing jobs. An additional component of this project is the creation of a 0.33-acre pocket park to provide public access for fishing, kayaking, swimming, bird watching, and other sustainable uses or eco-tourist activities. This pocket park will increase public safety by providing “off-street” parking for fishermen who have historically parked along the road right-of-way.

Project Objectives: Completion of this restoration project will address at least three of the priority areas listed in the request for proposals including: Shellfish restoration, Coastal resiliency, and long-term habitat adaptation to sea level rise.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HM-E1	Prevent Nesting Habitat Decline	*Acres of habitat protected or restored *Shoreline/riparian changes	Increase acreage of nesting habitat for colonial and migratory birds	ongoing

HM-E1.2 Nesting Habitat Creation: Vegetation Restoration Program (Continuing)

Performing Organization	MBNEP/Bon Secour National Wildlife Refuge
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 3,192 (reprogrammed \$473)
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
Total Current Plan Funds	\$ 3,192
Match	\$1,000 volunteer hours
Leverage	\$ 5,000 (USFWS Restoration grant)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$ 5,000 US FWS
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Science Communicator

Little Dauphin Island, part of the Bon Secour Wild Life Refuge System, is a fragile barrier feature along the rapidly developing Alabama Gulf Coast. It is host to a diverse assemblage of beach, coastal dunes and associated uplands, salt marsh, and wetlands at the mouth of Mobile Bay. These habitats support a variety of threatened and endangered species, including the piping plover, sea turtles, and more than 370 species of migratory birds.

During the latter part of 2007 through April 2008, MBNEP partnered with the Bon Secour Refuge to conduct a dune planting along the eastern end of the island to stabilize sand and promote increased shore accretion to support piping plover habitat and tree plantings farther west to provide habitat and stabilize this dynamic island landscape which protects the northern shore of Dauphin Island from the impact of storms and flooding.. More than 40 volunteers planted 650 native trees to restore migratory bird habitat. Unfortunately, flooding from Hurricanes Gustav and Ike wiped out all of the trees that were planted. Areas restored with dune plants were unaffected and continue to thrive. Project complete.

Project Objectives: To restore habitat for colonial and migratory birds on Dauphin Island.

HM-E1.2 *Protecting Beach Nesting Birds on the Alabama Coast (Complete)*

Performing Organization	National Audubon Society
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 5,500
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 5,500
Match	\$
Leverage	\$ 5,500 (ADCNR)
NEP Prior Year Funds	\$ 5,500
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources
MBNEP Coordinator	Science Communicator

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 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 included: 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. The sites covered included: Bon Secour National Wildlife Refuge, Dauphin Island, West Dauphin Island, Isle Aux Herbs, Pelican Island, Cat Island, Gulf State Park, and Barton Island Peninsula. The resulting total number of breeding birds located for each species was: Snowy Plover 10 pairs, Wilson's Plover 13 pairs, American Oystercatcher 12 pairs, Least Tern 63 pairs, Gull-billed Tern 30 pairs, Common Tern 9 pairs, and Black Skimmer 56 pairs. 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. Two years of survey data are now complete.

Project Objectives: Survey breeding beach nesting birds; develop protective measures.

HM Science Communicator (Continuing)

Performing Organization	MBNEP/Bon Secour National Wildlife Refuge
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 70,000
Total Current Plan Funds	\$ 70,000
Match	\$
Leverage	\$
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, Education , Public Involvement
MBNEP Coordinator	Science Communicator

The Science Communicator position focus his efforts on community restoration activities project management that involve a citizen action component as a vehicle for promoting stewardship of the estuary. This position will be strictly project delivery and as such has been taken out of our overall administration budget.

IV. Human Uses

Provide consistent, enforceable, regional land and water use management that ensures smart growth for sustainable development and decreases the negative impacts of growth related activities on human health and safety, public access, and quality of life by developing and implementing plans consistent with the CCMP by 2006.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HU-A1	Develop and Implement Comprehensive Land Use Planning	*Acreage of land converted to alternate use *Acreage of Impervious surface * New road construction *Shoreline modifications/hardening *# of types of development permits	Improved management of human use activities related to land use	ongoing

HU A1.2 Sustainability Planning: Bayou La Batre (Continuing) Prichard (NEW)

Performing Organization	Auburn University/City of Bayou La Batre
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 17,000
FY 10 NEP Funding	\$ 30,000
Total Current Plan Funds	\$ 47,000
Match	\$ 5,000 volunteer labor
Leverage	Mississippi Alabama Sea Grant, SARPC
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, habitat management
MBNEP Coordinator	Deputy Director

During the 2009 program year, MBNEP contracted with Auburn University to engage the Bayou La Batre community in sustainability planning. The purpose of this project is to create a vision and plan for a sustainable community that promotes the development of neighborhoods and commercial districts, protects the waterfront industry that serves as the foundation of the community, fosters a diversification of the economy, and embraces the cultural and environmental assets of Bayou la Batre. The structure of this project included three phases: The *Community Profile* phase included the collection and analysis of data with regard to the history, geography, demographics, housing, education, government, public facilities, and the natural and cultural environment. The goal of this phase was to gain a baseline understanding of the community's current condition. The *Citizen Assessment* phase fostered participation and input from the planning commission of the community. Their input focused on what was consider to be strengths, weaknesses, opportunities, and threats of their community. The *Synthesis* phase combined the knowledge gained about the community from the previous two phases with training and knowledge acquired by the principle investigator through the curriculum of the Auburn University Community Planning Program to generate recommendations for future action.

Concurrently, MBNEP contracted with Auburn University to prepare a Graphical Ecological Characterization of the lower Eight Mile Creek Watershed. The objectives of this project were to: 1) characterize the ecosystems and shoreline stream conditions occurring along 8 Mile Creek in Prichard, Alabama from St. Stephens Rd (Hwy. 45) to I-65 (see Figure 1); 2) assess stream health; 3) design walking trail extensions to Reading Park; 4) identify greenspace opportunities; and 5) propose educational opportunities for surrounding and abutting communities. The characterization will be graphic in nature and include information on aquatic, plant, animal and human communities. Existing stream conditions will be inventoried including current land use. GIS data for mapping will be solicited from existing sources.

In the 2009-2010 program year, MBNEP will continue its contract with the Principal Investigator of the Bayou La Batre project to work with the City of Bayou La Batre to implement the recommendations of the prepared study discussed above and to provide land use planning technical assistance to the City of Prichard as part of the continuation of the watershed planning process begun by Auburn University.

Project Objectives: Provide local planning that promotes environmental sustainability

HU A1.1 Graphical Ecological Characterization of the Eight Mile Creek Area(Continuing)

Performing Organization	Auburn University
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 35,533
Total Current Plan Funds	\$
Match	\$ 35,533
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, habitat management
MBNEP Coordinator	Deputy Director

According to the U.S. EPA, conducting characterization studies of sensitive estuarine habitats are key to providing community decision makers with the data necessary to address environmental management challenges. Characterization studies increase citizen ownership of a program study area and help citizens to see problems clearly and find new ways of engagement. Landscape architects and urban design planners are key players to such studies. The integration of science with community planning and landscape architecture fosters design interventions that can guide communities in creating a sustainable future.

Originally proposed for the Fish River Watershed, this graphical ecological characterization was re-routed to the Eight Mile Creek watershed to complement activities recently undertaken by a group of concerned citizens. In an effort to expand recreational opportunities, community leaders in Prichard raised the necessary resources to develop a passive reading park along a degraded streambed. This effort was an implementation of the City’s Comprehensive Plan, specifically, Section 4 which addresses the treatment of natural resources. Of particular note, the plan discusses a need to develop streambank buffers as a means of protecting water quality and to use the buffers for passive recreational activities.

In an effort to engage the community in watershed planning, this characterization is being prepared as a mechanism for generating community input and involvement for future planning efforts.

Project Objectives The objectives of this project seek to: 1) characterize the ecosystems and shoreline stream conditions occurring along 8 Mile Creek in Prichard, Alabama from St. Stephens Rd (Hwy. 45) to I-65 (see Figure 1); 2) assess stream health; 3) design walking trail extensions to Reading Park; 4) identify greenspace opportunities; and 5) propose educational opportunities for surrounding and abutting communities. The characterization will be graphic in nature and include information on aquatic, plant, animal and human communities. Existing stream conditions will be inventoried including current land use. GIS data for mapping will be solicited from existing sources.

HU A1.1 Shoreline Assessment and Survey of Fish River (Continuing)

Performing Organization	Alabama Coastal Foundation
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 5,800
Total Current Plan Funds	\$
Match	\$ 5,800
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, habitat management
MBNEP Coordinator	Deputy Director

The Alabama Coastal Foundation will work with Auburn University and Weeks Bay Foundation in this comprehensive assessment of the Fish River. Volunteers will use an assessment instrument to collect data on shoreline conditions along the upper Fish River. This data will be added to efforts under WQ B2.1 Study of Land Use Impacts on Fish River being undertaken by Auburn University.

Project Objectives: The objective of Alabama Coastal Foundation’s participation in this project is to generate a product that is used in local land use planning or that is used to help manage resources at the community level.

HU-A1.1: Land Use Education for Real Estate and Development Professionals (Complete)

Performing Organization	grassroots, inc.
Project Lead	Emily Sommer
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 5,000
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 5,000
Match	\$
Leverage	\$
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, Habitat Management
MBNEP Coordinator	Director/Deputy Director

According to NOAA, an estimated 54 percent of the world’s population lives less than 40 miles from the coast and this number is expected to increase. With over 433 miles of shoreline, the Alabama coast and surrounding areas are experiencing increasingly rapid land development resulting in large amounts of non-point source pollution. According to the Pew and U.S. Commission on the Ocean Report, this has become an environmental issue of great consequence. Conventional land use practices, including requirements for high levels of paved surfaces, have been identified as contributing to the decline of fragile watersheds from elevated levels of storm water runoff. Impervious cover produces 16 times more storm water runoff than a forest, causing flooding, erosion, siltation and contamination that increased stress not only on our watersheds but on plant and animal habitat. This project is complete.

Project Objectives: Implement online course for professionals; execute live courses; offer web-site; conduct one site visit field trip

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HU-B1	Assess Hydrologic Effects of Development Practices	*New road construction * #/types of development permits *303 (D) Listed Streams *# waste water permit violations	Mitigation of impacts related to hydrologic changes due to development	

HU-B1.1 Causeway Studies: TNC (Cancelled)

Performing Organization	Contract
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
Total Current Plan Funds	\$
	\$ 20,000 (Mott Foundation Grant to TNC)
Match	\$ donated labor
Leverage	
NEP Prior Year Funds	\$ 10,000 cancelled. Reprogrammed.
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources, Human Uses
MBNEP Coordinator	Director/Deputy Director

The Mobile-Tensaw Delta (Delta) is a freshwater dominated estuarine system at the base of the Mobile River drainage basin. Since 1930, approximately 20 large dams and other water control structures have been built on the Delta's two primary feeder streams – the Alabama/Coosa/ Tallapoosa and the Tombigbee/Black Warrior river systems. Within the Delta proper, a large causeway has sealed off a number of once open bays from immediate contact with the Gulf. These hydrological modifications have potentially altered the hydrology of one of North America's largest, most productive and diverse estuaries on a local- and system-wide basis. It is hypothesized that these modifications have dramatically altered the productivity of ecological communities within the lower Delta via reduced water exchange and altered circulation patterns, changes in nutrient cycling, and increased incidences of exotic and invasive plant species.

In 2004 MBNEP and partners began funding a multi-year study to collect preliminary data assessing potential impacts of the Causeway on altered freshwater inflow and saltwater interchange on the ecology of the lower Delta. The partnership which included DISL, The Nature Conservancy, Alabama Power Company, and Mobile Bay Watch, acted on concerns of altered hydrology of the estuary due to the construction of the long Causeway that connects the west and east sides of Mobile Bay. Since that time a second year of study by Dr. John Valentine of DISL has been funded by the Gulf of Mexico Program (EPA) through Mobile BayKeeper and the Mobile Bay National Estuary Program. The Nature Conservancy also conducted analysis of river flow information collected through these projects. The results of these two studies and first three parts of the Delta/Causeway Study are on the MBNEP website.

In 2007, Dr. Valentine was funded for the third and final year of study, considered necessary to answer questions related to the advisability of changing the hydrology of the lower Delta/upper Bay once again by increasing openings in the Causeway. This year of study is funded through the Alabama Department of Conservation and Natural Resources, Marine Resources Division. Discussions with Dr. Valentine indicate that additional analysis of habitat, landform, and vegetation change would be useful adjuncts to more fully characterize the impacts of the altered hydrology caused by the Mobile Bay Causeway. This project was cancelled.

Project Objectives: Investigate wetland and aquatic habitat changes in the Mobile Delta using comparative analysis with other Gulf Coast river systems; summarize and present to Alabama Power in a Power Point presentation, the results of the hydrologic analyses of inflows and the influence on water quality in the Delta.

HU B1.1 Causeway Outreach related to TNC Studies (Cancelled)

Performing Organization	To be determined
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 10,000 (reduced for match deficit)
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 0
Match	\$
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, habitat management
MBNEP Coordinator	Deputy Director

Recognition of the complexities of the Delta system has resulted in a recommendation of the Science Advisory Committee to conduct further investigations and research through other sources before developing an action plan for the Causeway.

Project Objectives: Establish an outreach distribution plan; engage in small group, one on one and general public meetings

HU C1.2 Public Access: Helen Wood Park (Continuing)

Performing Organization	Alabama Coastal Foundation
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 4,240
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 4,240
Match	\$
Leverage	\$ 38,500 (USFWS- CRP Grant)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, habitat management
MBNEP Coordinator	Deputy Director

In 2006, MBNEP partnered with the City of Mobile to improve Helen Wood Park, a triangular eight acre tract immediately to the north and east of Dog River Bridge. The restoration included removal of pavement, paving with permeable materials, and building a boardwalk. The property occupies part of a low, flat, wet salt marsh peninsula bordered by Dog River to the west and south and by Mobile Bay to the east. The second phase of the project involves the restoration of the wetlands located along the

western/northwestern side of developed area of Helen Wood Park. These wetlands receive tidal flows directly from Mobile Bay through two small tidal guts and from Dog River through a culvert under Dauphin Island Parkway which connects to a tidal creek on the west side of the parkway. The area is approximately 3.5 acres in size and is heavily infested with Phragmites with some Chinese Tallow Trees (Please see Figures 2 and 5).

During the 2009 program year, MBNEP successfully removed invasive species from the site.

During the 2010 program year, MBNEP will complete the Helen Wood Park Project which will involve reducing the elevation of the area, and replanting of native species.

Project Objectives: Conduct a prescribed burn to a 3.5 acre section of the park; Lower the elevation of the shore area to six to eight inches; monitor the area and where re-infested with Phragmites, treat with a glyphosate-type herbicide approved for use in wetland areas; plant native vegetation and install educational signage throughout the park using volunteers and neighborhood groups.

	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HU-B2	Restore Natural Hydrologic Conditions	*Acreage of land converted to alternate use *Acreage of Impervious surface *new road construction *shoreline modifications/hardening *Acreage of functional wetland restored, enhanced, created	Reduction of hydrologic impacts of natural habitats Reduced sediment loadings into Mobile Bay Increased SAV Restoration of function of lake as detention basin	ongoing

HU-B1.2 Three Mile Creek Restoration (Re-Initiated)

Performing Organization	Contract
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 5,700
Total Current Plan Funds	\$ 5,700
Match	\$ 20,000 (Waterkeeper Alliance Grant)
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources, Human Uses
MBNEP Coordinator	Director/Deputy Director

The Three Mile Creek Industrial Canal originates in the extreme eastern portion of the sub-watershed and is a channelized canal, a little over 1 mile in length, emptying northward into Three Mile Creek about 0.5 mile upstream of the confluence of Three Mile Creek and the Mobile River. Water flow in Three Mile Creek has been altered due to a channel modification that was constructed for flood damage reduction and

as a result primarily all water flow bypasses a portion of the old channel. Minimal flow entering the original creek channel between Conception Street Road and MLK has altered the aquatic community found in and adjacent to the stream. Minimal flows have reduced water quality in the original stream of Three Mile Creek. The original creek channel currently has minimal to no water flow directed into it.

During the 2009 program year, MBNEP will continue to keep abreast of activities with the City of Mobile, the US Army Corps of Engineers, Mobile Area Water and Sewer Service and others regarding the development of a project to examine feasibility of restoring natural flow in an old streambed and creating a greenway along other portions of Three Mile Creek. TMDLs have already been developed by ADEM for Three Mile Creek.

Project Objectives: Restore a portion of an altered channel back to its natural state.

HM-B2.3 D'Olive Bay Watershed Planning (Continuing)

Performing Organization	MBNEP/Contractor
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 25,000
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 25,000
Match	\$
Leverage	\$ ADCNR/GSA project dollars; \$45,000 ADEM; \$15,000 MASGC
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	
Related Priority Issue(s)	Living Resources, Human Uses
MBNEP Coordinator	Director/Deputy Director

D'Olive Bay has served as the "poster child" for the impacts of increased storm water run-off and sediment loading in coastal Alabama since the mid-1970s. Accelerated erosion within the watersheds of D'Olive and Tiawassee Creeks in Daphne and Spanish Fort, Alabama has contributed to this problem. Negative environmental impacts resulting from the development of one of Alabama's largest subdivisions (Lake Forest) have stimulated CCMP actions to address them. The CCMP prescribes a comprehensive biological, hydrologic, and engineering study of D'Olive Bay that would be used to develop a stepwise strategy for returning the area to a more natural hydrologic condition.

MBNEP will continue to provide leadership and resources to the D'Olive Bay/Lake Forest sub-watershed Task Group. This group now includes the NRCS, ADCNR, Baldwin County, City of Daphne, City of Spanish Fort, ADEM, USF&WS, USACOE, members of the Baldwin legislative delegation, Lake Forest Property Owners Association, MBNEP, CACWP, and others. We will support technically and financially (as funds become available) the continued systematic approach to addressing erosion and sedimentation issues associated with three contributing streams as well as the current partially-filled condition of the lake in the Lake Forest subdivision. Systematically addressing this larger regional problem will help us address sediment loadings into a portion of the Upper Mobile Bay and may serve as an exportable model for other communities to use in addressing similar local problems.

The Geological Survey of Alabama (GSA) conducted long-needed watershed assessment and streambed analyses, monitoring 13 sites for bedload and suspended load in the watersheds of D'Olive and Tiawassee Creeks and Yancey Branch. Early results are identifying areas that may be candidates for stream restoration using Rosgen stability curves and methodologies.

During the 2010 program year, MBNEP will work with project partners to continue community involvement and effort to: reduce upstream sediment inputs into the Lake Forest/D'Olive/Tiawassee system, remediate and restore past effects of these sediment loads, reduce outgoing sediment loads into D'Olive Bay and the Mobile Bay Estuary, and mitigate future impacts of development in the watersheds where feasible. Specifically, during this program year, a conceptual management plan for the reduction of sediment inputs will be prepared.

Project Objectives: Prepare a watershed management plan through contracting with a private engineering consultant that will lead to specific corrective actions in the watershed.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HU-B3	Improved Control of Erosion and Sedimentation	*New road construction *Shoreline modification/hardening *turbidity *light attenuation *Sediment loads	Reduction of non-point source pollution	ongoing

HU-B3.1 MAWSS Source Water Protection/Recreational Access Impact (Cancelled)

Performing Organization	MBNEP, TPL
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 5,000 (add. \$5,000 reprogrammed)
FY 08 NEP Funding (12)	\$ 20,000 (reprogrammed)
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 0
Match	\$ \$80,000 (MAWSS projected)
Leverage	\$
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$ 10,000 ADCNR; \$6,000 Auburn, \$4,000 DISL
Related Priority Issue(s)	Living Resources, Habitat Management
MBNEP Coordinator	Director/Deputy Director

J.B. Converse Lake, referred to as Big Creek Lake, is a 3,600 acre, man-made reservoir in western Mobile County, Alabama that is used as a source of drinking water for the city of Mobile, while providing recreational fishing for residents of the local area. The surrounding watershed of the lake is predominantly rural; however, residential and commercial development is anticipated to increase as a result of the construction of new roads and the establishment of a large tourist attraction to the northeast.

Although the Big Creek Lake watershed was identified as a target area by the MBNEP Project Implementation Committee, there are no plans at the current time to undertake any projects in this area.

During the 2009 program year, MBNEP will work to develop a stronger working relationship with the Alabama Department of Transportation as it expands route 98, in an effort to improve activities that could negatively impact the area.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
HU-C1	Increase Public Access and Eco-Tourism Opportunities	*Number of types of development permits *Population Growth/Changes *Functional wetland protected, restored or created ****(#'s of people using access points-not identified in workshop)	Increase in the importance of protecting the Estuary and its environment	ongoing

HU-C1.2 Coastal Bird Fest Tourism Economic Impact Assessment (Complete)

Performing Organization	MBNEP, ADCNR
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 5,000
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$
Match	\$
Leverage	\$
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, Habitat Management
MBNEP Coordinator	Director/Deputy Director

The most rapidly growing segment of the tourism market is nature-based tourism, according to the World Tourism Organization, with most tourists expressing an interest in natural, historic or cultural sites. The growth of ecotourism, besides increasing incomes, is compatible with the long-term conservation of natural and cultural resources of the state. Such preservation and development of natural and cultural attractions in turn enhances the quality of life and the appeal of location for industries with higher income employees.

Strong community support is needed to increase the success of these types of events. Annual events provide potential economic and community benefits of ecotourism and the importance for building a

regional marketing base. Over time successful events such as these have brought hundreds of thousands of tourism dollars to local economies as well as local will to fund conservation initiatives to protect natural economies.

This focus of this project was a baseline economic analysis of the Alabama Coastal Birdfest. This project is complete.

HU-C1.2: Improving Public Access Opportunities (Reprogrammed to projects)

Performing Organization	MBNEP, ADCNR
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 10,000 (10,000 reprogrammed)
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 0
Match	\$
Leverage	\$ 26,450 (ANEP-CRP Grant)
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$ 10,000 ADCNR; \$6,000 Auburn, \$4,000 DISL
Related Priority Issue(s)	Living Resources, Habitat Management
MBNEP Coordinator	Director/Deputy Director

This funding will be provided for the development of public access opportunities including boat launches, native planting, and recreational park development in Mobile County. Three different sites will be further evaluated for improvements and at least one site will be improved. These sites include: Heron Bay cutoff, Bay Front Park, both located in south Mobile County and Luscher Park located in the City of Mobile. Additional public access feasibility is planned for Baldwin County sites. During the 2008 program year, improvements at Heron Bay Cutoff were put on hold pending approval of the State's CIAP plan.

Project Objectives: Secure external funding; assess shoreline stabilization options; conduct project to secure southern portion of shoreline; conduct wetland planting

HU-C1.2 *Improving Public Access Opportunities Satsuma (Continuing) Chickasabogue (NEW)*

Performing Organization	MBNEP, ADCNR
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 10,000 (reprogrammed)
FY 10 NEP Funding (14)	\$ 15,000
Total Current Plan Funds	\$ 15,000
Match	\$
Leverage	\$
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, Habitat Management
MBNEP Coordinator	Director/Deputy Director

The City of Satsuma is located just south of the intersection of I-65 and Hwy. 43 in Mobile County, Alabama, Latitude 30.85 & Longitude -88.06. During 2009 this project was delayed due to staffing capacity issues.

During the 2010 program year, MBNEP will partner with the City of Satsuma to make renovations and improvements at Steele Creek Park by assisting the city with stabilizing the shoreline at this access point. The park currently provides public access to Steele Creek, a tributary of the Mobile-Tensaw Delta. This project will consist of shoreline stabilization and improvements to stormwater drainage.

At Chickasabogue Park, MBNEP will work with ADCNR, DISL and community leaders to develop interpretive signage along the boardwalk recently completed.

Project Objectives: Work with City of Satsuma to conduct shoreline stabilization; investigate opportunities for living shoreline activities

HU-C1.2 Interpretive Signage to Support the Scenic By-Way (NEW)

Performing Organization	Wolf Bay Watershed Watch, GCVB
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 51,000
Total Current Plan Funds	\$ 51,000
Match	\$ 55,000 (land value, other in-kind)
Leverage	\$
NEP Prior Year Funds	\$
Prior Year Match	\$
Prior Year Leverage	\$
Related Priority Issue(s)	Living Resources, Habitat Management
MBNEP Coordinator	Director/Deputy Director

Ecotourism is key to expanding stewardship of our coastal resources. To expand ecotourism opportunities, the Alabama Gulf Coast Convention and Visitors Bureau is working to establish a coastal connection scenic byway that would promote and educate visitors and residents about the waters, ways and wildlife of Alabama's Gulf Coast. While the intrinsic qualities and attractions along the byway are varied, the creation of a scenic byway will bring these varied resources together to create a sense of place, a destination, where coastal Alabama's natural, historic and recreational assets are all a part of an enjoyable and educational experience for visitors and where the spirit and importance of coastal stewardship are encouraged.

To market Alabama's scenic byway and create a sense of destination, the byway will have coordinated interpretive signage installed at key points that will visually and conceptually present the byway as an entity to travelers and will identify and promote its natural attractions and intrinsic qualities. Key areas along the more than 100 miles of Alabama's Coastal Connection scenic byway will be marked. These signs, along with additional marketing materials, will be the critical foundation on which byway partners can begin consistent promotion of the byway through their own marketing programs, leveraging all efforts.

The signs will offer descriptive and interpretive information describing the surroundings and the environmental and cultural heritage of the area. The signage will also help clearly mark the route, guiding travelers along the byway and promoting it as a destination in itself.

During the 2010 program year, MBNEP will work with the Cities of Orange Beach, Foley, and Elberta, the Alabama Gulf Coast Convention Visitors Bureau, and the Wolf Bay Watershed Watch to complete this project.

Project Objectives: Design signage template; Construct and install- proposed locations for the signs include: Bayou La Batre waterfront; Coden/Mon Luis Island; Dauphin Island Ferry landing and Estuarium; Fort Morgan Ferry Landing and birding area; Bon Secour National Wildlife Refuge; Gulf State Park; Perdido Pass; Orange Beach Waterfront park; Orange Beach Canoe Trail; Foley Eco-Park; Elberta Parks; Wolf Bay locations; Weeks bay NERR/Mouth of Fish River; Gator Alley/Eastern Shore Trail; and the Fairhope Pier.

IV. Education and Public Involvement

Increase awareness of natural resource issues and promote understanding and participation in conservation and stewardship activities.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
EPI-A1	Enhance Public Education and Outreach	*# of k-12 teachers who have implemented curriculum units based on completed environmental training *# of adults volunteering for environmental activities/monitoring *# of professionals who have implemented concepts based on environmental training *# of k-12 students who have participated in long term environmental projects at school that pursue advanced environmental education or jobs *# of Environmental Organizations *# of Environmental Activities	Increase knowledge and importance of estuary	ongoing

EPI-A1.1: Alabama Coastal Clean Oceans Initiative (NEW)

Performing Organization	Southeastern Wildlife Conservation Group
Project Lead	ADCNR/MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 5,814
FY 10 NEP Funding (14)	
Total Current Plan Funds	\$ 5,814
Match	
Leverage	
NEP Prior Year Funds	\$9,000
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Science Communicator

In 1997, it was estimated that 6.4 million tons of garbage reach the marine environment every year. A United Nations Environment Program Study reported estimates of 46, 000 pieces of plastic litter floating per square mile of ocean (UNEP 2006). Additionally, according to other studies, approximately 136,000 metric tons of plastic lines and nets are lost annually by commercial fishermen; 3,000 miles of commercial fish netting are lost annually; and 5 million plastic containers are tossed overboard from ocean-going vessels every day. These quantities do not include plastics and other pollution entering into the marine ecosystem from the general public from our beaches, rivers, streams or items thrown from cars

and making it into storm sewer drains. These pollutants eventually make it into the marine ecosystem. Plastics and other pollutants can affect marine wildlife in two important ways: by entangling creatures and by being eaten.

During the 2010 program year, MBNEP will continue to support in partnership with ADCNR and the Southeastern Wildlife Conservation Group the completion of this project.

Project Objectives: Install monofilament recycling containers at public access points throughout coastal Alabama; conduct targeted coastal clean ups

EPI-A1.1: Waters to the Sea: Rivers of Alabama and Georgia (NEW)

Performing Organization	Alabama Clean Water Partnership
Project Lead	Alabama Clean Water Partnership
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$ 10,000
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 10,000
Match	\$ 25,000 (in-kind)
Leverage	\$ 393,000 (private donors)
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Deputy Director

As the demand on Southeastern water resources grows, and the fresh water supply is increasingly affected by both drought and non-point source pollution, it is imperative that Alabama and Georgia citizenry, both youth and adult alike, be armed with the appropriate knowledge on which to base future decisions affecting both water quality and quantity. Waters to the Sea: Rivers of Alabama and Georgia will be the newest addition to the internationally acclaimed, Waters to the Sea CD ROM series- the definitive watershed education tool for inspiring informed river and coastal stewardship in the next generation.

Waters to the Sea: Rivers of Alabama and Georgia will provide the region’s youth, teachers, and their families, as well as members of the general public, with a comprehensive watershed education resource that combines cutting-edge interactive multimedia with hands-on classroom and field-based learning and stewardship activities linked to science and social studies standards. This program targets children in grades 4-8.

During the 2010 program year, MBNEP will continue to support the completion of this project in partnership with the Alabama Clean Water Partnership to produce Waters to the Sea: Rivers of Alabama and Georgia.

Project Objectives: Instill appreciation of importance of the region’s waterways and resources; introduce watershed-based landscape perspective and understanding of the fundamental relationship between historical and current land-use and water quality within the region, motivate students to become active stewards; contribute to core learning in areas of social studies, science, language arts and math.

EPI-A1.2: Bays and Bayous Symposium 2010 (NEW)

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 10,000
Total Current Plan Funds	\$ 10,000
Match	
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	All

The purpose of the Bays and Bayous Symposium is to promote environmental stewardship through science and community based environmental management in the North Central Gulf of Mexico. The major theme of the symposium is the integration of research and management as it relates to the effects of human activities on coastal ecosystems. The objectives of the symposium include reviewing status and trends as well as citing case studies related to water quality, living resources, and habitat management. Partners include the Mississippi-Alabama Sea Grant Consortium, Gulf Coast Research Lab, Alabama Center for Estuarine Studies, and the Dauphin Island Sea Lab. The tentative date is November 2010.

Project Objectives: Bring together the scientific community with resource managers as a vehicle for information sharing.

EPI-A1.2: Indicators/Status of the Bay Report (Complete)

Performing Organization	TBD
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$15,000
FY 08 NEP Funding (12)	\$ 7,710
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 22,710
Match	
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Deputy Director

From time to time, MBNEP produces reports for the public to provide the community with information related to the health of the estuary. In 2005, MBNEP held an Indicators workshop to identify types of data that would, when analyzed, communicate whether our estuary was in good shape or suffering. The workshop produced a list of 51 indicators of estuary health. During the next two years, MBNEP staff has conducted research on these and gathered data currently being collected regarding these 51 indicators from various state and local agencies. Although a significant amount of information has been amassed, there are still many gaps. To assist in making determinations about “status” based on this information, MBNEP has engaged the Science Advisory Committee of the Management Conference to take on the indicators project. This project is complete.

Project Objectives: Produce indicator report/publication.

EPI-A1.2: Management Conference Support- Continuing

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$5,000
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$
Total Current Plan Funds	\$ 5,000
Match	
Leverage	\$750 Private Support
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	All

The MBNEP Management Conference includes over 90 community stakeholder representatives that meet at least quarterly to discuss program, issues, actions, and progress. In order to facilitate these activities, MBNEP has set aside funding to support these efforts.

Project Objectives: To bring community stakeholders together to assist with implementation and updating of the CCMP.

EPI-A1.2: Community Special Events (Continuing)

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$11,500
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 10,000
Total Current Plan Funds	\$ 21,500
Match	Volunteer hours, donated equipment
Leverage	
NEP Prior Year Funds	\$ ongoing activity
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Project Coordinator

Participation in trade shows and festivals provides regular exposure for the MBNEP and can serve as additional outlet for distribution of CCMP-related materials. It is also necessary to support other agencies and organizations that perform CCMP related events. Prior support and participation has included Hazardous Waste Amnesty Days, Coastal Kid’s Quiz, children’s fishing events, and Bay Area Earth Day. During the 2009-2010 program year, MBNEP will prepare a general request for proposals from community groups to allocate these funds. This request for funding will come out during the summer of 2009.

Project Objectives: Participate in and/or support area environmental events.

EPI-A1.2: Outreach Campaign: Community and Industry Leaders (NEW)

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 2,030
Total Current Plan Funds	\$
Match	
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Director

This funding has been allocated to support efforts to cultivate community leaders and private industry as MBNEP initiates a targeted campaign to reach new stakeholders and build new partnerships.

EPI-A1.3: Quarterly Newsletter Publication (Continuing)

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$6,000
FY 10 NEP Funding (14)	\$ 6,000
Total Current Plan Funds	\$ 12,000
Match	
Leverage	\$ 6,000 (ADCNR grant)/annual
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Science Communicator/Project Coordinator

On a quarterly basis, the MBNEP publishes a newsletter in partnership with the ADCNR. This newsletter is distributed it over 2,000 residents and visitors to the area.

During the 2010 program year, MBNEP will continue to publish this and will look for new ways of distributing it via e-mail or internet.

EPI-A1.3: Outreach Materials: Promotional Items and Publications (Continuing)

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 9,000
Total Current Plan Funds	\$ 9,000
Match	
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Project Coordinator/Program Administrator

This funding has been allocated for the production of fact sheets, educational brochures and for reprints of already existing outreach materials and for the production of outreach materials at special events.

CCMP	SUB OBJECTIVE	INDICATORS	OUTCOMES	STATUS
EPI-B1	Develop Comprehensive Citizen Monitoring and Reporting Programs	*# of volunteer monitors *# of reports	Increase the # of citizens that are actively engaged in sustaining the estuary	

EPI-B1.1: Community Involvement: CAC Mini Grants for Water Testing Program- NEW

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$ 3,233
FY 09 NEP Funding (13)	\$
Total Current Plan Funds	\$ 3,233
Match	donated labor
Leverage	
NEP Prior Year Funds	
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Outreach and Education Coordinator

Citizen volunteers are becoming increasingly involved in monitoring the quality of the waters of Coastal Alabama. From a simple "creek walk" to sophisticated analyses, they evaluate water quality for a host of reasons. For some, it is because they live next to a stream and feel closely affected by it. For others, the monitoring of a stream provides a vital, practical, educational experience. Some groups use monitoring to raise awareness in the community about water quality and how it is influenced by activities and land uses within the watershed.

One of the first activities undertaken by a re-organized Community Action Committee (CAC) in early 2007 was a needs assessment to determine commonalities among its members. . The top three areas of common need identified in this assessment were concern about water quality, improved communication, and assistance with organizational development. Of these three, the group has decided to address water quality issues throughout the two counties by establishing a coordinated, tiered, water monitoring program that can be implemented by grassroots organization volunteers and other citizens. A review of the activities of each of these groups indicates that over half already conduct volunteer water monitoring. However, they have been frustrated by a lack of knowledge or direction of methodology to take that monitoring to "the next level". Other groups have yet to start testing but are very interested in establishing a volunteer water monitoring program in their area.

During the 2008 program year, MBNEP will facilitate the creation of a comprehensive water monitoring program for the CAC. Partners will include Alabama Water Watch, ADEM, Coastal Alabama Clean Water Partnership, and possibly others. The program concept includes the "beginner" groups being trained and learning from those groups already engaged in water monitoring activities. More experienced groups will identify causes and effects of impairments along with potential corrective actions.

The *purpose* of this project is to educate citizens about the water quality issues related to their local watersheds, who will, in the process, become better environmental stewards. The *expected outcome* is the

adoption, use, and promotion of environmentally sensitive practices by citizens to protect their local waters.

The goal of this effort is to increase citizen involvement in hands-on monitoring of local waters as a mechanism for better identification of trends and causes and effects of water quality improvements or degradation.

The *objectives* of this project are to: 1) gather data on a regular basis from targeted sampling sites on water quality parameters including temperature, dissolved oxygen, salinity, nutrients, and bacterial pathogens; 2) establish baseline data and/or reveal trends for local water bodies; 3) provide ongoing information through meetings, training, publications, and web sites; and 4) identify and undertake mitigation efforts to correct negative impacts. The *educational priorities* are to build the capacity of these community organizations to lead water monitoring efforts in their local area and to connect citizens to and educate them about the water resources.

EPI- Project Coordinator

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$
FY 08 NEP Funding (12)	\$
FY 09 NEP Funding (13)	\$
FY 10 NEP Funding (14)	\$ 49,000
Total Current Plan Funds	\$ 49,000
Match	donated labor
Leverage	
NEP Prior Year Funds	
Prior Year Match	
Prior Year Leverage	
Related Priority Issue(s)	All
MBNEP Coordinator	Outreach and Education Coordinator

Program Management

The MBNEP Program Office works closely with all of the MBNEP Management Conference members on initiatives relating to the CCMP. The MPA budget will provide resources for the Program Office to continue program planning, development, implementation, evaluation, and reporting. Staff will provide organizational and logistical support for all of the Management Conference committee meetings and coordinate/communicate 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.

MPA: Overall Administration/Travel

Performing Organization	MBNEP
Project Lead	MBNEP
FY 07 NEP Funding (11)	\$ 462,908
FY 08 NEP Funding (12)	\$ 527,274
FY 09 NEP Funding (13)	\$ 612,736
FY 10 NEP Funding (14)	\$ 453,799
Total Current Plan Funds	\$ 2,056,717
Match	\$ un-recovered indirect from DISL
Leverage	
NEP Prior Year Funds	\$
Prior Year Match	in-kind value of truck DISL
Prior Year Leverage	\$
Related Priority Issue(s)	All
MBNEP Coordinator	Director

This amount includes all the necessary items for program administration including salaries, benefits, rent, supplies, equipment, phone, internet services etc.

In addition, this amount includes \$13,000/year that is specified for traveling regionally and nationally. Program staff will participate in regional, state, and national conferences and meetings relevant to estuarine management. EPA requires through an earmark \$13,000 of program funds for travel related to outreach and technology and information transfer. Attendance at Association of National Estuary Programs workshops and EPA workshops / meetings will be stressed.

Indirect Cost charged at a rate of 15% on all cash expenditures (grant and matching funds) to 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 cases basis.

Indirect costs charged by our host institution to administer the grant are included .

Staff Position	Employee	Responsibilities	Main Activities
Program Director	Toby Bolton	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 CCMP indicator program; Oversees all office activities.
Deputy Director	Roberta Arena Swann	Conducts activities to identify, design and develop projects that further the implementation of the CCMP	Executes strategic and organizational planning for program; conducts project design, development and implementation; assists with financial resource development and management; prepares EPA plans and reports; prepares contracts with local entities; and other activities as deemed necessary
Science Communicator	Thomas Herder	Communicates scientific data to public and conducts education activities	Translates scientific information for public media; develops special educational programs that provide for technology transfer; conducts project management for on the ground project with citizen involvement component; and other activities as deemed necessary
Project Coordinator	Sara Shields	Coordinates Community Outreach and Education Programs	Manages program website and other online communication tools; assists with EPA reporting; assists with volunteer monitoring programs; develops public awareness activities; coordinates citizen; stewardship activities and other activities as deemed necessary.
Business Manager	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