Alabama CUITIEN CONNECTION

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Tracking Progress on Watershed Plans

By Christian Miller, Non Point Source Pollution Outreach, Auburn University and Mobile Bay National Estuary Program

As you will read in this edition's Estuary Reflections, the Mobile Bay National Estuary Program (MBNEP) has embarked on a wholesale watershed-based approach to ecosystem restoration and protection that is initiated by development and

implementation of comprehensive watershed management plans (WMPs) for all tidally-influenced watersheds in coastal Alabama. What follows is an update of the WMPs in process, which encompass 15 coastal watersheds.

Fowl River was recently assessed by the Geological Survey of Alabama and found to be one of the most pristine watersheds yet monitored in the State. The recently completed WMP for Fowl River highlights the importance of conserving upland wetland and riparian areas to preserving the function of critical habitats throughout the watershed and maintaining healthy streams.

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Coastal Corner

By Phillip Hinesley, Coastal Section Chief, ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES STATE LANDS DIVISION

Coastal Resiliency and Coastal Hazards Along the Gulf Coast

According to the National Oceanic and Atmospheric Administration (NOAA), in 2010, 123 million people, or 39 percent of the United States population, lived in counties directly on the shoreline. Of these, over 60 million people in the U.S. call the Gulf of Mexico their home, with about a third of those living in coastal counties or parishes. The warm climate, low cost of living, laid back lifestyle and the natural beauty act like a magnet to attract people to the region. With the additional population increases, Baldwin County is now the fastest growing county percentage-wise in the state of Alabama, and Mobile is the second largest county in population in the

With these population increases, homes, businesses, and infrastructure are at great risk of damage from hazards such as hurricanes, coastal storms and flooding. Communities that prepare for short- and long-term impacts, consider hazards, risk, and land-use planning, and assess development and management of natural habitats are more resilient communities and are able to recover from disasters more quickly.

So it is probably no surprise that the Alabama Coastal Area Management Program (ACAMP) listed coastal hazards (i.e. storms, flooding, sea level rise) as a highpriority area for funding from the NOAA

Coastal Zone Enhancement Program. The enhancement program is an opportunity for states and territories with coastal programs, like Alabama, to complete an assessment every five years to determine priority needs and opportunities for improvement in one or more of nine areas: wetlands, coastal hazards, public access, marine debris, cumulative and secondary impacts, special area management plans, ocean and Great Lakes resources, energy and government facility siting, and aquaculture. Once the priorities are identified, the states then develop a multi-year strategy that focuses on one or more of the priorities and submits the plans to NOAA for approval and funding.

In the current five-year cycle, the ACMP proposes to use NOAA funds to implement a project entitled Community Resiliency Initiative: Planning for Resilient Communities. This project will help coastal

communities mitigate and adapt to coastal hazards and stressors through enhanced floodplain management, technical assistance, and public outreach programs. To implement the initiative, the Alabama Department of Conservation and Natural Resources (ADCNR) will develop a grant program to provide guidance and funding to local governments within Mobile and Baldwin counties for the purpose of becoming active in the Community Rating System (CRS) and developing and implementing local ordinances related to floodplain management and community resiliency from coastal hazards. Included in the initiative is the establishment of a public awareness program by local governments relating to coastal resiliency. Guidance will be provided through ADCNR with an advisory committee of local partners, such as the Alabama Department of



Damage to beach front condos in Gulf Shores, Alabama from Hurricane Ivan.

Economic and Community Affairs (ADECA), Mississippi/Alabama Sea Grant, Alabama Association of Floodplain Managers, Mobile Bay National Estuary Program, academic institutions, etc.

Throughout the initiative, ADCNR will require an outreach component where local governments incorporate actions that engage the public in the process by conducting public forums, public service announcements and other actions at strategic points in the process. ADCNR, an advisory committee of local partners (created for the strategy implementation), and other coastal partners of ACAMP will work with communities to develop and disseminate information and presentations targeting public awareness and input.

ADCNR will work closely with the ADECA, Office of Water Resources (OWR), on training materials and information sources related to OWR floodplain management programs. This is done in conjunction with FEMA and local communities to build relationships and to strengthen mitigation plans and actions to better protect residences and communities through flood mapping and flood studies.

Additional partners in the effort could include the Alabama Association of Flood Plain Managers, who sponsor conferences and seminars that provide up-to-date educational programs and network opportunities with other partners interested and experienced in floodplain management.



Damage to beachfront home from Hurricane Dennis.

The goal is to educate local communities about the CRS and encourage local communities to participate in CRS which will benefit all parties. (For more information on this effort, go to http:/www.outdooralabama.com/)

In addition to the ACAMP effort, NOAA has also funded the Gulf of Mexico Alliance (GOMA) to address coastal resilience. The GOMA, based in Ocean Springs, Mississippi, is a partnership working to sustain the resources of the Gulf of Mexico. Led by the five Gulf States, the broad partner network includes federal agencies, academic organizations, businesses, and nonprofits in the region. Its goal is to significantly increase regional collaboration to enhance the environmental and economic health of the Gulf of Mexico, GOMA has six priority issue areas: education and engagement, data and monitoring, habitat resources, water resources, wildlife and fisheries, and coastal resilience.

The GOMA received a major NOAA Coastal Resilience Grant recently. Two of the six GOMA teams, Habitat Resources and Coastal Resilience, will work with ten coastal Gulf-wide communities to foster resilience planning and promote best practices for future mitigation actions. The award will support the update of existing tools identified by communities as vital to the decision-making process. The project aims to improve risk communication and will develop a Coastal Resilience Roadmap for use by communities throughout the Gulf to prepare for future hazards.

"The challenges confronting our nation's coastal communities are incredibly complicated. Effective solutions are going to require strong science, ingenuity, and collaboration if they are going to safeguard and ensure the future vitality of our economy and valuable natural resources," said Dr. Jeffrey Payne, Acting Director of the NOAA Office for Coastal Management.

GOMA was awarded one of six grants totaling \$4.5 million. NOAA received 132 proposals, creating a highly competitive selection process. The chosen projects improve coastal risk assessment and communication, promote collaborative



Damage to a local Gulf Coast marina from Hurricane Ivan.

resilience planning, and better inform science-based decisions.

"The projects approved for funding represent opportunities to do just that. We are excited about what these partnership projects will accomplish at the local level and the positive impact this program will have on our nation." Payne said.

Gulf of Mexico coastal communities will enter a competitive process for selection as one of the ten projects worth \$45,000 each. The communities will evaluate ways to enhance resilience by working with experts from the GOMA teams. As the communities take new steps to become risk-resilient, they will become part of a Resilience Community of Practice. Here, they will share their experiences with their peers and establish protocols from which others may learn. For more information on this project, go to: www.gulfofmexicoalliance.org.

Estuary Reflections

By Roberta Swann, Director, Mobile Bay National Estuary Program

Half Way There -

Achieving the 5-Year Goals of the CCMP

he Mobile Bay National **Estuary Program's Comprehensive Conservation and Management** Plan (CCMP) for Alabama's Estuaries and Coast 2013-2018 was developed in collaboration with government agencies, industry, academia, and citizen groups to protect water quality, sustain populations of key living resources, manage vital habitats, mitigate human impacts, and build citizen **stewardship.** This CCMP includes actions prescribed by teams assembled around the six things people value most about living in coastal Alabama: Access, Beaches and Shorelines, Fish and Wildlife, Environmental Health and Resiliency, Heritage and Culture, and Water Quality. Over 140 actions were compiled, posted for public review and, with input from 232 respondents, distilled, prioritized and included in five-year strategies under one of the following areas: Estuary Status and Trends, Ecosystem Restoration and Protection, Technical Assistance and Capacity Building, and Education and Public Involvement. It's now 2016 – halftime – when coaches review and evaluate progress to ensure a strong second-half performance by their team. So how did we do in the first half?

Estuary Status and Trends (EST) addresses "biological integrity," particularly in the most- and least-stressed habitats and watersheds, what monitoring and research are needed, and how we can reduce stressors and then communicate the biological changes that result. The MBNEP's Science Advisory Committee (SAC) has overseen

important data development and mapping initiatives funded through the National Fish and Wildlife Foundation's Gulf Environmental Benefits Fund (NFWF GEBF). Mapping of coastal submerged aquatic vegetation (SAV), previously undertaken in partnership with the State in 2002 and 2008-2009, is currently nearing completion. High-resolution habitat mapping to establish a present-day baseline of distribution and coverage and an updated soil survey, both of the two-county area, have also been initiated. Discussions are currently under way with the Dauphin Island Sea Lab over establishment of a data repository accessible to resource managers and investigators.



Another CCMP-prescribed EST initiative is the development of a Habitat Restoration Plan and a Mapping Tool to identify critical habitat restoration needs to improve ecological function and to provide a tool to track progress of conservation and restoration activities. The Habitat Restoration Plan will combine data from habitat and SAV maps, as well as digital information and recommendations from completed watershed plans, to determine where restoration and conservation

activities will provide the greatest "bang for the buck" towards restoration and protection of ecosystem services. This plan will include an inventory of restoration and conservation opportunities to guide future NFWF GEBF and other funding source requests. The online decision support mapping tool will utilize a number of statewide data sets and data gleaned from ongoing watershed management planning to provide scientific information to support decisions about watershed and estuarine resources along with access to all data sets. It would supplement the ongoing development of coastal watershed management plans by providing a resource for community stakeholders and planners to prioritize and monitor the implementation of management recommendations and to guide NFWF, RESTORE, or other funders to determine where restoration efforts should be used.



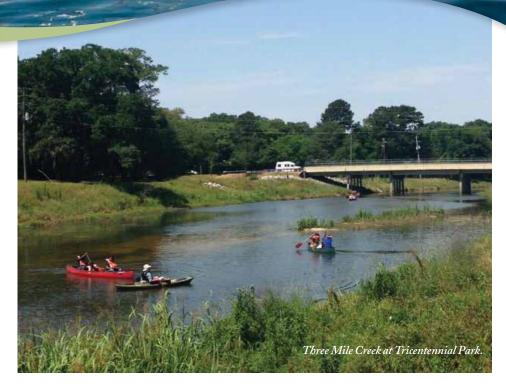
Meanwhile, towards development of a Biological Condition Gradient (BCG) to track the health of critical habitats, the SAC has developed a standardized monitoring framework to assess water quality, understand freshwater flow and sedimentation, and relate the condition of habitats to the impacts of development. Wetland assessments delivered as part of the habitat mapping effort and indices

developed for local streams and their banks will be used to calibrate this tool to understand trends and condition and to guide management actions. The BCG framework will be tested in the D'Olive Watershed, where stream restoration activity is ongoing and impacts to SAV are apparent. Sediment analyses to determine baselines and track restoration success are also happening on both sides of the Bay.

The CCMP prescribes scientificallybased Ecosystem Restoration and **Protection** measures developed and recommended through, and including, watershed management planning. This CCMP has garnered national attention for a watershed approach that prescribes watershed management plans (WMPs) to ensure restoration projects are based in science and fit into an overall management program. This approach is a shift in paradigm from traditional municipal or county planning, where geopolitical boundaries limit actions.

Suggested activities in the CCMP's ERP strategy are highlighted by development and implementation of WMPs and a protocol that involves sediment-loading analysis as a precursor to WMPs. Recognizing the value of this approach, NFWF GEBF funding has allowed us to move quickly towards fulfilling these recommendations. NFWF funded a sediment analysis and WMP for Fowl River, both recently completed, and sediment analyses are underway for Bayou La Batre, Dog, and Fish rivers' watersheds. A subsequent GEBF award funded WMPs for Bayou La Batre River, Dog River, and Fish River, Bon Secour River (all in progress) and the Wolf Bay and Apalachee-Tensaw complexes (anticipated to begin soon). The Federal RESTORE Council has approved funding WMPs for all 19 remaining tidallyinfluenced watersheds in Baldwin and Mobile counties. Planning for West Fowl River/Delchamps Bayou and Dauphin Island will be incorporated into the Bayou Le Batre effort, leveraging RESTORE funding and the Corps of Engineers, State, and USGS Alabama Barrier Island Study.

Implementation of stream restorations recommended in the 2010 D'Olive Creek WMP is progressing with dramatic early



results. The award-winning 2012 construction of the step pool stormwater conveyance in the Joe's Branch subwatershed and the NFWF-funded restoration of JB Phase 2 resulted in an over 90 percent reduction of downstream sediment loads. The five remaining NFWF-funded Joe's Branch restorations are currently underway. The Tiawasee Creek restoration, implemented by a partnership between MBNEP with NFWF funds and the City of Daphne with Coastal Impact Assistance Program funds is substantially completed. Restoration of the chronically degraded D4-D6 tributary to D'Olive Creek between Interstate 10 and U.S. Highway 90 will be underway in May, and remaining NFWF-funded D'Olive Creek restorations are all in planning phases.

WMP implementation of the west side of the Bay is ramping up, with several recommendations from the 2013 Three Mile Creek (TMC) WMP underway or planned. MBNEP has:

- Helped the City of Mobile secure National Park Service and Mobile County Health Department funding to construct the first leg of the TMC Bicycle Trail and Kayak Launch.
- Collaborated with the MLK Jr. Avenue Redevelopment Corporation to establish and conduct a successful Leadership Academy.
- Funded an Auburn University analysis and hydrologic modeling of areas draining into Toulmin Springs Branch and a Mobile

County drainage study to guide drainage improvements to alleviate flooding.

- Conducted intensive community adaptation planning at churches across the lower TMC watershed to determine where environmental protection is needed, what parts of the community can be accommodated, to set a course for future resiliency planning for critical infrastructure, and to identify areas that may need to be vacated as waters rise.
- Cultivated a partnership with the University of South Alabama towards increased use of low impact development (LID) and collaboration on engineering initiatives.
- Been involved in Three Mile Trace Neighborhood of Choice planning initiative.
- Partnered with The Nature Conservancy in planning a Toulmins Spring Branch Stormwater Park.

Other WMPs are also being implemented. In the Eight Mile Creek Watershed, an assessment of failing septic systems has been completed, and the Mobile County drainage study will guide improvement plans. In Fowl River, a construction contract has been awarded to restore the shoreline along the northern end of Mon Louis Island to its 1995 footprint, create an additional four acres of salt marsh, and dredge the shallow navigation channel through the river mouth into Mobile Bay.

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BY CARL FERRARO, BIOLOGIST III, ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, STATE LANDS DIVISION, COASTAL SECTION

s part of the Deepwater Horizon **Natural Resource Damage Assessment Phase I Early Restoration Plan (DWH-**NRDA-ERP), the Alabama Department of Conservation and Natural Resources (ADCNR) has initiated construction of the Marsh Island (Portersville Bay) **Restoration Project. A construction** contract was recently awarded, and at the time this article was written. construction was scheduled to begin in early May 2016 and should be well underway by time of the printing of this issue of Alabama **Current Connection.**

State-owned Marsh Island is in the Portersville Bay portion of Mississippi Sound, located approximately four

miles south of Coden in southern Mobile County. The island is mainly covered by low-lying salt marsh with some higher areas comprising oyster shell hash and salt-tolerant shrubs. Early 1800s historic navigation charts

indicate that the island was over 175 acres in size. By 2010, due to sea level rise, wave action, storms and other factors, the island had been reduced to less than 24 acres. The Marsh Island restoration

project was originally proposed in 2011 as part of DWH-NRDA-ERP-Phase I. The project will restore at least 50 acres

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of salt marsh and

tidal creeks on the north

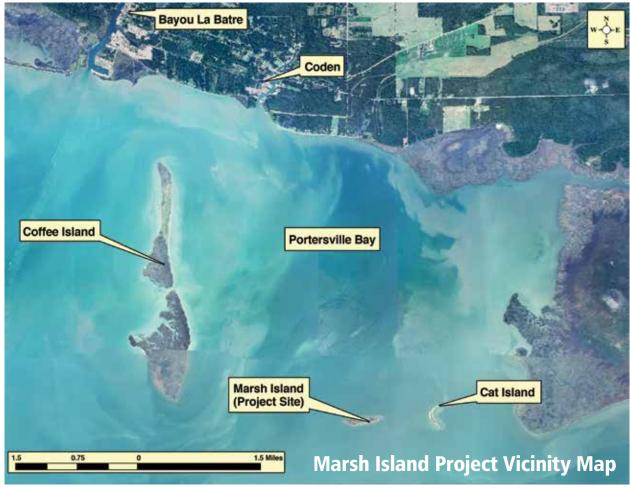
side of the island.

of salt marsh and tidal creeks on the north side of the island. Additionally, a breakwater will be constructed along its southern shoreline to reduce wave energy and further erosion.

After the project

was approved as part of the DWH-NRDA-ERP Phase I, the ADCNR entered into a professional services contract with Thompson Engineering, who have since provided design, engineering and





regulatory compliance services. This has included conducting field surveys and environmental assessments, geotechnical investigations, wave modeling, preparing drawings and construction documents, and

assisting in obtaining a U.S. Army Corps of Engineers permit for the project.

Once all regulatory and environmental requirements were met, permits for the project

were received by the ADCNR in late August 2015. The Thompson team then went to work finalizing the project manual, drawings and bid documents. A request

for bids was released on November 15, 2015, and bids were opened on January 13, 2016. 4-H Construction was the low bidder on the project, and a contract was executed with 4-H on March 11, 2016.

The Marsh Island

Restoration Project is

another step in continuing

to address ecological injuries

caused by the oil spill.

The first phase of construction will involve creating containment dikes around the 50-acre marsh restoration area on the north side of the island. Once dikes are in place, dredging and

placement of sediment will commence, as will construction of the breakwater on the south side of the island. Active construction is expected to take approximately 240

days. The sediment will then be allowed to settle and consolidate before the excavation of the tidal creeks and the planting of marsh vegetation. Commencement of construction to completion of planting could take up to 500 days.

The Marsh Island Restoration Project is another step in continuing to address ecological injuries caused by the oil spill. Look for updates on this and other coastal restoration projects in the Fall 2016 issue of Alabama Current Connection.

Alabama's RESTORE Act Center of Excellence What Is It and What Will It Do?

BY RENEE COLLINI, SCIENCE COORDINATOR, MOBILE BAY NATIONAL ESTUARY PROGRAM AND JOHN VALENTINE, DIRECTOR, DAUPHIN ISLAND SEA LAB

pril 2010 saw the Gulf Coast rocked with the Deepwater Horizon oil spill. In addition to effects off-shore in the Gulf, coastal ecosystems and economies suffered negative impacts. Recognizing this, in July 2012, Congress passed the Resources and Ecosystem **Sustainability, Tourist Opportunities,** and Revived Economies of the Gulf Coast States Act (RESTORE Act). The RESTORE Act ensures that 80 percent of all administrative and civil penalties, often referred to as "Clean Water Act Penalties," related specifically to the Deepwater Horizon spill will be utilized to restore the

ecosystems and economies of the Gulf Coast. The 80 percent is placed into what is called the Gulf Coast RestorationTrust Fund (Trust Fund).

The monies dedicated to the RESTORE Act are then divided into five different sections called "pots" or "buckets" (Fig 1). One of these five buckets is dedicated to the development of Centers of Excellence in each state. The Centers of Excellence bucket contains 2.5 percent of the total funds that enter into the Trust Fund and 25 percent of the interest generated by the Trust Fund. Those monies are then divided among the states to develop Centers of Excellence.

What is a Center of Excellence and what does it do?

A Center of Excellence, will distribute the funding from the Trust Fund in the form of grants to further science, technology, and monitoring related to Gulf restoration. To become a Center of Excellence, U.S. Treasury regulations stipulated that a competitive process must be run in each state to identify the best consortium or institution for the job. In Alabama, the Alabama Gulf Coast Recovery Council put out a Request for Proposals (RFP) inviting institutions and consortiums to apply to be the Center of Excellence. Based on the submitted proposals on December 4, 2015,

Allocation of Gulf Coast Restoration Trust Fund



*Supplemented by interest generated by the Trust Fund (50% to Gulf Coast Ecosystem Restoration Council, 25% to Science Program, 25% to Centers for Excellence)

Visual of the allocation of the Gulf Coast Restoration Trust Fund. Image courtesy of www.restorethegulf.gov

the Alabama Gulf Coast Recovery Council voted unanimously to recommend that the State of Alabama enter into contract negotiations with the Dauphin Island Sea Lab (DISL) to be Alabama's Center of Excellence. Those contract negotiations have begun and are the first in a series of actions required to officially be recognized as Alabama's RESTORE Act-funded Center of Excellence.

Once a Center of Excellence has been identified, each state has adopted different ways to go about distributing the funds. Each Center of Excellence has to identify focus areas from U.S. Treasury-defined priority disciplines. Dauphin Island Sea Lab chose to focus on four of the five:

- Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast Region;
- Coastal fisheries and wildlife ecosystem research and monitoring in the Gulf Coast Region;
- > Sustainable and resilient growth, economic and commercial development in the Gulf of Mexico; and
- ➤ Comprehensive observation, monitoring, and mapping of the Gulf of Mexico.

The funds awarded to each Center of Excellence will then be utilized to further the science, technology, and monitoring under these specific priority disciplines. The Alabama Center of Excellence will do this through a competitive grants process and will coordinate with the other four Centers of Excellence and the Gulf of Mexico University Research Collaborative to reduce duplicative efforts. Additionally, outreach will be conducted utilizing Mobile Bay National Estuary Program and Mississippi-Alabama Sea Grant to inform policy-makers and concerned citizens about the importance of our coastal resources to successful coastal communities.

Research from the Alabama Center of Excellence will provide improved understanding and insight to decision-makers working for strong and resilient Alabama communities, ecosystems, and economies. ■



Half Way There - Achieving the 5-Year Goals of the CCMP Continued from page 5



Towards Technical Assistance and Capacity Building, MBNEP has worked to improve private sector/business understanding of coastal assets by hosting boat trips in TMC and on the Bayou La Batre River, tours of restoration projects, and various community presentations. Working with a broad range of partners, the Create a Clean Water Future Campaign has gained traction with adoption by local business interests, recent introduction of an informative website, and a public outreach campaign with billboards and signage encouraging reduction of litter. A video was produced to educate municipal officials on MS4 permit requirements, and another, Slowing the Flow, is being produced to encourage the use of Low Impact Development (LID) practices. MBNEP provided a Living Shorelines Manual for property owners and are involved in an effort to educate contractors in living shorelines practices with production of another manual.

Education and Public Outreach

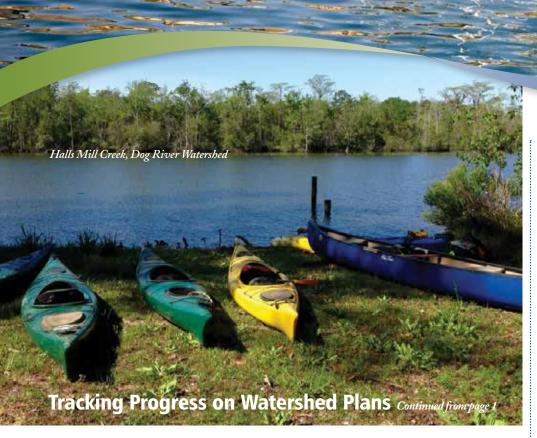
efforts are critical to encouraging wise stewardship of coastal assets, and most MBNEP initiatives direct significant energy towards this area. MBNEP continues to:

- Provide community presentations and workshops;
- Engage watershed groups in WMP development;
- Promote and support volunteer water quality monitoring;
- Host community cleanups to encourage positive behavior changes and ommunity ownership; and
- Participate in environmental festivals and celebrations of heritage and culture.

In addition, MBNEP's Community Action Committee has sponsored fundraising workshops, volunteer monitoring trainings, and a grant-writing workshop.

Halfway through our 5-year strategies, we can take some satisfaction in progress achieved while maintaining respect and recognition of CCMP-prescribed activities not yet checked off the list. The groundwork has been laid for a solid second half, ensuring a strong finish in achieving the 5-year goals of the CCMP.





The WMP acknowledges that although the overall health of Fowl River is good, nutrient loading, stormwater runoff from land use change in the headwaters, and habitat loss are all issues that need to be addressed and monitored. Recommendations for initial implementation focus on restoring and stabilizing shorelines in the lower watershed, habitat restoration, stormwater project opportunities, and initiation of a public education and outreach program.

"We are happy to announce that the Final Fowl River Comprehensive Watershed Management Plan has been published. The plan is actively being utilized as funding requests have already occurred to implement high-priority projects outlined in the plan. We are extremely grateful to the many active and engaged citizens that were vital in the effort to protect the important natural resources throughout Fowl River. Special thanks to Mobile Bay NEP for spearheading this effort and their collaborative work to protect our coastal watersheds throughout Mobile and Baldwin Counties." - Lee Walters, Director of Environmental, Goodwyn Mills and Cawood

Dog River flows through the heart of Mobile and drains over 60,000 acres of mostly urban or transitioning land. Community input to the Dog River and Garrow's Bend WMP indicates improving water quality, litter reduction, and increasing recreational access to be among the most important issues. The Goodwyn Mills and Cawood (GMC) team leading the project has focused on assessing available water quality data and looking for ways to supplement this with additional monitoring where needed. Another component the watershed team has focused on is an assessment of critical habitats in the watershed. With so much of the upper portions of the watershed being highly urbanized, identifying and protecting remaining headwater wetlands and riparian areas is a paramount concern.

"The development of an updated watershed management plan for Dog River is crucial to providing the scientific background necessary for us to successfully compete for funding for projects with a long-term benefit to Mobile's Dog River. Protection of critical wetlands, expansion of public access, and involvement of citizens in meaningful water quality monitoring throughout the watershed help to give citizens of all ages a connection to the river. The watershed management plan gives everyone a chance to speak out and work together to make Dog River an amenity for all Mobilians." - Dr. Mimi Fearn, University of South Alabama Associate Professor of Geography, Retired

Bon Secour has long been associated with Alabama's seafood industry, a fact reflected in stakeholder surveys and input sessions that have been a part of the planning process for Bon Secour, Oyster Bay, and the Skunk Bayou watersheds. Community input has focused on the importance of protecting the fisheries, improving water quality, and reducing the impacts of stormwater related to urbanization in the headwaters of the Bon Secour River. The Volkert team has recently been focusing on completing field assessments throughout the planning area and identifying potential management managers that address stakeholder concerns.

"Bon Secour River has a long, rich history for recreation and seafood so our goal is to restore and protect the river for our future generations. Local participation will be key, as there are many diverse interests throughout the watershed." -Leslie Lassitter Gahagan, Environmental Programs Manager, City of Foley



Bayou La Batre is intimately tied to the coastal habitats supporting fisheries that are the local economy's main driving force. In the Bayou, an ongoing effort to engage the community coalesced around two central themes: creating additional public access points for the Bayou's waterways and increasing the community's resiliency or ability to withstand future storms and sea level rise. The Dewberry team has focused the science on cataloging the current health and function of the Bayou's waters and ecosystems and developing a suite of recommended management measures encompassing everything from habitat protection to improving city stormwater and sanitary sewer infrastructure.



Stakeholder workshop for Weeks Bay Watershed Management Plan.

"The resident watershed stakeholders are very adamant that protecting the natural habitat is paramount to preserving their history and culture." - Chris Warn, Project Manager, Dewberry

Weeks Bay is the receiving water of both the Fish and Magnolia rivers, which collectively drain over 200 square miles in western Baldwin County. At the end of 2015, a team led by Thompson Engineering was selected to produce the WMP for the Weeks Bay Watershed. A Stakeholder Working Group was formed in early 2016 to help guide the development and early

implementation of the plan and helped facilitate a stakeholder workshop drilling down into the perceived strengths, weaknesses, and opportunities within the watershed. Concurrent to the WMP effort, an assessment is underway within the watershed that will quantify sediment transport and examine impacts of landuse change and associated impacts on water quality.

"The Thompson team brings a great deal of expertise and technical qualifications. As a member of the stakeholder working group, I see the ongoing modeling, research, monitoring, and public participation resulting in development of strategies that effectively address challenges in a rapidly changing area." -Mike Shelton, Training and Watershed Program Coordinator, Weeks Bay Reserve

Mobile Bay National Estuary Program Continues to Grow: Welcomes Two New Employees

By Mobile Bay National Estuary Program Staff

Ben Brenner is an independent video and web producer based in Mobile, Al. For the past decade, he has been helping a variety of small businesses and nonprofits throughout the country with their marketing and digital production. Ben's role at the MBNEP is filming and production



Ben Brenner, Digital Production Coordinator

of video content, websites, and other digital media. When not working on a project, you'll find him on a bicycle or in a kayak exploring the many trails and waterways the area has to offer.

Dixie Pomerat has provided administrative support, technical writing, social media and content development for digital imaging businesses in Mobile as well as for nonprofit organizations in North Carolina and Alabama. The mother of three children, she likes to cook, read and hike.



Program Administrator

At Mobile Bay National Estuary Program, you will often find her working at her standing desk.



Community Collaboration Leads to Cleanup Success

By Angela Underwood, Natural Resources Planner, Alabama Department of Conservation and Natural Resources, STATE LANDS DIVISION - COASTAL SECTION

Deptember 17th will mark the 29th anniversary of the Alabama **Coastal Cleanup. Hard work and the** participation of over 5,500 community members lead to the continued success of Alabama's largest volunteer effort. With 31 cleanup zones representing coastal and inland waterways, dedicated zone captains are critical to ensuring that volunteers have the supplies and support they need to accomplish litter removal on such a large scale.

Zone captains distribute supplies, ensure volunteer safety and comfort, and tally the totals of trash removed from each zone. To recognize the outstanding work accomplished by volunteers across the state, zones are chosen each year to receive the Alabama People Against a Littered State (AL PALS) Governor's Award. In 2015, the Theodore Industrial Canal (TIC) zone in Mobile County and the Daphne zone in Baldwin County were honored. The cleanups at both sites are truly community

events, with several partnering groups at each site working to implement the event.

The TIC zone was started in 1999 and captained by Travis Osborne, current Environmental Manager at Holcim U.S. Inc. As participation increased, Travis enlisted Mitzi Houk, former Alabama Power employee now with Southern Company, to be his co-captain. Over the

years, Holcim and Alabama Power have been great supporters of Coastal Cleanup, providing not only volunteers, but the small details such as drinks, snacks, gloves, sunscreen, bug spray, and hand sanitizer that go into making a cleanup event

safe and successful. After the cleanup, the volunteers are invited to Holcim to debrief while they enjoy free pizza provided by local vendors. The volunteers look forward to talking about the unusual things they found and stories about the day. Travis and Mitzi comment that it is a hard day's work

(especially those years when it rains or is extremely hot), but the sense of pride and accomplishment at the end of the day is felt by all. The zone had a record of 187 volunteers last year, many of them Holcim and Alabama Power employees, and is now the largest environmental community outreach event Holcim sponsors each year.

Daphne has been involved with Coastal

Organizers of the

Daphne site feel that the

cleanup is an opportunity

to teach resident children,

from an early age, the

long-term benefits of taking

care of the environment.

Cleanup since 1992 and is one of the largest zones with 600 volunteers participating last year. It takes coordination among the two zone co-captains (Priscilla Dabney, a teacher of Marine Science at Daphne High School, and Amy Gohres, an

environmental consultant), workers from the City of Daphne public works department, Daphne Utilities, and volunteers enlisted from the Daphne High School Key Club and Girls Service Club to manage such a large zone.

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Alabama Coastal Comprehensive Plan (ACCP) A Guide for Resiliency

By Eliska Morgan, Coastal Restoration Coordinator, Alabama Department of Conservation and Natural Resources

s reported in a previous issue of Alabama Current Connection, the Alabama Department of **Conservation and Natural Resources** has partnered with the U.S. Army **Corps of Engineers - Mobile District** (USACE), the Mississippi-Alabama Sea **Grant Consortium, and the Mobile Bay National Estuary Program** (MBNEP) to develop a constituentinformed, science-based coastal comprehensive plan to strengthen the economic, environmental, and social resilience of coastal Alabama for current and future generations.

By maximizing the use of resources in support of this comprehensive planning effort, the ACCP will create a roadmap for local, state and federal officials as they seek to

- · Reduce the susceptibility of residential, commercial and public infrastructure to storm damages, climate change, and sea level rise;
- · Improve habitats for freshwater, coastal, and marine resources to support commercial and recreational harvest:
- Assist in the restoration of natural and human-made features damaged by erosion or unwise land use or development decisions;



- Promote long-term erosion reduction during future natural hazards: and
- Promote diversification of economies within the two coastal counties as a means of economic resilience from future hazards.

As part of the initial development of the ACCP, 19 visioning sessions were conducted last year - 17 with targeted focus groups and two with a broader public audience. Using input received in the visioning sessions, a survey is being

developed by the MBNEP to further identify and classify priority issues. When given the opportunity, we hope you will take the time to participate in the MBNEP survey this summer, as this process will generate valuable information for the USACE to develop vulnerability and adaptability assessments.

It is not too late to share your coastal vision on the ACCP website at accp. usace.army.mil. You may also visit the website to get the latest update on the ACCP, as well as to view comments received thus far on an interactive map.

Create a Clean Water Future — Join the Movement, It's Picking Up!

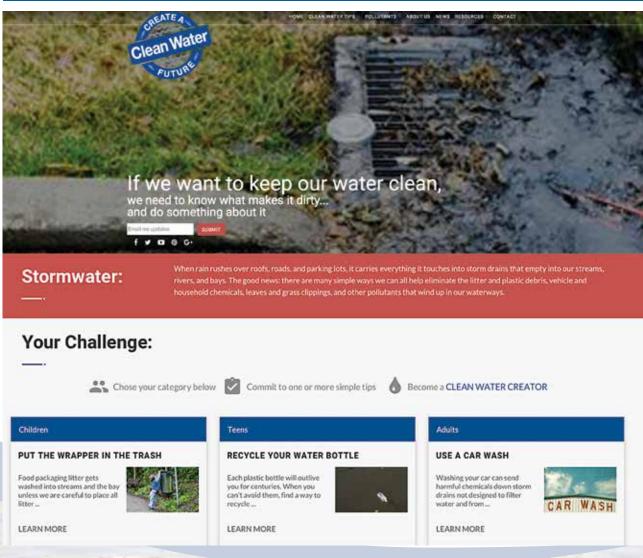
By Ben Brenner, Digital Production Coordinator, Mobile Bay National Estuary Program

e've asked thousands of folks around Mobile Bay, and they all want clean water in our streams, rivers, and bays. Those waters, though, are threatened by a variety of pollutants, and while no single government, nonprofit, business, or individual can solve the problem on

their own, if each of us does our part, we can together create a clean water future. That's why the Mobile Bay National Estuary Program is proud to announce the launch of the new website for the Create a Clean Water Future campaign. The website features a growing list of easy to follow tips for different categories of people from children and adults to business owners and government officials.

Simple changes in behavior like picking up pet waste, using reusable shopping bags, or taking your car to the car wash can make a big difference to the health of area waters. The website uses pictures, video, and easy to understand lists to help explain why these activities are so important and simple ways to start doing them. Take a look and let us know what vou think.

www.cleanwaterfuture.com



jurrent **events**



July 4

What: July 4th Celebration

Where: USS Alabama Battleship

Memorial Park

For information: www.ussalabama.com

July 15-17

What: 83rd Annual Alabama Deep Sea

Fishing Rodeo

Where: Dauphin Island, Ala.

For information: www.adsfr.com or call

(251) 471-0025

August

August 6

What: 152nd Commemorative of the

Battle of Mobile Bay

Where: Fort Gaines and Fort Morgan For information: www.dauphinisland.org/ fort-gaines and www.fort-morgan.org

September

September 2-5

What: Mobile Big Game Fishing Club's **Labor Day Invitational**

Where: Orange Beach Marina For information: www.mbgfc.org

September 17

What: 29th Annual Alabama Coastal Cleanup

Where: Various locations around

Mobile Bay

For information: www.alcoastalcleanup.com

October 5-8

What: 13th Annual John L. Borom

Alabama Coastal BirdFest

Where: Mobile and Baldwin Counties For information: www.alabamacoastal

birdfest.com

October 13-16

What: 45th Annual National Shrimp Festival

Where: Gulf Shores, Ala.

For information: www.myshrimpfest.com

ovember -

November 4-6

What: Oyster Cookoff at The Hangout

Where: Gulf Shores, Ala.

For information: www.hangoutcookoff.com

November 6-8

What: Alabama Pecan Festival

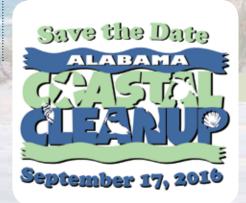
Where: Mobile and Baldwin Counties For information: www.alabamapecan

festival.com

November 12

What: 4th Annual Stockton Sawmill Days Where: Live Oak Landing Stockton, Ala. For information: www.stockton

sawmilldays.org



Alabama

About the Mobile Bay National Estuary

Program: The Mobile Bay National Estuary Program's mission is to lead the wise stewardship of water quality and living resources of the Mobile Bay and Tensaw Delta. The MBNEP serves as a catalyst for activities of estuary stakeholders, helping to build community-based organizational capacity for sound resource management and leveraging commitment and investment to ensure the estuary's sustainability. For more information, please contact the MBNEP office at 251-431-6409.

About ADCNR, State Lands Division, Coastal

Section: In an effort to protect and enhance coastal resources and reduce potential conflicts between environmental and economic interests, the Alabama Coastal Area Management Program (ACAMP) was approved by the National Oceanic and Atmospheric Administration (NOAA) in 1979. The ACAMP is administered through the Alabama Department of Conservation and Natural Resources, State Lands Division, Coastal Section. For more information, please contact the Coastal Section office at 251-621-1216.

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Alabama Current Connection encourages reprinting of its articles in other publications. If you have recommendations for future articles or would like to subscribe, please contact the editor:

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We reserve the right to edit submissions.

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Community Collaboration Leads to Cleanup Success Continued from page 12

Dabney and Gohres feel that the greatest achievement of the Daphne zone is the large percentage of volunteers that are children and students. The site has approximately 200 Boy Scouts and Girl Scouts of all ages that participate alongside their parents and siblings to earn scout badges. Additionally, a number of middle and high school service organizations participate annually. Organizers of the Daphne site feel that the cleanup is an opportunity to teach resident children, from an early age, the long-term benefits of taking care of the environment.

We are proud of all of our zones and volunteers and appreciate the years of hard work and dedication they have shown to the Alabama Coastal Cleanup. You can find more information on the cleanup and how to get involved at www.Alabama CoastalCleanup.com.



The Alabama PALS Governor's Award was presented to the Theodore Industrial Canal zone in Mobile County and the Daphne zone in Baldwin County. Pictured, left to right: Phillip Hinesley, Amy Gohres, Angela Underwood, Mitzi Houk, and Travis Osborne.