

Alabama current connection

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Community Involvement Critical to Successful Restoration

ESTUARY REFLECTIONS, BY ROBERTA SWANN, DIRECTOR,
MOBILE BAY NATIONAL ESTUARY PROGRAM

Dog River

Since 2009, the Mobile Bay National Estuary Program (MBNEP) has facilitated the creation and implementation of eight comprehensive Watershed Management Plans (WMP). Throughout this effort, over 1,500 citizens have been involved in documenting their community environmental concerns (litter, silty water, streambank erosion – the list goes on); learning about what impacts watershed health and how water runs through it; developing action plans to improve conditions; and engaging other residents in “being part of the solution” through volunteer monitoring, cleanups and other activities.

These plans have become as much about community development as they are about environmental protection. Why? We are all connected to the water surrounding us in coastal Alabama and these waters matter to people, to communities, to our coastal quality of life. As you read through this newsletter you will hear from some of the people who have gotten involved and why these plans are important to them.

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Currently Inside



Coastal Corner

By PHILLIP HINESLEY, COASTAL SECTION CHIEF,
ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
STATE LANDS DIVISION

Estuaries – *Rivers That Run Both Ways*

One of my favorite movies is the 1992, *A River Runs Through It*. Based on the 1976 semi-autobiographical novel by Norman Maclean, the movie tells the true story of the Maclean brothers growing up in Missoula, Montana, with their father, a Presbyterian minister. A common theme in the film is the men's love of fly fishing for trout in the Blackfoot River and how it impacted their lives. The story is told from the older brother's point-of-view, with director Robert Redford as narrator. The movie has a sad ending, but the key to the story is that the family is connected by a river and the life the river provides. Whenever I watch it, I think about my family and how we have always been connected to the water. Even my mother's maiden name is Waters, and my family has been in Baldwin County since the early 1800s. Originally from Pensacola, Florida, I can remember going over to Quiet Water Beach on Pensacola Bay in the 1960s and swimming in the clear, blue waters of the bay. As a young child, it seemed to me that the bay was as clear as the bathtub, and fish and wildlife were everywhere. Later, in the 1970s, my family bought a piece of property on the Fort Morgan Peninsula where I enjoyed swimming and fishing on Bon Secour Bay. We also enjoyed a Memorial Day tradition of family camping trips on the Perdido

River. I guess we were a water-loving family and took every advantage to enjoy the natural resources of the central Gulf Coast.

Something happened in the early 1980s. I finished college and was thrown into the reality of the real world. I worked ten years for local governments as a city planner and began to realize the conflict between the world of development and the environmental world. I can recall attending a 1981 meeting of the former Alabama Coastal Area Board (CAB) in Gulf Shores and hearing for the first time the workings of the board. This involved permitting under the Alabama Coastal Area Management

Program (ACAMP) for the Broad Water Development, one of the first large condo developments on the Alabama Gulf Coast. I remember the project was permitted under a great deal of criticism from local environmental groups concerning the size of the development and the setback from the vegetation line. Soon afterwards, the ACAMP established the Coastal Construction Control Line. This line would set the standard for where development would be allowed on all the Alabama Gulf-front beaches. The CAB was abolished in 1982, and the ACAMP was divided between two state agencies: The Office of State



Phillip Hinesley enjoying Perdido River with his youngest daughter and niece.



Weeks Bay at dusk.

Planning, later named the Alabama Department of Economic and Community Affairs (ADECA) and the newly created Alabama Department of Environmental Management (ADEM).

In 1989, I left a local planning job and soon found myself working for the ACAMP in Montgomery with the ADECA. While it seemed somewhat strange to be working for an economic development agency, it provided some good state-wide experience. In 1991, I was able to return to the Gulf Coast and was one of the first people to be stationed at the Weeks Bay National Estuarine Reserve. It was at this time that I began to appreciate the need for local land use planning and the need to approach that planning from a watershed level. Since the beginning of civilization, estuaries have played a critical role in the well-being of humankind as a source of food; a medium of transportation; and a site for recreation, adventure and inspiration. It also should be noted that a healthy estuary today means a healthy economy. To ensure a healthy estuary, we must ensure an increased scientific understanding of estuaries and develop strong policies and tools for land use management. In Alabama, most of the responsibility for land use planning is vested by state statute with the local governments, and that is where the rubber meets the road. We, as planners, need to realize that certain lands are unsuitable for urbanization

and need protection, while others areas are better suited for more intense development. The lands that are identified as floodplains, marshes, aquifer recharge areas, steep slopes and maritime forests need to be protected, while other uplands are more suitable for development as ports, harbors, marinas and industrial sites. Thus, there is the need for comprehensive watershed and land use planning to identify both areas that need protection as well as to classify areas that are suitable for sound, well-planned development using best management practices and low impact designs.

Now, after 35-plus years working with local and state governments, I know the

importance of good watershed planning. I feel blessed to be close to two beautiful watersheds, Weeks Bay and Bon Secour Bay. We all live in a watershed that is directly affected by our individual actions. So do your part and join a local watershed group, attend your local city planning commission or city council meeting, and get involved with local events such as watershed and beach cleanups or water quality testing. Working together and using the watershed approach to management will help protect our water resources and leave a lasting legacy allowing for future generations to enjoy our beautiful and important coastal resources.



Estuary Reflections



Bon Secour River

Continued from page 1

MBNEP will continue to facilitate these comprehensive plans for all tidally influenced watersheds and by the time we are finished there will be 31 plans in place covering drainage areas along the Alabama coast from Mississippi to Florida. If you have ever visited one of these places or if you live along the coast, MBNEP encourages you to get involved in your area's watershed planning! You won't be disappointed.

In what watershed do you live? The MBNEP's new interactive map will help you find out! Visit www.mobilebaynep.com to get the latest news about the watershed where you live.

BON SECOUR

By PAIGE FELTS, ENGINEER WITH VOLKERT

As a resident of Bon Secour, I was thrilled by the opportunity to work on the watershed management plan for the Bon Secour River. I often refer to the Bon Secour River as the "Forgotten River;" other adjacent watersheds including Magnolia River, Lower Fish River, and Wolf Bay have strong community involvement, while Bon Secour River is sometimes missing a strong support base from our community. Several individuals have tried to organize citizen watershed groups in Bon Secour in the past, but these efforts have had limited success.

Public involvement is a very important component of the watershed management planning process. In order for a plan to be successful, you need community buy-in. There were several public meetings held to gather input for the WMP and attendees were asked about their willingness to

participate in a local watershed group. Just 45% said that they would be interested. Although this was not entirely discouraging, there is obviously room for improvement in the community.

I am however very encouraged and at the same time appreciative of the opportunities ahead of us for Bon Secour. Last year we had 22 volunteers for the Alabama Coastal Cleanup in Bon Secour. This year we had 199 volunteers participate even with unfavorable weather conditions. Also, thanks to MBNEP, we are nearing the finalization of the Bon Secour, Oyster Bay, and Skunk Bayou WMP which will provide the first ever detailed guide to sustaining this important and rich resource in south Baldwin County.

FOWL RIVER

By RAY MAYHALL, FOWL RIVER AREA CIVIC ASSOCIATION

Fowl River is a beautiful, pristine river located in south Mobile County. I have enjoyed this waterway my entire life. It is great for swimming, fishing, skiing, or just a peaceful boat ride. While I have enjoyed it my whole life, I want to ensure that it is just the same for my children, my grandchildren, and generations to come.

Over the years, I have noticed changes in our beautiful river. Shorelines have eroded. Marshes seem to have gone away almost overnight. Islands have been washing away.

While everyone has had theories about why this is happening, nobody quite knew the real reason for the changes.



Ray Mayhall and his grandson enjoy fishing on Fowl River.



Fowl River Marina

What we did know is that we wanted the changes to stop so our river would remain as good as it has always been.

Our answer was presented by the Mobile Bay National Estuary Program. They sponsored the creation of a Watershed Management Plan for Fowl River. This plan was not something shoved onto the residents of the watershed. They reached out to the citizens of the communities to participate in the creation of the plan. They were careful to get input from all these citizens to learn the communities' concerns about the watershed. This was the starting point.

They then contracted environmental consultants to scientifically study the various elements of the watershed. They studied the various geographic locations of the watershed, so they understood each area's effect on the watershed. They studied the history of the watershed to understand the natural aging of the watershed compared to what may have been changed by mankind. From all this data, they defined the quality of the watershed, identified risks moving forward, and provided recommendations to implement to protect and improve our watershed. Upon completion, the plan was made available for public comment and recommendations. The watershed planning process was a worthwhile project not only for the citizens of the communities of the watershed, but also for all the citizens who enjoy the use of Fowl River. We now have a road map of prioritized activities to keep our river at least as good as it is today and improve it if possible.

Thank you to the MBNEP for their initiation and management of this project.

WEEKS BAY WATERSHED PLAN

By DR. RICK WALLACE, RETIRED FISH RIVER RESIDENT

I have been fortunate to live on Fish River and enjoy fishing, boating, and swimming in the river. Over time, my neighbors and I have observed that the river turns more turbid more quickly, after only modest rain storms, than it did some years ago. These are only anecdotal observations, but we know that land disturbance in the Weeks Bay watershed results in our highly erodible, Baldwin County soils reaching the river more readily than before widespread development. Of equal concern are the devastating floods that destroy property along the river.

I am participating in the Weeks Bay Watershed Management Plan Stakeholders Group because, like my neighbors, I hope something can be done to slow or even reverse this trend of erosion, sedimentation and flooding. The Plan, when finished, will highlight these and other problems, provide a large amount of background information, and propose solutions.

There is no single entity that can solve these problems, but the Plan may be able to help the many municipalities in the watershed and the county to obtain funding and work more closely to maintain or improve this most valuable public asset – an asset that contributes so much to the acclaimed “quality of life” on the eastern shore.

The Weeks Bay watershed contains a mixture of heavily developed areas, rapidly developing areas, agriculture lands, and minimally disturbed wetlands and forests. Flooding, erosion/sedimentation, and pollution are among the problems facing



Jimbo Meador and his dog Dixie on Mobile Bay.

the waterways of this 203 square mile watershed. The watershed includes the Fish River and Magnolia River drainage basins, and portions of nine municipalities lie within the Weeks Bay Watershed – Fairhope, Daphne, Spanish Fort, Loxley, Silverhill, Robertsedale, Summerdale, Foley, and Magnolia Springs.

The MBNEP is overseeing the development of a Weeks Bay Watershed Management Plan, and a Stakeholders Group has been meeting since February to provide input and advice for the Plan. The Stakeholders group is made up of residents of the watershed, local officials, and representatives of groups with an interest in the watershed. A list of issues and potential solutions have been identified with help from invited community leaders.

Meanwhile, the contractor, Thompson Engineering, has been gathering past studies and historical information on the watershed as well as trying to fill some gaps with their own surveys.

The next step is to refine the issues and articulate realistic solutions. The stakeholders group will be meeting several times this fall to finalize the plan. Updates and documents related to the plan can be found at the MBNEP web site.

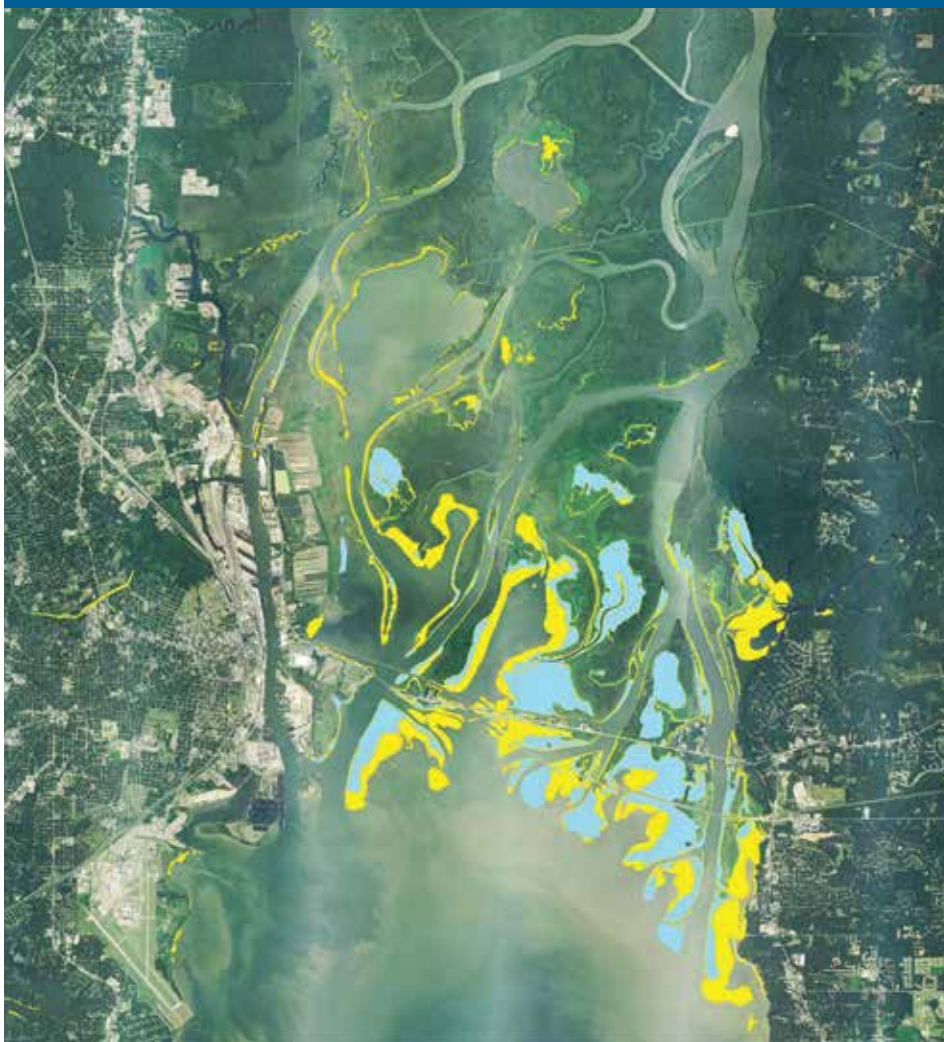
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Submerged Aquatic Vegetation

Showing Gains In and Around Mobile Bay

By AMY NEWBOLD, FORMER DEPUTY DIRECTOR, MOBILE BAY NATIONAL ESTUARY PROGRAM

Figure 1: Study Area for SAV Mapping from 2009-2015



- 2015 Submerged Aquatic Vegetation
- 2009 Submerged Aquatic Vegetation

Summer 2015 Submerged Aquatic Vegetation
Mobile Bay National Estuary Program and Alabama Department
of Conservation and Natural Resources, State Lands Division

Area shown corresponds to The Mobile-Tensaw Delta, AL
Source: Barry A. Vittor & Associates, Inc., 2016

A major focus of the Mobile Bay National Estuary Program (MBNEP) 2013-2018 Comprehensive Conservation and Management Plan (CCMP) is to improve the effectiveness of landscape scale resource management and habitat restoration and conservation strategies. A project that aligns with this goal of the CCMP was conducted as a partnership between the MBNEP and the Alabama Department of Conservation and Natural Resources State Lands Division to map submerged aquatic vegetation (SAV) for Mobile and Baldwin counties. This study looked at gains and losses of SAV in the two counties in an effort to improve understanding of how the estuarine ecosystem responds to anthropogenic, or human caused, stressors.



SAV at Turtle Ditch in Northern Mobile Bay.

SAV not only provide habitat for invertebrates and fishes, which are consumed by other fish and wildlife species, but are also an important component of the diet of waterfowl, turtles, and other wildlife, including manatees. Many factors can play a role in establishment and/or decline of SAV within the bay including water clarity; salinity and temperature; pollution; trawling and dredging; and boat traffic. **This study mapped an overall increase of 3,875 more acres of**

My recent days fishing on Mobile Bay and in the Delta have me cautiously optimistic. While impressed with the numbers in the MBNEP's recent SAV report, I was not at all surprised. Two main areas where I have noticed more successful fishing in conjunction with significant SAV growth, or Ribbon Grass as it's known to this layman, are Coffee Island (Isle aux Herbes) and Heron Bay. Also, I'm looking forward to checking out the Bridgehead area real soon – but don't ask too many questions! The fishing is good, just a lot more pressure than 15 years ago – precisely why we need these programs!

Trey Bryant, local business man and avid fisherman

*Vallisneria bed in Mobile Delta.
Photo courtesy of DISL*

SAV in 2015 than what was mapped in 2009, due mostly to a 2,455 acre increase in the Bridgehead quadrangle area (or quad) and a 511 acre increase in the Mobile quad.

(Note: A quadrangle area is defined by the United States Geological Survey as approximately 49 to 70 square miles.) However, there are still significant areas of decrease or total loss of SAV. Table 2 shows all the USGS quads included in the 2015 SAV mapping study.

This study was funded by the National Fish and Wildlife Foundation's Gulf Environmental Benefit Fund and the State of Alabama Coastal Impact Assistance Program. The final study entitled "Mapping of Submerged Aquatic Vegetation in Mobile Bay and Adjacent Waters of Coastal Alabama in 2015" can be found on our website at www.mobilebaynep.com.

Table 2: Total SAV acreage (continuous + patchy) by U.S.G.S. 7.5-Minute Quadrangle¹ for the summer 2015, 2009 and 2002 surveys.

USGS QUADRANGLE	2015 ACREAGE	2009 ACREAGE	2002 ACREAGE
Bellfontaine	1.7	0.0	0.0
Bridgehead	5,905.3	3,450.3	3,641.0
Chickasaw	107.9	21.2	26.9
Coden	5.1	0.0	0.0
Daphne	209.3	35.1	9.5
Fort Morgan	1.7	0.0	0.0
Fort Morgan NW	28.6	25.2	0.0
Grand Bay	414.6	364.2	296.4
Grand Bay SW	93.6	61.8	79.9
Gulf Shores	164.6	1.5	1.2
Heron Bay	10.2	0.0	0.0
Hollinger's Island	61.3	0.0	126.7
Hurricane	125.7	1.9	517.3
Isle aux Herbes	163.7	129.2	87.6
Kreole	162.1	218.8	295.9
Little Dauphin Island	0.4	0.0	0.0
Magnolia Springs	2.3	0.0	0.0
Mobile	1,021.3	509.8	1,007.0
Orange Beach	179.7	150.8	60.0
Perdido Bay	164.2	135.4	114.6
Petit Bois Pass	203.8	142.3	59.6
Pine Beach	3.8	1.2	0.1
Spring Hill	37.4	0.0	0.0
Theodore	55.7	0.0	0.0
The Basin	0.0	0.0	265.2
TOTAL	9,123.5	5,248.7	6,588.9

Quadrangles without mapped SAV are not listed.

Mobile Manatees Sighting Network

BY ELIZABETH HIEB AND DR. RUTH CARMICHAEL, DAUPHIN ISLAND SEA LAB

The MBNEP was an early funding supporter for the research led by the Dauphin Island Sea Lab's Manatee Sighting Network (DISL/MSN). Since 2007, the program has shown that manatees, who were once thought to be wayward travelers to the northern Gulf of Mexico, are regular seasonal inhabitants of our local waters.

Since 2007, we have collected more than 1,800 sighting reports from Alabama and Mississippi and tracked 13 satellite/GPS tagged manatees. We now know that Alabama waters provide important habitat for manatees to feed, breed, and give birth, which is exciting news for ongoing recovery efforts for this endangered species. As the manatee population in Florida continues to recover and grow, we expect more manatees to travel to Alabama and nearby waters in coming years. As a result, local research and public education efforts are more important than ever.



DISL researcher Kayla DaCosta tags a rehabilitated manatee for release. Photo courtesy DISL/MSN

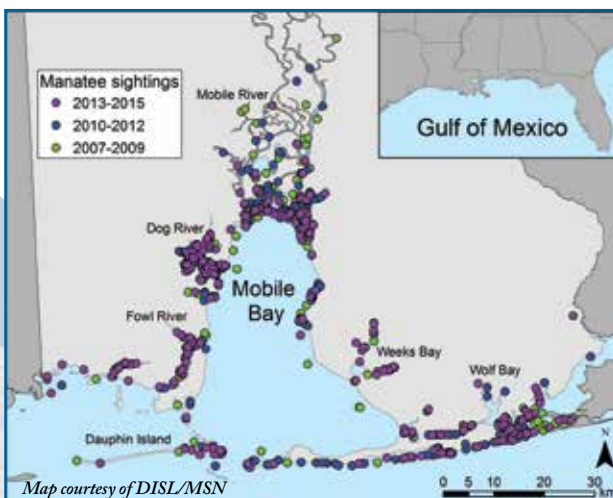
DISL/MSN is a true citizen science program, which relies on public sighting reports to help determine when and where manatees spend time in Alabama and Mississippi waters. We operate the only research program of this kind for manatees, combining publicly reported manatee sightings with direct tagging and tracking. We also help raise awareness and share information about manatees by distributing manatee awareness waterway signs, boat decals, magnets, and fact sheets from Florida to Louisiana. More than 300 waterway signs have already been distributed.

Additionally, we respond to sightings of distressed, injured, or dead manatees in local waters to help reduce manatee mortality, to gain an understanding of the causes of death, and to remove deceased specimens from beach and shoreline areas. During the winter of 2015, we led the first ever rescue of a manatee that became stranded in Alabama due to cold stress. The manatee recovered and was released back to the wild.

What can the public do?

- Report sightings as soon as possible, and share information with friends and neighbors.
- Do not approach, chase, feed or provide drinking water to manatees; turn off boat engines and observe and take pictures from at least 100 feet away. Remember, the manatee is protected under federal law by the Marine Mammal Protection Act of 1972 and by the Endangered Species Act of 1973, which makes it illegal to harass, hunt, capture or kill any marine mammal. Any activity that changes a manatee's natural behavior is considered harassment even if intentions are well-meaning.
- Request a manatee awareness sign if you live in a location where manatees visit.
- Make a tax-deductible donation to DISL's Manatee Sighting Network to support ongoing research (we are entirely supported by grants and donations).

For more information see our Facebook page (Mobile Manatees Sighting Network) and website (manatee.disl.org), or email manatee@disl.org or call 1-866-493-5803.



Map courtesy of DISL/MSN

City of Daphne's New and Improved Gator Alley

By Ashley Campbell, City of Daphne Environmental Manager

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D'Olive Creek
The Big Picture: The Ecosystem

Chief the Alligator
Alligators were once common in the area, but they were almost completely eradicated by the 1950s. They are now a symbol of the area's history and are a popular attraction for visitors.

What would happen if we lost the alligators?
Alligators are an important part of the ecosystem. They help control the population of other animals, and they are a source of food for other animals. Without alligators, the ecosystem would be out of balance.

What lives in and around the creek?
The creek is home to a variety of plants and animals. Some of the animals that live in the creek include alligators, turtles, and fish. Some of the plants that grow in the area include cypress trees and marsh grasses.

Plants of D'Olive Creek
The plants in the area are adapted to the wet, marshy conditions. Some of the plants that grow in the area include cypress trees, marsh grasses, and wildflowers.

Animals of D'Olive Creek
The animals in the area are adapted to the wet, marshy conditions. Some of the animals that live in the area include alligators, turtles, and fish.

Look for these full-grown plants in the water's edge:
• Cattails
• Pickerel Weed
• Soft Needlegrass

Look for these full-grown animals in the water's edge:
• Green Anole
• American Frog
• Water Moccasin

Look for these full-grown plants in the water's edge:
• Red Maple
• Swamp Chestnut Oak
• Sweet Gum

Look for these full-grown animals in the water's edge:
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• Southern Marsh Wren
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City of Daphne's New and Improved Gator Alley

By Ashley Campbell, City of Daphne Environmental Manager

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City of Daphne's New and Improved Gator Alley

By Ashley Campbell, City of Daphne Environmental Manager

D'Olive Creek
The Big Picture: The Ecosystem

Chief the Alligator
Have you ever seen an alligator in the water? They are the largest reptiles in the world and can grow up to 14 feet long. They are also the most powerful animals in the water. They can swim, walk, and even run on land. They are also the most powerful animals in the water. They can swim, walk, and even run on land.

What would happen if you
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City of Daphne's New and Improved Gator Alley

By Ashley Campbell, City of Daphne Environmental Manager



29th Annual Alabama Coastal Cleanup a Success

By ANGELA UNDERWOOD, NATURAL RESOURCES PLANNER, ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, STATE LANDS DIVISION – COASTAL SECTION

Alabama Coastal Cleanup, the state's largest one-day volunteer event, returned for its 29th year on Saturday, September 17. Over 4,100 residents, visitors, individuals and organizations braved stormy weather to "get the trash out of the splash" by picking up trash littering Alabama coasts and waterways. Approximately 30,000 pounds of trash was retrieved this year, bringing the 29 year total up to 1.6 million pounds of trash removed from the coastal environment.

"We always have great participation from volunteers who walk our beaches, parks and roadways and pick up trash," said Spencer Ryan, Executive Vice President of Alabama People Against A Littered State. After all of these years, I am still overwhelmed by the dedication, sincere personal interest, and hard work that our zone captains, volunteers, cities, municipalities and sponsors put into making this special coastal effort possible each year."

Alabama Coastal Cleanup is made possible by the generous support of 2016 Presenting Sponsor-The Poarch Band of Creek Indians and many other sponsors including: ExxonMobil, Bebo's Express, Mobile Bay National Estuary Program, Alabama Power Company, LuLu's, Ike's Beach Service, City of Gulf Shores, Gulf Shores Utilities, City of Orange Beach, Riviera Utilities, Baldwin EMC, The Home Depot, The Flora-Bama, Dog River Clear Water Revival, Republic Services, MAWSS, ALFA Insurance, Honda Manufacturing of Alabama, Vulcan

Materials Company, Alabama Farmers' Cooperative, Mercedes Benz, Compass Media, Coast 360, NOAA, Alabama Department of Conservation & Natural Resources-State Lands Division, Coastal Section and Alabama People Against A Littered State.



Airbus team at 2016 Coastal Cleanup



Thompson Engineering's Litter Gitter team hard at work on Fish River and Weeks Bay.

Volunteer Water Monitoring in Mobile and Baldwin Counties

By JASON KUDULIS, MONITORING AND SCIENCE COORDINATOR, MOBILE BAY NATIONAL ESTUARY PROGRAM



Volunteer water monitors at Daphne's Bayfront Park.

Whether you catch fish for fun or for a living, swim for exercise or for leisure, kayak or powerboat, or just like to gaze at its beauty, as a community, coastal Alabama is intimately intertwined with its water resources.

We depend on healthy water resources to sustain our environment, economy, and quality of life. Understanding the health of Mobile Bay's estuarine waters is paramount to ensure the experiences and opportunities afforded to you remain intact and accessible for the next generation. One of the best ways to determine the condition of a waterbody is to conduct regularly monitoring. However, when you consider the numerous waterways in coastal Alabama, along with budget constraints and other limitations placed on professionals and government agencies, routinely monitoring every river and stream seems daunting at best. The good news, however, is a productive and cost efficient way to collect comprehensive water quality data already exists, all it needs is you. In watersheds around Mobile Bay, citizens

from all walks of life volunteer to become certified Alabama Water Watch (AWW) monitors and test sites monthly.

Alabama is fortunate to have AWW. Since 1992, AWW has worked to educate, train, and empower people statewide to monitor water quality. To date, they have more than 82,000 data records from 2,300 sites throughout Alabama. Their protocols are approved by the Environmental Protection Agency and include a robust Quality Assurance Plan. Trained AWW water quality monitors are able to test for basic water chemistry and/or for bacteria depending on their certification. Alabama Water Watch training is always free! Water chemistry training takes about six hours and bacteria training about two hours.

Two longstanding watershed groups, Dog River Clearwater Revival in Mobile County and Wolf Bay Watershed Watch in Baldwin County, are a wonderful example of how volunteer water quality monitors can make a difference in their communities. Collectively, these two groups have monitored more than 100 different sites over the past twenty years.

Both groups not only monitor, but they use their data to advocate for their respective watersheds. Wolf Bay's volunteer monitoring data was instrumental in having the watershed declared an Outstanding Alabama Water in 2007 (Alabama's highest designation). Dog River uses volunteer data to document water quality impacts from urban runoff and sewage overflows. Other watersheds with active citizen monitoring efforts include Weeks Bay, D'Olive, Little Lagoon, and recently established Fowl River.

Currently, water quality monitors are needed as part of the comprehensive watershed planning for 31 priority watersheds in Mobile and Baldwin counties. Driven by science, these plans will guide future restoration and management decisions for decades to come. Citizen science has an important role in watershed planning. Each plan calls for water quality monitoring to track the success or failure of implemented planning strategies, or to determine where additional focus is needed.

The importance of volunteer monitoring and the benefit of your involvement cannot be overstated. If you or someone you know is interested in a fun and meaningful science-based volunteer activity, consider becoming a local water quality monitor. You do not have to live on the water to participate. What it boils down to is we need you. The success of any volunteer water quality monitoring program is dependent on the volunteers who willingly offer their time to better our collective understanding of water quality.

To learn more about how you can become a AWW volunteer or to register for a workshop, visit www.alabamawaterwatch.org. If you or a group is interested in volunteering as a water quality monitor for the comprehensive watershed plans, contact MBNEP.

Communication: *A Must in Conservation Work*

By HARRISON WATSON, INTERN, MOBILE BAY NATIONAL ESTUARY PROGRAM

Over a six-week period this past summer, I had the opportunity to work as an intern with the Mobile Bay National Estuary Program (MBNEP) with hopes of developing my knowledge and furthering my experience in the marine biology and conservation discipline. Instead of the expected mundane tasks of grabbing coffee, filing paperwork, and answering phone calls, I was involved in such projects as developing data-sets for mapping structure losses on Dauphin Island following major hurricanes and tropical storms, helping construct a survey for the Alabama Coastal Comprehensive Plan (ACCP), organizing photography files for use by the MBNEP, and writing this article. These projects, as well as field work conducted with a fellow intern and employees of the MBNEP, contributed to one central idea: citizen input is imperative for successful environmental work, both immediate and long term.

This introduction to a different facet of environmental work has forced me to consider the various possibilities of communication one can take within their community to improve stewardship of natural resources, which ultimately improves the quality of life of its citizens. This has become a very important task for me during this experience. For so long my thought process with this field of work, though genuinely compassionate, was rather one-sided. I believed that simply setting a course and cleaning up obvious sites of infection and infestation, of course defined by serious scientific analysis, coupled with routine check-ups for eventual maintenance would ultimately satisfy the surrounding population's

"dilemma" and, more importantly, my desire for environmental justice. Unfortunately, I left so much to be considered as I discovered all the missing pieces lying on the table – partners to help with obscure scientific analysis; grants and other monetary sources needed to fund these endeavors; possible manpower, or machine power, to help move these endeavors forward; and a consensus of community opinion of the endeavors themselves.

I now see the importance of tools, such as the ACCP survey developed by the MBNEP and its partners, that help gather observations and wishes of members of the community. Town hall meetings that speak directly with the public or door-to-door trips throughout neighborhoods

aren't just effective, but necessary to give people the opportunity to voice their concerns regarding the health of their community. These opportunities don't just create an ease of mind in certain individuals, they also encourage people to look around more thoughtfully to find alleys of improvement. And if this mindset reaches leaders of our communities, no doubt the sentiment could and would be spread to those who don't initially feel the weight. While these are but a few widely understood methods in environmental participation, they are momentous steps in my understanding of environmental sustainability granted to me during this internship with the MBNEP. For that I am incredibly thankful.



MBNEP interns Chris Foster-Allen and Harrison Watson enjoying a paddle on Three Mile Creek.

Gulf of Mexico Alliance Releases Governors' Action Plan III for Healthy and Resilient Coasts

The Alabama Coastal Area Management Program (ACAMP) has worked over the last year with the Gulf of Mexico Alliance (GOMA) to sustain and promote the resources, abundant seafood and recreational opportunities of the Gulf of Mexico. Both ACAMP and GOMA recognize the economy and quality of life for citizens of the Gulf are linked to its ecological health. As the result of a shared vision for a healthy and resilient

Gulf of Mexico region, the states of Alabama, Florida, Louisiana, Mississippi and Texas formalized the Alliance in 2004. The Alliance's mission is to enhance the ecological and economic health of the Gulf region by encouraging collaboration among government agencies, businesses, education providers and non-governmental organizations. Through the ACAMP the State of Alabama has supported all six teams and provided leadership in the development of the Governors' Action Plan III.

In June of 2016 GOMA released the Governors' Action Plan III For Healthy and Resilient Coasts. This is the third

major effort by the Alliance, approved by all five U.S. Gulf Coast State governors. The states of Alabama and Mississippi issued proclamations, declaring support for the plan and emphasizing the vision to improve the health and sustainability of our coastal areas. They noted millions of people depend on it – to live, work, and vacation. In the plan, the Alliance addresses six major regional issues: coastal resilience; data and monitoring; education and engagement; habitat resources; water resources; and wildlife and fisheries.

Support from the governors of Alabama, Mississippi, Louisiana, Texas, and Florida demonstrates they recognize the need to work across the region on shared issues. The strength and success of our organization depends on strong regional collaboration. Without it, the Gulf of Mexico economy and environment suffers.

Laura Bowie
Alliance Executive Director

"Support from the governors of Alabama, Mississippi, Louisiana, Texas, and Florida demonstrates they recognize the need to work across the region on shared issues," said Laura Bowie, Alliance Executive Director. "The strength and success of our organization depends on strong regional collaboration. Without it, the Gulf of Mexico economy and environment suffers."

Through leadership from the five states, the

Alliance embraces the mission to enhance the environmental and economic health of the Gulf of Mexico. APIII addresses 16 major goals utilizing partnerships within six Priority Issue Teams based on the shared regional issues.

Over the next five years, the Alliance will provide forums for collaboration; develop and modify tools to address regional issues; track restoration efforts; and identify and expand opportunities for comprehensive monitoring among other things.

Access the Alabama proclamation on Governor Bentley's website <http://governor.alabama.gov/newsroom/2016/05/governors-action-plan-iii-healthy-resilient-coasts/>. The Mississippi proclamation and a copy of the Governors' Action Plan III For Healthy and Resilient Coasts is available on the publication page <http://www.gulfofmexicoalliance.org/tools-and-resources/publications/>.

To learn more about the Gulf of Mexico Alliance, visit www.gulfofmexicoalliance.org.



Community Solutions Fellow from Malaysia Joins MBNEP

By MOBILE BAY NATIONAL ESTUARY PROGRAM STAFF

Joannie Jomitol, Mobile Bay NEP's newest Community Solutions Fellow, recently joined the program as part of the Three Mile Creek (TMC) watershed effort.

Joannie, a native of Malaysia, brings with her education in plant technology with 11 years of experience working with communities in terrestrial and marine protected areas throughout Malaysia. Her main task working with the MBNEP is to promote the wise stewardship of the Three Mile Creek Watershed through diverse community engagement activities joining together science education with on-the-ground restoration related activities.

The TMC watershed drains portions of the cities of Mobile and Prichard in Alabama. A comprehensive management plan published for the watershed recommends actions needed to restore this urban area and improve the quality of water flowing through its waterways. Major issues identified in this plan include projected impacts of sea level rise and projected impacts from storm surges as a result of increased extreme weather events. The lower reaches of this watershed are home to a community of underserved residents who are 100% minority and over 65% low income. This area has experienced serious flooding issues in the past and will be at risk for climate change and storm related impacts in the future because of the low lying nature of the landscape.

The TMC Plan was adopted by the City of Mobile in 2016. Since then, there have been concerted efforts to advance the

implementation of the plan by establishing a steering committee for capital projects, undertaking activities to build community ownership in the watershed, and publishing a drainage improvement plan for an area in the lower part of the watershed.

Additionally, the Mobile Bay National Estuary Program recently submitted a grant application to

establish a Three Mile Creek Conservation Corps for urban young adults, received funding to improve stormwater conveyance using green infrastructure technologies, is supporting the City of Mobile in its efforts to install approximately one mile of bicycle trail along the creek and is pursuing a partnership with the Butterfly Project to improve flora throughout the creek to better serve native butterflies.

With support from MBNEP staff, Joannie will continue paving a way forward by coordinating and implementing measures found in the TMC watershed plan. The goals of her project are to create positive change in the watershed by (1) involving community members in improving environmental conditions; (2) educating community members about the various ecosystem functions and services of the watershed; and (3) challenging community members to take responsibility for ensuring those ecosystem functions and services are preserved in the Three Mile Creek watershed. These goals will be reached through activities such as: (1) coordinating



Social entrepreneurship training in Kudat, Sabah in Malaysia for local communities from Tun Mustapha Park, the largest marine park in Malaysia.



Joannie in Bienville Square in downtown Mobile.

the installation of 25 rain barrels in lower part of the watershed by residents/property owners; (2) educating a minimum of 30% of the residents in the middle and lower sections of the watershed about the comprehensive watershed plan, the drainage report, and short term activities being taken to implement the plan; and (3) building the capacity of two community groups through activities which may include volunteer water quality monitoring, plantings, community clean-ups, festivals, or other creative measures. Deliverables from these activities will include: 25 rain barrels installed; one outreach product (media to be defined by Fellow); engagement of at least 40 residents in the lower watershed resulting in their active participation in a community initiative.

Through this project, Joannie will have an opportunity to explore creative ways of educating and engaging urban, underserved populations using science based information generated by the watershed plan and other channels. As a result of Joannie's work, the MBNEP looks forward to continued outreach and engagement in the TMC watershed.

MBNEP Welcomes Monitoring and Science Coordinator, Jason Kudulis

Jason Kudulis is a native of Mobile and grew up in awe of everything life in L.A. (Lower Alabama) affords. He holds a Bachelor of Science from the University of South Alabama and a Master's of Science from the University of Alabama. Eager to put his fascination of earth processes to work, Jason ventured out to live in the pristine wilderness of America's national parks as a ranger for the National Park Service. In early 2015, while managing a remote off-grid field station in the heart of Utah's red rock country Jason decided it was time to return home to serve the natural resources and communities of coastal Alabama, a place he cares deeply for.



Jason currently serves as the Monitoring and Science Coordinator where he is responsible for leading the coordination and expansion of the Coastal Volunteer Environmental Monitoring Initiative working through the Community Action Committee (CAC) and coordinating Science Advisory

Committee (SAC) recommendations of data needs and gaps to further develop environmental monitoring that informs us about the status and trends of coastal Alabama's biological condition.

Jason is passionate about connecting people to their natural resources and promoting stewardship. In his free time, you will find him enjoying some form of water recreation or music event.

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DOG RIVER

BROTHERS: JOHN T. BENDER, ATTORNEY, McFADDEN, LYON, AND ROUSE LLC; J. GAVIN BENDER, SR. PRESIDENT, BENDER REAL ESTATE GROUP, INC.

As lifetime residents of Dog River, we find the current efforts aimed at watershed management of the Dog River watershed to be both well timed and truly professional. This plan has the potential to significantly impact many of the ongoing problems that have negatively affected Dog River over the years, such as water quality and siltation. The primary reasons for optimism and continued encouragement are, first, the depth of analysis going into eliminating the source of the problems – not just concentrating on symptoms. Second, and most importantly, there is funding associated with the review to actually implement initial improvements. The problems currently affecting Dog River



and the lack of previous watershed management systems date back many decades. Solutions will be expensive and take time; however, solving the problems can begin with the current watershed management plan.

As Dog River residents, it is very encouraging to see plans for a solution beginning to form.

Alabama current connection

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:

Rick Frederick
Mobile Bay National Estuary Program
118 North Royal Street, Suite 601
Mobile, AL 36602
Office: 251-431-6409
Fax: 251-431-6450
E-mail: rfrederick@mobilebaynep.com
www.mobilebaynep.com

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Dauphin Island Sea Lab
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101 Bienville Boulevard
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National Estuary Program Reauthorized: *Funding Awarded to Focus on Local Conservation Projects*

A bill reauthorizing the National Estuary Program and awarding \$26.5 million in funding was signed into law by President Obama earlier this year.

The National Estuary Program is a non-regulatory partnership between 28 locally-based estuaries throughout the country, including the Mobile Bay National Estuary Program, which was established in 1997. The MBNEP will receive \$3 million over the next five years. The funds will be used for water quality and wetlands restoration, as well as other local conservation projects to restore our beaches, rivers, and bays and to protect wildlife. The bill also ensures that funding

will be prioritized to address urgent and challenging issues that threaten the ecological and economic well-being of coastal areas. These issues include the increase in nitrogen, pollution, and sediment pouring into our bay.

With this renewed mandate from Congress, The Mobile Bay National Estuary Program looks forward to continued implementation of its 2013-2018 Comprehensive Conservation and Management Plan and tackling the challenges facing our estuaries today and into the future.

The National Estuary Program was created by a 1987 amendment to the Clean Water Act. This reauthorization is the first

since 2010. The bill signed into law in May 2016 funds the program for the next 15 years.

"The National Estuary Program is the crown jewel on how to make significant environmental progress," stated Jim Giattina, Director Water Management Division, Environmental Protection Agency.

