

**Alabama Coastal Area Management Program  
#NA15NOS4190159, FY 2015/2016**

**Alabama Department of Conservation & Natural Resources  
State Lands Division, Coastal Section  
and  
Alabama Department of Environmental Management, Facility/Coastal and Environmental Assessment Sections**

**1<sup>st</sup> PERFORMANCE REPORT, October 1, 2015 – March 31, 2016**

***Section 306, Section A***

**306 – 01: ACAMP ADMINISTRATION, MANAGEMENT & COORDINATION**

Task Outcomes	Accomplishments
<p>1. <i>Execute Program Administration Functions and Duties</i></p> <p>2. <i>Program Management with Office of Coastal Management (OCM)</i></p> <p>3. <i>Maintain GIS Database and Inventory</i></p> <p>4. <i>Working with Local Governments</i></p> <p>5. <i>Partnership Programs with State, Regional and Federal Organizations</i></p>	<p>1. <u>Execute Program Administration Functions and Duties:</u></p> <p>A) <i>ADCNR, State Lands Division, Coastal Section:</i> ADCNR Operations: The Coastal Section is staffed by:</p> <ul style="list-style-type: none"> <li>• Phillip Hinesley, Section Chief and ACAMP Manager</li> <li>• Amy King, Natural Resources Planner</li> <li>• Carl Ferraro, Biologist III</li> <li>• Will Underwood, Natural Resources Planner</li> <li>• Linda McCool, Administrative Support Assistant III</li> <li>• Sharon Nobles, Account Technician (50 percent FTE)</li> <li>• Sarah Johnston, Geographic Information Systems Specialist (50 percent FTE)</li> <li>• Angela Underwood, Educations and Outreach Coordinator - Natural Resources Planner (50 percent FTE)</li> <li>• Janis Helton, Retired State Employee</li> </ul> <p>Coastal staff provided day-to-day administrative, clerical and financial support to implement the ACAMP. During this period, staff coordinated with NOAA/OCM and State Lands Accounting Section to begin the FY2016-2017 budget draft for application next period. All operational expenditures were monitored for matching requirement according to state and federal law.</p> <p>ADCNR Equipment Purchases: No activity this period.</p> <p>ADCNR Subawards: Coastal staff maintains records for all FY2015-2016 sub-awards and the Cooperative Agreement with ADEM. There are 14 sub-awards. See <i>Appendix A, List of Sub-Awards for NA15NOS4190159.</i></p> <p>B. <i>ADEM:</i> This portion of the task outcome was conducted by the Alabama Department of Environmental Management (ADEM) through a cooperative agreement with the ADCNR, State Lands Division, Coastal Section.</p> <p>1. Administration Fiscal Services: The ADEM managed federal grant funds received from the OCRM, appropriations from the State general fund, and permit fee monies which are utilized for matching funds. This management includes preparation of budgets, requisitions, vouchers, reimbursements, and also processing of contractor billings.</p>

	<p>2. Personnel Support Services: The ADEM managed personnel (interview, hire, evaluate, promote, etc.), prepared payroll, and maintained personnel records consistent with ADEM procedures, State Personnel Department policies, and State law. The ADEM's Coastal Program was fully staffed during this reporting period.</p> <p>3. Vehicles and Travel: Vehicles were made available to the ADEM staff through ADEM's Mobile Branch Motor Pool. Mileage is charged at the standard State of Alabama rate. ADEM personnel were reimbursed for necessary travel at the standard State per diem rate for in-state trips and for actual reasonable expenses for out-of-state trips.</p> <p>4. Office Space, Facilities, Supplies, Equipment, and Maintenance: The ADEM Coastal Program satellite office is located at 3664 Dauphin Street, Suite B, in Mobile, Alabama and is fully supported with adequate office space, telephone and fax services, computers and networking, supplies, and other related services. ADEM staff made necessary purchases to conduct activities related to implementing the ACAMP.</p> <p>5. Grant and Contract Administration: The ADEM coordinated with ADCNR on adherence to the NOAA grant and award conditions, specific project contracts, professional services contracts, hearing officers, and contracting with the local governments. Contracts are in effect with the following units of local government: Town of Dauphin Island, the Baldwin County Commission, the City of Gulf Shores, and the City of Orange Beach. ADEM negotiates, prepares, and monitors these grants and contracts, as needed.</p> <p>6. Coordination with State Lands Division: The ADEM coordinated activities with the ADCNR, State Lands Division, Coastal Section staff in the form of joint staff meetings and informal contact on a regular basis with regard to grant applications, performance reports, research, program changes, program revisions, and permit and regulatory activities. ADEM responded to inquiries for information regarding the coastal regulatory program in Alabama and attended national, state, and local meetings, as resources allowed. ADEM staff routinely coordinated with and participated in working groups, committees, and other Alabama coastal related programs and interest groups.</p> <p><u>2. Program Management with Office of Coastal Management (OCM):</u> During this reporting period Coastal staff communicated with NOAA/OCM by telephone, email, correspondence and in-person. This related to various actions related to but not limited to grants administration, 6217, 309 Assessment and Strategy and 312 Evaluation. In addition staff attended the OCM/ South East Regional CZM meeting in Port Aransas, Texas on January 12-15, 2016. In addition, staff attended the NOAA/OCM Program Managers Meeting in Washington, DC on February 25, 2016. Staff was unable to attend the NOAA/GMD Financial Assistance Workshop due to issues with the new state accounting system. See <i>Appendix B, Coastal Section Staff, List of Meetings</i>.</p> <p><u>3. Maintain GIS Database and Inventory:</u> The GIS Specialist conducted the following activities:</p> <p>Projects in progress:</p> <p><i>Coastal Programs:</i></p> <ul style="list-style-type: none"><li>• Public Access Sites Project</li><li>• Perform IT Administrative duties as needed</li><li>• Perform Coastal Server backup duties as needed</li></ul> <p>Completed projects:</p> <p><i>Coastal Programs:</i></p> <ul style="list-style-type: none"><li>• Provided technical and GIS support to staff.</li></ul>
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- Performed data management and organization for effective operability
- Miscellaneous location aids, images, and displays for staff such as
  - Coastal Cleanup Save the Date ad 2016
  - Public Access sites in and around Dog River Watershed
  - CBRS units AL map
  - Coastal Area map

*Acquisitions (misc., data and/or software):*

- National Historic GIS layers

*Professional Meetings, Conferences & Workshops:*

- BirdFest Expo (10/3)
- Coastal Marine Planning conference call (11/20)
- GOMA PIT Data and Monitoring Steering committee call (12/10)
- URISA GIS professional meeting (12/16)
- GOMA Data and Monitoring Steering Committee (1/25)
- GOMA Data and Monitoring Steering Committee (2/18)

4. Working with Local Governments: During this reporting period the ACAMP provided technical assistance to local governments. This included the City of Foley, City of Fairhope, Town of Perdido Beach, Town of Dauphin Island, City of Bayou La Batre and the City of Mobile. Technical assistance included review and comment on proposed local ordinances and comprehensive plans and other initiatives or activities related to coastal resource issues, such as habitat restoration, conservation and protection, land use planning, coastal hazards, grant opportunities and watershed planning.

The South Alabama Regional Planning Commission conducted the following activities:

- Received and processed 4 requests for Consistency Determination that involved publication in the local newspaper during this progress reporting time frame.
- Worked with our Web Site consultant to add visibility to our partnership with the Alabama State Lands program and NOAA. (See SARPC.org)
- Attended Planning Commission Meetings with the following municipalities located in the Coastal Zone Management planning area: Town of Dauphin Island; City of Bayou La Batre; City of Saraland; City of Satsuma; City of Citronelle; Town of Mount Vernon; Town of Creola; City of Chickasaw; Town of Loxley; Town of Magnolia Springs; City of Robertsdale; City of Bay Minette; Town of Summerdale; and Town of Perdido Beach. The SARPC provided general technical assistance to these communities in regards to subdivision development, site plan review, and implementation of the Code of Alabama. Topics discussed included storm water management, floodplain restoration and protection, conservation of natural/coastal resources, hazard mitigation planning, and implementation of working waterfronts.
- Assisted with grant application submittals to the FY2016-2017 ACAMP program.

5. Partnership Programs with State, Regional and Federal Organizations

**Gulf of Mexico Alliance (GOMA):** The Coastal staff continues to actively participate in the Gulf of Mexico Alliance (GOMA). This included attending a briefing for the five state Governor staffs held in Austin, Texas. The Coastal Section Chief still serves as the Alliance Management Team (AMT) Chair and participates in monthly calls and in person meetings. The staff continues to provide the state leads to the GOMA Habitat Team and Education and Engagement. During the reporting period, the staff assisted the GOMA Habitat team and Education and Engagement in drafting its next Action Plan III as well as planning its agenda for All –Hands 2016. Staff also Data and Monitoring and Coastal Resilience Teams.

**MBNEP:** Coastal staff attended meetings of the MBNEP Executive Committee, annual meetings, government networking and Finance Committee. The staff also continues to serve on the Mobile Bay NEP Project Implementation Committee, assisting the MBNEP in the selection, planning and oversight of restoration projects in the coastal area.

	<p><b>Coastal States Organization (CSO):</b> The Coastal Section staff continued to be active in CSO participating in the Coastal Non-point, 306A and Reauthorization working groups. Coastal Section Chief attending the winter meeting of CSO in Washington, DC and participated in Capital Hill Day.</p> <p><b>Alabama Coastal Compressive Plan (ACCP)</b> The Coastal Section staff continued to work with the Army Corps of Engineers, Mississippi/ Alabama Sea Grant and the Mobile Bay NEP on development of the ACCP. Two additional public visioning workshops were held in November to finalize public input on the draft plan. Coastal staff continues to meet with the Corps in development of the plan.</p> <p><b>Gulf Coast Ecosystem Restoration Council:</b> The Coastal staff provided technical assistance to the SLD in the developing and submitting proposals to the Council.</p>

### 306 – 02: COMPLIANCE AND ENFORCEMENT OF COASTAL USES

Task Outcomes	Accomplishments
<ol style="list-style-type: none"> <li>1. <i>Federal Consistency Certifications and Non-Regulated Use Permits Activities</i></li> <li>2. <i>Defense of Appeals</i></li> <li>3. <i>Compliance Monitoring</i></li> <li>4. <i>Enforcement</i></li> <li>5. <i>Program Delegation to Local Governments, Contracts, and Technical Assistance</i></li> <li>6. <i>Education and Outreach, and Technical Assistance/Training</i></li> </ol>	<p><u>1. Federal Consistency Certifications and Non-Regulated Use Permits Activities:</u> The ADEM conducted reviews of federal consistency and non-regulated use applications according to procedures that are clearly defined in the ADEM Administrative rules. A summary of consistency determinations and permit actions taken during this period is provided in <i>Tables 1a and 9a of Appendix C, ADEM Tables</i>. Listings of ADEM consistency determinations and permit actions are provided in <i>Tables 2 through 7 of Appendix C, ADEM Tables</i>. In short, during this reporting cycle, the ADEM Coastal Program received <u>154</u> new project proposals; reviewed and made final decisions on <u>123</u> project proposals. The ADEM Coastal Program issued <u>1</u> new variance. During this reporting cycle, delegated local government programs received <u>44</u> new project proposals. The delegated local governments issued <u>47</u> authorizations</p> <p><u>2. Defense of Appeals:</u> No appeals were filed during this reporting cycle.</p> <p><u>3. Compliance Monitoring:</u> The ADEM and federal agencies cooperated in the effort to monitor authorized federal license and permit activities. The ADEM staff and local community contractors routinely inspected sites, projects, and/or activities for compliance with non-regulated use permit conditions as well as compliance with the ADEM Division 8 Coastal Program Regulations. A summary of monitoring activities conducted during this period is provided in <i>Tables 1b and 9b of Appendix C, ADEM Tables</i>. In short, during this reporting cycle, the ADEM Coastal Program conducted <u>35</u> monitoring inspections of federal consistency and non-regulated use activities. During this reporting cycle, delegated local government programs conducted <u>219</u> monitoring inspections for activities associated with construction on Gulf Front Beaches and Dunes.</p> <p>The ADEM staff reviewed Discharge Information Zone (DIZ) proposals and monitoring results related to major NPDES discharges to coastal waters. During this reporting cycle, ADEM Coastal Program staff reviewed and provided feedback on <u>3</u> new DIZ industry reports.</p> <p><u>4. Enforcement:</u> The ADEM Coastal Program completed <u>1</u> enforcement action during this reporting period. (See <i>Table 8 of Appendix C, ADEM Tables</i>)</p> <p><u>5. Program Delegation to Local Governments, Contracts, and Technical Assistance:</u> The ADEM has contracts in effect with the</p>

	<p>Town of Dauphin Island, the Baldwin County Commission, the City of Gulf Shores, and the City of Orange Beach to assist in the implementation of delegated programs. The ADEM provides one full-time employee to provide technical assistance and regulatory expertise to local governments and communities, as needed and as requested to support the ADCNR efforts promote the implementation of delegated portions of the ACAMP. The ADEM coordinated with local governments and communities in the coastal area to inform them of ADEM enforcement and inspection activities in their area.</p> <p><u>6. Education and Outreach, and Technical Assistance/Training:</u> Each ADEM Coastal Program staffer has a job responsibility to provide quality customer service regardless of the method any request is received. Telephone, letter, and e-mail requests for information relating to coastal permitting were received and addressed, including requests made directly to the ADEM staff and to the Building Departments of the Town of Dauphin Island, the Baldwin County Commission, the City of Gulf Shores, and the City of Orange Beach. Pre-application meetings were attended by the ADEM staff to answer questions and provide technical expertise to prospective developers. Requests for regulations interpretations were fielded during this reporting period. ADEM Coastal Program staff participate in training classes whenever pertinent classes are offered and attendance is practicable. Supervisory staff participates in management training courses whenever available. ADEM staff are available to local governments, watershed protection organizations, etc. for group presentations or individual training. The list of meetings, workshops, forums, and other similar functions is provided in <i>Appendix D, ADEM Meetings</i>.</p>
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### 306 – 03: COORDINATE WATERSHED AND WATER QUALITY MONITORING ACTIVITIES

Task Outcomes	Accomplishments
<ol style="list-style-type: none"> <li>1. <i>Coastal Alabama Water Quality Monitoring</i></li> <li>2. <i>ACNPCP Administration and Coordination</i></li> <li>3. <i>Maintaining Real-Time Observation in Mobile Bay for Resource Management - DISL</i></li> </ol>	<p><u>1. Coastal Alabama Water Quality Monitoring</u> FY 2016 sampling locations have been selected, reconnaissance completed, and first of eight sampling excursions is complete. All data has or will be entered into ALAWADR, the ADEM water quality data repository.</p> <p><u>2. ACNPCP Administration and Coordination:</u> The ADCNR staff participated in regularly scheduled CSO Non-point source workgroup calls. In addition, the Coastal Section Chief held a meeting with ADEM staff to discuss current status and progress of 6217 program.</p> <p>Working in coordination with the ADCNR, the ADEM continued working on tasks designed to obtain federal approval of the Alabama Coastal non-point Pollution Control Program (ACNPCP).. The ADEM coordinated activities with ADCNR, NOAA-OCRM, including both EPA-R4 and EPA-HQ, regarding outstanding program approval issues. (See <i>Appendix E, ACNPCP Activities</i>.)</p> <p>ADEM Activities have been expanded considerably to coordinate closely with ADEM-319, Coastal States Organization (CSO), the Gulf of Mexico Alliance (GOMA)-Water Resources &amp; Education Enhancement Teams, Alabama Clean Water Partnership, and other Program partners and projects in order to specifically address approval criteria for the Program.</p> <p>ADEM continued to serve as national Chair of the CSO's Coastal NPS (6217) Workgroup throughout this reporting period. This position serves the national Coastal NPS Workgroup (coordinating directly with the federal NOAA and EPA representatives, CSO Director, Counsel and Staff, Sub Committees, as well as other State representatives) to provide monthly Teleconferences that are directed toward the promotion, approval and implementation of State CNPCPs. This is an ongoing forum is for all coastal states' Nonpoint Programs, with over 95 Work Group members engaged through the server and an average of 26 participants per Teleconference discussion. (See <i>Appendix E, ACNPCP Activities</i>.)</p>

	<p>The ADEM continued to provide technical advice and technical coordination with ADCNR and the Mobile Bay NEP, NRCS, USFWS, COE-Mobile District, MS-AL Sea Grant, the Nature Conservancy, and others, including cooperation with local County and Municipal entities (<i>Appendix E, ACNPCP Activities</i>) to develop ACNPCP applicable projects and programs.</p> <p><u>3. Maintaining Real-Time Observation in Mobile Bay for Resource Management – DISL:</u> A sub-grant was provided to The Dauphin Island Sea Lab (DISL) to conduct this task outcome. During the reporting period, DISL conducted the following activities:</p> <ul style="list-style-type: none"> <li>• maintained real-time weather display</li> <li>• performed monthly calibration of water quality sondes</li> <li>• conducted calibration of meteorological instruments</li> <li>• reviewed and revised QA/QC methodology</li> </ul>
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**306 – 04: PARTICIPATE IN PUBLIC OUTREACH, EDUCATION & INFORMATION EFFORTS**

Task Outcomes	Accomplishments
<p>1. <i>Coastal Communications and Public Relations</i></p> <p>2. <i>Facilitate and Support Marine Debris Issues</i></p> <p>3. <i>Promote Sustainable Tourism Initiative</i></p>	<p><u>1. Coastal Communications and Public Relations:</u> The ACAMP Education and Outreach Coordinator conducted the following activities:</p> <p><i>A) Inform Public of Coastal Issues and Activities</i></p> <ul style="list-style-type: none"> <li>• Attended American Shore and Beach Preservation Society Conf., New Orleans, (Oct 13-15)</li> <li>• Attended Coastal States Annual Meeting (Oct 1) and Winter meeting (Feb 22-23)</li> <li>• Attended NERRS Annual Meeting (Oct 26-28)</li> <li>• Attended NOAA Climate Adaptation Workshop (Jan 26-28)</li> <li>• PowerPoint presentation on” Vulnerability of Natural Habitats to Climate Related Stressors” at NOAA Climate Adaptation Workshop (Jan 26)</li> <li>• Attend AL Coastal Foundation Sustainability Workshop (Jan 29)</li> <li>• Attended Community Rating System: Reduce the Risk-Increase the Savings workshop (Feb24)</li> <li>• Attended GOMA Coastal Resilience Team Meeting (Feb 2-4)</li> <li>• Attended Weeks Bay Science Collaborative Management Application Team meeting (March 16)</li> <li>• Attended MS/AL Sea Grant Advisory Meeting (March 29)</li> <li>• Participated in planning call for AL/MS National Response Planning Team Disaster Response workshop (March 31)</li> <li>• Participated in planning call for Climate Community of Practice expert panel (March 28)</li> <li>• Participated in Coastal States Organization Non-Point Source Work Group Calls (bi-monthly)</li> <li>• Participated in GOMA Education and Engagement Team Calls (Oct 13, Dec 15, Feb 16, March 10)</li> <li>• Participated in GOMA Education and Engagement steering committee calls as the state lead for AL (Jan 25, Feb 9, March 3)</li> <li>• Participated in GOMA Marine Debris Cross PIT steering committee call (Jan 21)</li> </ul> <p>ACAMP partnered with the MBNEP to produce Vol. IX, Issue 2 of the Alabama Current Connection, December 2015. 3300 color newsletters were mailed and 135 were submitted electronically via email. A meeting was conducted March 15, 2016, to discuss the Spring 2016 edition with an anticipated publication date of May. A sub-grant was provided to the Mobile Bay National Estuary Program (MBNEP) to conduct this portion of the task outcome. See <i>Appendix F, Alabama Current Connection Vol. IX, Issue 2.</i></p> <p><i>B) Conduct Education Outreach Coordination with Various Groups</i></p> <ul style="list-style-type: none"> <li>• Attended Bon Secour River Watershed Management Plan Steering Committee meeting (Nov 3, Jan 25)</li> </ul>

- Attended Alabama Water Quality Partnership Meeting, (Dec 2-3)
- Attended Weeks Bay NERR Advisory Committee Meeting (Dec 9)
- Attended Foley Planning Commission (Dec 16, Jan 20)
- Attended City of Foley LID Ordinance meeting
- Attended PALS Board Meeting (Nov 11, March 9)

No CRAC meetings were held during the reporting period.

*C) Support and Participate in Public Events*

- Assisted 5-Rivers staff with an educational booth at the Mobile Boat Show.

The 13th Annual Alabama Coastal BirdFest is scheduled for Oct 5-8, 2016. A sub-grant was provided to the Faulkner State Community College (FSCC) to conduct this portion of the task outcome.

2. Facilitate and Support Marine Debris Issues: Coastal staff conducted Alabama Coastal Cleanup pre-event work including contacting and coordinating with zone captains and coordinating with Alabama People Against a Littered State via email and conference calls.

3. Promote Sustainable Tourism Initiative: A sub-grant was provided to The Alabama Gulf Coast Convention and Visitors Bureau (AGCCVB) to conduct this task outcome. During the reporting period, AGCCVB conducted the following activities:

- a) The Nature Tourism Specialist continues to identify new nature tourism businesses and work with existing businesses to identify needs and locate and/or develop appropriate resources and training for those businesses. The specialist and special projects coordinator also continue to work with municipalities and public lands/project managers to identify opportunities for eco-tourism businesses to expand their businesses as well as improve public access opportunities on public lands.
- b) As mentioned above, the nature tourism specialist and special projects coordinator continue to work with municipalities and public lands/project managers to identify opportunities for eco-tourism businesses to expand their businesses as well as improve public access opportunities on public lands.

AGCCVB also continues to operate two Welcome Centers seven days a week. The new Gulf Shores Welcome Center features a dolphin fountain sculpture as a focal point, to highlight the value of the native marine mammals of the area. The centers and the Information Specialists who work there display and promote brochures on nature-based assets, attractions, events and businesses. These are also featured in the annual printed Vacation Guide, consumer websites, primarily [www.gulfshores.com](http://www.gulfshores.com), but also [www.alabamascoastalconnection.com](http://www.alabamascoastalconnection.com). In addition, a suite of consumer advertising is placed to promote various aspects of nature tourism including Alabama's Coastal Connection National Scenic Byway and the Alabama Coastal Birding Trail.

Staff continues to work with the Alabama Gulf Coast Reef & Restoration Foundation to find ways to enhance and promote diving opportunities in the area that will support more nature-based businesses as well as increased engagement by visitors.

c) Conducted a general assessment of the economic value of ecotourism via website. The assessments can be accessed via the website, [www.agccvb.org/stats](http://www.agccvb.org/stats). Visitor profile research goals and methods were re-assessed in 2014 and a new system for surveying and reporting has begun.

d) In late 2015 the effort to update the existing marketing materials, develop social media platforms and train stakeholders in byway promotional tactics was complete and put into place. Byway marketing efforts continue and new social media marketing

	<p>tactics are showing positive results and increasing engagement by both stakeholders and potential visitors/customers.</p> <p>e) In the fall of 2015 the AGCCVB staff began working with the cities of Gulf Shores and Orange Beach to coordinate a communications effort to promote a new “Leave Only Footprints” campaign. The campaign rolled out in January of 2016 and is ongoing. It includes a newly designed website at <a href="http://www.cleanisland.org">www.cleanisland.org</a> as well as social media platforms, an advertising and public relations campaign both locally and regionally.</p> <p>f) Sea Turtle Volunteer Program: Staff continues to coordinate with Share the Beach volunteers on collateral and publicity needs, as well as continued promotional efforts in the two Welcome Centers. The new Gulf Shores Welcome Center will also have a Turtle Tracks (a City of Gulf Shores program) turtle statue, to highlight the efforts of Share the Beach, as well as local artists who support those efforts.</p>
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### 306 – 05: COASTAL COMMUNITY RESILIENCE EFFORTS

Task Outcomes	Accomplishments
<p>1. <i>Support for Coastal Resilience Efforts and Initiative</i></p> <p>2. <i>Maintain Shoreline Monitoring and Analysis of Data and Information</i></p>	<p><u>1. Support for Coastal Resilience Efforts and Initiative:</u> Coastal staff conducted the following activities:</p> <ul style="list-style-type: none"> <li>• participated in and presented at NOAA Climate Change Vulnerability Workshop</li> <li>• participated in coordination calls and winter meeting of GOMA Coastal Resilience Team</li> <li>• participated in steering committee for Bon Secour River Watershed Management Plan</li> <li>• Coastal Section Chief participated in planning and implementation of Weeks Bay Marine Debris Disaster Response Exercise</li> <li>• participated in Weeks Bay Vulnerability Assessment</li> </ul> <p><u>2. Maintain Shoreline Monitoring and Analysis of Data and Information:</u> During the reporting period, the GSA began to contact vendors to request quotes for annual Gulf beach imagery. However, quotes had not yet been received prior to the end of the reporting period. Additionally, GSA georeferenced a digital version of the April 1986 National Agricultural Index Program imagery for the study area. Also, GSA has obtained 1975 contact prints and is in the process of digitizing and geo-referencing this imagery. During the next reporting period, the GSA will complete processing this imagery, obtain quotes for and issue a contract for obtaining this year’s imagery and will conduct field work to obtain beach profiles.</p>

### 306 – 06: PROMOTE PRODUCTIVE COASTAL HABITATS

Task Outcomes	Accomplishments
<p>1. <i>Assist with Coastal Habitat Mapping Efforts</i></p> <p>2. <i>Assist the Gulf Ecological Management Sites Program</i></p> <p>3. <i>Support Regional Sediment Mgmt. Efforts – Beneficial Use of Dredged</i></p>	<p><u>1. Assist with Coastal Habitat Mapping Efforts:</u> The Coastal staff continues to provide technical assistance to the Mobile Bay NEP in the implementation of its Coastal Habitat Mapping Project, which is being funded by a National Fish and Wildlife Federation Gulf Environmental Benefit Fund Grant.</p> <p>Additionally, the staff assisted the ADCNR in the preparation and submission of a Submerged Aquatic Vegetation Mapping proposal to the Gulf Coast Ecosystem Restoration Council. This proposal was selected for funding under the Council’s Funded Priorities List.</p>

<p><i>Materials</i></p> <p>4. <i>Support SLD to Promote Stewardship and Restoration of Coastal Lands</i></p>	<p><u>2. Assist the Gulf Ecological Management Sites Program:</u> The Coastal staff continues to work with the other GEMS program partners to pursue additional funding sources for the partnership. These efforts have been unsuccessful to date but will continue in the next reporting period.</p> <p><u>3. Support Regional Sediment Mgmt. Efforts – Beneficial Use of Dredged Materials:</u> The Coastal staff continues to serve on the Mobile Harbor Interagency Working Group (MHIWG). During the reporting period, the staff attended 2 MHIWG meetings as well as a meeting of an interagency working group being stood-up for the Mobile Navigation Project Deepening and Widening study.</p> <p>Additionally, the Coastal staff continues to serve as co-chair of the GOMA Habitat Team Regional Sediment Management Subcommittee. This mainly included participating in conference calls as the GOMA Habitat Team planned out its next Action Plan and All-Hands 2016 agenda.</p> <p><u>4. Support SLD to Promote Stewardship and Restoration of Coastal Lands:</u> The Coastal staff continues to provide technical support to the SLD in promoting stewardship and restoration of state-owned lands in coastal Alabama. The coastal staff provided technical assistant to other SLD staff as requested.</p>
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**306 – 07: PROTECT AND ENHANCE COASTAL USES & PLANNING EFFORTS**

Task Outcomes	Accomplishments
<p>1. <i>Comprehensive Plan – Creola</i></p> <p>2. <i>Fairhope Beach Management Plan – Fairhope</i></p> <p>3. <i>Stormwater Management Plan – Town of Perdido Beach</i></p>	<p><u>1. Comprehensive Plan - Creola:</u> The City of Creola was delayed in starting the Comprehensive Plan due to securing the required e-Verify document for the State of Alabama. Without the e-Verify the State could not issue a sub-award for the project. The e-Verify was and its approval by the Department of Homeland Security was provided to the State on March 21, 2016. The sub-award was executed and the City will begin work next period.</p> <p><u>2. Fairhope Beach Management Plan – Fairhope:</u> A sub-grant was provided to the City of Fairhope to conduct this portion of the task outcome. The City conducted the following activities:</p> <ul style="list-style-type: none"> <li>• conducted initial survey of existing beach profile at Magnolia Beach and Bluff Park</li> <li>• recommendations and coordination of March 2016 beach renourishment</li> <li>• facilitated initial public meeting (March 24) held to gather public input</li> </ul> <p><u>3. Stormwater Management Plan – Town of Perdido Beach:</u> A sub-grant was provided to the Town of Perdido Beach to conduct this portion of the task outcome. The Town conducted the following activities:</p> <ul style="list-style-type: none"> <li>• RFQ initiated Nov 30, 2015, Volkert, INC. selected as contractor Feb 5, 2016</li> <li>• March 19, 2016 held first of four town hall meeting with residents for public input and review</li> </ul>

**306 – 08: SECTION 312 PROGRAM EVALUATION**

Task Outcomes	Accomplishments
<p>1. <i>Participate in the Program 312 Evaluation</i></p>	<p><u>1. Participate in the Program 312 Evaluation:</u> Coastal staff completed the 312 questionnaire and coordinated with NOAA/OCM to distribute the evaluation survey to stakeholders and schedule site visits for the evaluation team in August.</p>

**Section 306a**

**306A – 01: CRIP: PUBLIC ACCESS PROJECTS FOR RECREATIONAL USES**

Task Outcomes	Accomplishments
<p>1. <i>Graham Creek Nature Preserve ADA Trail - Foley</i></p> <p>2. <i>West 12<sup>th</sup> Street Public Access Improvement – Gulf Shores</i></p>	<p>1. <u>Graham Creek Nature Preserve ADA Trail – Foley</u>: A sub-grant was provided to the City of Foley to conduct this portion of the task outcome. The City conducted the following activities:</p> <ul style="list-style-type: none"> <li>• Currently the designs for the trail are being developed by Stiffler Engineering.</li> <li>• Bid specifications have also been developed in anticipation of going to bid at the end of April.</li> </ul> <p>2. <u>West 12th Street Public Access Improvement – Gulf Shores</u>: A sub-grant was provided to the City of Gulf Shoes to conduct this portion of the task outcome. The City conducted the following activities:</p> <ul style="list-style-type: none"> <li>• survey completed for property</li> <li>• agreement accepted for engineering of sidewalk and parking improvements</li> <li>• contractor selected and purchase order issued for dune walkover</li> <li>• shower and bicycle rack purchased by City</li> </ul>

**306A – 02: CRIP: PUBLIC ACCESS PROJECTS FOR HABITAT RESTORATION**

Task Outcomes	Accomplishments
<p>1. <i>Swift Tract Marsh Restoration</i></p>	<p>1. <u>Swift Tract Marsh Restoration</u>: Coastal staff conducted site selection visit with Weeks Bay Staff. They also requested Americorps NCCC team to support planting in late summer.</p>

**Section 309**

**309 – 01: COASTAL AREA AND MARINE SPATIAL PLANNING PROGRAM (CMSP), PHASE V**

Task Outcomes	Accomplishments
<p>1. <i>Final Products</i></p>	<p>During the reporting period the Coastal staff met with the MBNEP to develop a plan complete the CMSP. Given that the MBNEP has been concentrating on completing the Phase IV (FY 2015) Tasks, no other activities took place on the Phase V (FY 2016) tasks.</p>

## **APPENDICES**

- Appendix A List of Sub-Awards for NA15NOS4190159, 1<sup>st</sup> period, Task 306-01, attached*
- Appendix B Coastal Section Staff, List of Meetings, 1<sup>st</sup> period, Task 306-01, attached*
- Appendix C ADEM Tables, 1<sup>st</sup> period, Task 306-02, attached*
- Appendix D ADEM Meetings, 1<sup>st</sup> period, Task 306-02, attached*
- Appendix E ACNPCP Activities, 1<sup>st</sup> period, Task 306-03, attached*
- Appendix F Alabama Current Connection Vol. IX, Issue 2, 1<sup>st</sup> period, Task 306-04, attached*

## *Appendix A, List of Subawards, NA15NOS4190159*

<i>Sec#</i>	<i>Task#</i>	<i>LegalName</i>	<i>Status</i>
306	01	South Alabama Regional Planning Commission	Fully Executed 11-12-15
306	01-02-03	Alabama Department of Environmental Management	Fully Executed 11-02-15
306	03	Dauphin Island Sea Lab	Fully Executed 01-21-16
306	04	Faulkner State Community College	Fully Executed 11-02-15
306	04	Alabama Gulf Coast Convention & Visitors Bureau	Fully Executed 11-02-15
306	04	Alabama People Against A Littered State	Closed/Completed 03-25-16; Fully Executed 11-02-15
306	04	Mobile Bay National Estuary Program	Fully Executed 11-02-15
306	05	Geological Survey of Alabama	Fully Executed 11-02-15
306	06	ADCNR, State Lands Division	Ongoing Agreement; Transmittal Executed 10-28-15
306	07	Town of Perdido Beach	Fully Executed 11-02-15
306	07	City of Fairhope	Fully Executed 12-03-15
306	07	City of Creola	Fully Executed 04-13-16
306	a 01	City of Foley	Fully Executed 11-12-15
306	a 01	City of Gulf Shores	Fully Executed 11-12-15
309	01	Mobile Bay National Estuary Program	Fully Executed 12-03-15

**Appendix B**  
**NA15NOS4190159, 1<sup>st</sup> Period**  
**Task 306-01**

<b>List of Meetings and Events, October 1, 2015 – March 31, 2016</b>	
<b>Dates</b>	<b>Event</b>
<b>October, 2015</b>	
1	Coastal States Annual Meeting
3	AL Bird & Conservation Expo
6	Gulf Coast CZ/NERR Meeting planning call
8	Maritime Advisory Board Meeting
8	Marine Debris Display coordination call
13	Mobile Bay NEP PIC Meeting
13	GOMA EE Team call
13-15	American Shore and Beach Preservation Society Conf., New Orleans
15	Gulf Coast CZ/NERR Meeting planning call
23	Gulf Coast CZ/NERR Meeting planning call
26-28	NERR Annual Meeting
<b>November, 2015</b>	
2	Gulf Coast CZ/NERR Meeting planning call
3	Bon Secour Watershed Meeting
4	Alabama Coastal Comp Plan
6	Meeting with NOAA/OCM Director
10	NOAA Living Shorelines Nationwide Permit Conf. Call
11	AL PALS Governor's Award ceremony
11	PALS Board Meeting
12	City of Prichard Planning
12	Alabama Coastal Comp Plan Public Meeting
12	Cleanwater Partnership/MBNEP PIC Joint Meeting
16	Coordination Meeting with City of Bayou La Batre
16	Gulf Coast CZ/NERR Meeting planning call
18	Coordination Meeting with City of Creola
19	State Lands and Governor's Office
20	Coastal Marine Planning
30	Gulf Coast CZ/NERR Meeting planning call
30	Meeting with NOAA Science Coordinator
<b>December, 2015</b>	
2	Bon Secour Watershed Public Meeting
2-3	Alabama Water Quality Partnership Meeting
4	Alabama Restore Council Meeting
4	AGCRC Meeting
8-9	GOMA meeting with Governor's staff
9	Weeks Bay Advisory Committee
10	Forever Will Board

10	NEP Annual Meeting
10	Marine Debris Display coordination call
15	GOMA EE Team call
16	City of Foley Planning Commission
<b>January, 2016</b>	
5	Coastal Staff Meeting
6	Weeks Bay Swift Tract 306A Site Visit
6	Weeks Bay Vulnerability Assessment
7	Alabama Coastal Comprehensive Plan meeting
8	Weeks Bay Marine Debris Disaster Response Planning Call
11	Coastal States Organization Conference Call
12	NOAA/NEPA Webinar
12	Planning call for NOAA Climate Adaptation Workshop
12-15	Gulf Coast CZ/NERR Meeting
19	GOMA ACT meeting
20	Foley Planning Commission
20	City of Foley LID Ordinance meeting
20	Marine Debris Display coordination call
21	Weeks Bay Marine Debris Disaster Response Planning Call
21	GOMA MD Steering Committee Call
25	Alabama Coastal Comprehensive Plan meeting
25	Bon Secour River Watershed Management Plan Steering Committee
26	GOMA Business Council
26-28	NOAA Climate Adaptation Workshop Presentation
28	SARPC meeting
29	ACF Sustainability Workshop
29	Weeks Bay NERR Science Collaborative Site Visit
<b>February, 2016</b>	
2	Coastal Program 6217 Coordination Meeting
2-4	GOMA Coastal Resilience Team Meeting
3	Coastal Staff Meeting
5	Weeks Bay/USGS Hydrographic planning call
9	GOMA EE Steering Committee Call
16	GOMA EE Team Call
16	Marine Debris Display coordination call
16	Weeks Bay/USGS Hydrographic planning call
16	CSO NonPoint Source Working Group Call
19	Weeks Bay Marine Debris Disaster Response Planning Call
19	Community Rating System 309 Planning Meeting
22-23	CSO Winter Meeting
24	Capitol Hill Briefing
24	Community Rating System Workshop
25	GOMA EE Steering Committee Call
25	NOAA Program Managers Meeting
28	Mobile Bay NEP PIC meeting

<b>March, 2016</b>	
3	GOMA EE Steering Committee Call
3	Weeks Bay Marine Debris Disaster Response Workshop
7	Meet with City of Spanish Fort
8	Weeks Bay Management Plan Meeting
9	PALS Board Meeting
10	GOMA EE Call
11	Community Rating System 309 Planning Meeting
15	<i>Current Connection</i> coordination meeting
16	Weeks Bay Science Collaborative MAT
21	CSO NonPoint Source Working Group Call
23	Coastal RFP review meeting
28	Climate Community of Practice Coordination Call
29	Coastal Cleanup design coordination meeting
29	NOAA 306A Workgroup Call
29	MS/AL Sea Grant Advisory Meeting
31	Meeting with State Lands on NOAA grants
31	AL/MS Disaster Response Workshop Organizational Call

***ADEM Tables***

**Task 306-02**

**Table #1a: Summary of State Permits**

State/Local Permitting Agency	Core Program or Type of Permit Activity	Applications Filed	Permits Issued	Permits Denied	Applications Withdrawn	Applications Pending
ADEM	Construction on Gulf Front Beaches and Dunes [ADEM Admin. Code r. 335-8-2-.08]	0	0	0	0	0
ADEM	Commercial and Residential Development [ADEM Admin. Code r. 335-8-2-.11]	0	0	0	0	3
ADEM	Groundwater Extraction [ADEM Admin. Code r. 335-8-2-.09]	1	3	0	0	0
Baldwin County	Construction on Gulf Front Beaches and Dunes	1	2	0	0	0
The Town of Dauphin Island	Construction on Gulf Front Beaches and Dunes	20	20	0	0	0
The City of Gulf Shores	Construction on Gulf Front Beaches and Dunes	20	20	0	0	0
The City of Orange Beach	Construction on Gulf Front Beaches and Dunes	3	5	0	0	7
<b>Total</b>		<b>45</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>10</b>

*Note: Total number of applications received may not be equal to number of decisions. Some decisions were made for applications received during previous reporting periods, and some decisions were pending at time of this report.*

**Table #1b: Summary of Monitoring Activities**

State/Local Monitoring Agency	Monitoring Activities Associated With Construction on Gulf Front Beaches and Dunes	Monitoring Activities For Regulated Activities Other Than Gulf Front Beaches and Dunes	Stop Work Orders Issued	Miles of Gulf Front Beaches and Dunes Monitored
ADEM	N/A	N/A	N/A	N/A
Baldwin County	53	57	0	3,620
The Town of Dauphin Island	43	40	0	1,320
The City of Gulf Shores	21	86	3	2,959
The City of Orange Beach	102	451	5	1,715
<b>Total</b>	<b>219</b>	<b>634</b>	<b>8</b>	<b>9,614</b>

Agency	Project ID	Project Name	Action	Application Date	Decision Date
National Marine Fisheries Service	2016-001-FC-FAA-NMFS	New rule that would withhold 4.9% of the 2016 red snapper commercial quota	Concur	10/5/2015	10/27/2015
National Marine Fisheries Service	2016-002-FC-FAA-NMFS	Amendment 28 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico	Concur	10/5/2015	10/27/2015
National Oceanic and Atmospheric Administration	2016-010-FC-FAA-NRDA	Draft Programmatic Damage Assessment and Restoration Plan and Draft Programmatic EIS (draft PDARP) for Deepwater Horizon Oil Spill	Concur	10/6/2015	11/17/2015
Bureau of Ocean Energy Management	2016-037-FC-FAA-BOEM-LS	CD for CPA Lease Sale 241	Concur	10/22/2015	11/19/2015
Bureau of Ocean Energy Management	2016-036-FC-FAA-BOEM-LS	CD for EPA Lease Sale 226	Concur	10/22/2015	11/19/2015
National Marine Fisheries Service	2016-147-FC-FAA-NMFS	New rule to the Fishery Management Plan for Reef Fish Resources of the Gulf of Mexico.	Concur	2/17/2016	3/7/2016
Bureau of Ocean Energy Management	2016-164-FC-FAA-BOEM-LS	Draft SEIS CPA Lease Sale 247	Comment	2/22/2016	3/17/2016

Agency	Project ID	Project Name	Action	Application Date	Decision Date
U.S. Army Corps of Engineers	2015-284-FLP-WITHDRAWN	Canoe/Kayak launch and possible walkway at Tricentennial Park.	Withdrawn by Applicant	6/10/2015	10/6/2015
U.S. Army Corps of Engineers	2015-386-FC-FLP-COE-NWP	NWP18 for driveway and fillpad	Reviewed	8/14/2015	10/7/2015
U.S. Army Corps of Engineers	2015-254-FC-FLP-COE-NWP	Convert overhead electrical lines to underground across Intracoastal Waterway	Reviewed	5/13/2015	10/16/2015
U.S. Army Corps of Engineers	2015-347-FC-FLP-COE-ALG	Add 16' x 30' covered boat house and hoist to existing pier/deck. Maintenance dredge 823 cy from nearby channel.	Reviewed	7/21/2015	10/16/2015
U.S. Army Corps of Engineers	2013-100-COE-M1	After-the-Fact modification for unauthorized 28' x 60' roof over boat slip.	Reviewed	9/22/2015	10/20/2015
U.S. Army Corps of Engineers	2016-035-FC-FLP-COE-ALG	Add deck to existing boat house	Reviewed	10/22/2015	10/22/2015
U.S. Army Corps of Engineers	2016-043-FC-FLP-COE-ALG	Construct boathouse, fill in and close off boat ramp with bulkhead.	Reviewed	10/28/2015	10/28/2015
U.S. Army Corps of Engineers	2015-311-FC-FLP-COE-ALG	5 Rivers canoe launch	Reviewed	6/26/2015	10/28/2015
U.S. Army Corps of Engineers	2016-051-FC-FLP-COE-NWP	Maintenance on existing culvert requiring discharge of fill into 0.034 acres of coastal wetlands and 48' of waterbottom.	Reviewed	11/2/2015	11/2/2015
U.S. Army Corps of Engineers	2015-430-FC-FLP-COE-ALG	Remove existing deck and extend pier with 24' gangway to 8' x 16' ADA accessible 12' x 16' floating canoe/kayak launch.	Reviewed	9/4/2015	11/2/2015
U.S. Army Corps of Engineers	2015-398-FC-FLP-COE-ALG	Construct 100' bulkhead and return walls.	Reviewed	8/24/2015	11/4/2015
U.S. Army Corps of Engineers	2013-207-COE-M1	Extend ALG11 previously issued on July 29, 2013 to replace existing 500' bulkhead.	Reviewed	11/5/2015	11/5/2015
U.S. Army Corps of Engineers	2015-357-FC-FLP-COE-ALG	Install eight pilings to create two boat slips, and install boat lift.	Reviewed	7/27/2015	11/6/2015
U.S. Army Corps of Engineers	2015-379-FC-FLP-COE-ALG	Construct 8' x 60' pier with 26' x 37' boathouse and boat lift.	Reviewed	8/10/2015	11/6/2015

U.S. Army Corps of Engineers	2015-345-FC-FLP-COE-ALG	Pier and boathouse over formerly indented boat slip.	Reviewed	7/17/2015	11/10/2015
U.S. Army Corps of Engineers	2015-452-FC-FLP-COE-ALG	Install 315 feet of new concrete bulkhead	Reviewed	9/21/2015	11/12/2015
U.S. Army Corps of Engineers	2015-436-FC-FLP-COE-ALG	Reconfigure structures to add new mooring slips.	Reviewed	9/14/2015	11/13/2015
U.S. Army Corps of Engineers	2015-394-FC-FLP-COE-ALG	Pier and boathouse in Soldier's Creek	Reviewed	8/19/2015	11/13/2015
U.S. Army Corps of Engineers	2014-313-FC-FLP-COE-LOP	Dredging and excavation of approximately 9,888yds <sup>3</sup> of sand, shell, and muck from an approximately 50,100ft <sup>2</sup> (1.15-acre) of tidal wetlands, waterbottoms, and upland property to widen the Bayou Coden channel	Concur	10/16/2014	11/18/2015
U.S. Army Corps of Engineers	2015-313-FC-FLP-COE-LOP	Aloe Bay Boat Docks	Concur	6/29/2015	11/18/2015
U.S. Army Corps of Engineers	2015-399-FC-FLP-COE-ALG	Construct 325' pier with boathouse in Mobile Bay.	Reviewed	8/25/2015	11/19/2015
U.S. Army Corps of Engineers	2015-377-FC-FLP-COE-IP	Maintenance dredge canal and fill ditch. Construct new boat slip and deck. Repair bulkhead.	Concur	8/10/2015	11/23/2015
U.S. Army Corps of Engineers	2016-038-FC-FLP-COE-ALG	Construct boathouse and deck structures on inlet in Magnolia River.	Reviewed	10/26/2015	11/30/2015
U.S. Army Corps of Engineers	2015-361-FC-FLP-COE-ALG	Pier across marsh leading to boathouse with boat slip.	Reviewed	8/3/2015	11/30/2015
U.S. Army Corps of Engineers	2015-378-FC-FLP-COE-ALG	Construct boathouse and boatlift adjacent to existing boathouse	Reviewed	8/10/2015	11/30/2015
U.S. Army Corps of Engineers	2015-366-FC-FLP-COE-NWP	Dredge sediment and remove dead fall from tributary.	Reviewed	8/3/2015	11/30/2015
U.S. Army Corps of Engineers	2016-074-FC-FLP-COE-ALG	Construct pier leading to boat house and open sun deck	Reviewed	11/30/2015	11/30/2015
U.S. Army Corps of Engineers	2016-075-FFC-FLP-COE-ALG	Pier and boathouse in Town of Perdido Beach	Reviewed	11/30/2015	11/30/2015
U.S. Army Corps of Engineers	2016-076-FC-FLP-COE-ALG	Place 43 cubic yards of rip rap at toe of bulkhead	Reviewed	11/30/2015	11/30/2015

U.S. Army Corps of Engineers	2016-078-FC-FLP-COE-ALG	Construct 29' X 35' boathouse with 2 covered slips.	Reviewed	11/30/2015	11/30/2015
U.S. Army Corps of Engineers	2015-303-FC-FLP-COE-NWP-M1	Move pipe from north ROW to south and add pump station	Reviewed	12/2/2015	12/2/2015
U.S. Army Corps of Engineers	2015-119-FC-FLP-COE-ALG-M1	After-the-Fact Modification to remove existing pier and construct new pier and boathouse, with slips.	Reviewed	12/2/2015	12/2/2015
U.S. Army Corps of Engineers	2015-438-FC-FLP-COE-ALG	Replace wharf and construct new 12' x 24' deck approximately 8' from bulkhead	Reviewed	9/14/2015	12/4/2015
U.S. Army Corps of Engineers	2015-418-FC-FLP-COE-ALG	Pier and boathouse with closet and crab pier.	Reviewed	9/1/2015	12/4/2015
U.S. Army Corps of Engineers	2016-089-FC-FLP-COE-ALG	Install pier and boat ramp	Reviewed	12/8/2015	12/8/2015
U.S. Army Corps of Engineers	2016-028-FC-FLP-COE-NWP	Remove 23 derelict vessels and marine debris from Bayou La Batre waterway	Reviewed	10/16/2015	12/11/2015
U.S. Army Corps of Engineers	2015-443-FC-FLP-COE-ALG	Construct 12.5' x 19' open deck extension to cover exposed stormwater pipe.	Reviewed	9/14/2015	12/11/2015
U.S. Army Corps of Engineers	2015-268-FC-FLP-COE-NWP	Fill wetlands for driveway, turnaround, and garage.	Reviewed	5/26/2015	12/18/2015
U.S. Army Corps of Engineers	2016-102-FC-FLP-COE-NWP	Install sewer pipe under creek	Reviewed	12/18/2015	12/18/2015
U.S. Army Corps of Engineers	2016-105-FC-FLP-COE-ALG	Replace structures in Mobile Bay	Reviewed	12/18/2015	12/18/2015
U.S. Army Corps of Engineers	2016-030-FC-FLP-COE-ALG	Modify existing boathouse by relocating 12' x 10' slip and enlarging primary boat slip by 8' x 12'	Reviewed	10/16/2015	12/21/2015
U.S. Army Corps of Engineers	2016-091-FC-FLP-COE-NWP	Repair culvert	Reviewed	12/9/2015	12/21/2015
U.S. Army Corps of Engineers	2015-226-FC-FLP-COE-ALG-M1	Modification 1 - Construct pier and boathouse, repair bulkhead, and construct new bulkhead/fill to eliminate boat slip.	Reviewed	12/28/2015	12/28/2015
U.S. Army Corps of Engineers	2015-210-FC-FLP-COE-ALG-M1	Modification 1 - Construct 470' boardwalk extension with 2x open decks.	Reviewed	12/28/2015	12/28/2015

U.S. Army Corps of Engineers	2015-031-FC-FLP-COE-IP	Shoreline stabilization and marsh creation on Mon Louis Island.	Concur w/ Conditions	10/28/2014	12/29/2015
U.S. Army Corps of Engineers	2016-007-FC-FLP-COE-ALG	Replace pier and boat house destroyed by Hurricane Ivan	Reviewed	10/1/2015	1/4/2016
U.S. Army Corps of Engineers	2015-434-FC-FLP-COE-ALG	Pier over marsh with boat lift at waterward end.	Reviewed	9/8/2015	1/4/2016
U.S. Army Corps of Engineers	2016-067-FC-FLP-COE-ALG	Replace existing pier/deck with 5' x 70' pier w/ 20' x 20' covered deck, 20' x 10' open deck, and 10' x 12' boat lift	Reviewed	11/19/2015	1/4/2016
U.S. Army Corps of Engineers	2012-254-COE-M3	Expand oyster farm	Reviewed	11/23/2015	1/7/2016
U.S. Army Corps of Engineers	2016-071-FC-FLP-COE-NWP	Run electric cable under canal	Reviewed	11/24/2015	1/7/2016
U.S. Army Corps of Engineers	2016-058-FC-FLP-COE-ALG	Remove and replace existing boathouse and crab pier.	Reviewed	11/10/2015	1/8/2016
U.S. Army Corps of Engineers	2016-034-FC-FLP-COE-ALG	Repair and expansion of existing boathouse, and construct new elevated walkway to boathouse	Reviewed	10/20/2015	1/8/2016
U.S. Army Corps of Engineers	2016-082-FC-FLP-COE-ALG	Install boat lift	Reviewed	12/1/2015	1/8/2016
U.S. Army Corps of Engineers	2015-369-FC-FLP-WITHDRAWN	Pier and deck near dog river bridge.	Administratively Closed by Agency	8/4/2015	1/11/2016
U.S. Army Corps of Engineers	2015-387-FC-FLP-COE-ALG	Dredge boatslips, install bulkead, and construct boathouse.	Reviewed	8/14/2015	1/11/2016
U.S. Army Corps of Engineers	2016-079-FC-FLP-COE-ALG	Remove and replace portions of existing bulkhead.	Reviewed	1/13/2016	1/13/2016
U.S. Army Corps of Engineers	2015-358-FC-FLP-COE-ALG-M1	Modify GP to add pilings and walkway	Reviewed	1/20/2016	1/20/2016
U.S. Army Corps of Engineers	2016-072-FC-FLP-COE-ALG	Pier, deck, and pilings for boatslip.	Reviewed	1/4/2016	1/20/2016
U.S. Army Corps of Engineers	2016-006-FC-FLP-COE-ALG	Extend boathouse and install rip-rap	Reviewed	10/2/2015	1/21/2016

U.S. Army Corps of Engineers	2016-070-FC-FLP-COE-ALG	Replace rip rap with bulkhead and replace 8' x 60' finger pier damaged during recent storms.	Reviewed	11/24/2015	1/25/2016
U.S. Army Corps of Engineers	2016-093-FC-FLP-COE-ALG	Dredge around boat ramp and construct bulkhead	Reviewed	1/25/2016	1/25/2016
U.S. Army Corps of Engineers	2016-106-FC-FLP-COE-ALG	Construct bulkhead along canal.	Reviewed	1/8/2016	1/26/2016
U.S. Army Corps of Engineers	2016-109-FC-FLP-BSEE	6 inch Bulk Gas Right-of-Way (ROW) Pipeline	Concur w/ Conditions	12/30/2015	1/26/2016
U.S. Army Corps of Engineers	2016-116-FC-FLP-COE-ALG	Construct pier, deck, and gazebo. Install pilings for boat slips.	Reviewed	1/28/2016	1/28/2016
U.S. Army Corps of Engineers	2016-013-FC-FLP-COE-ALG	Excavate new 30' x 14' boat slip on canal to Wolf Bay	Reviewed	10/13/2015	1/29/2016
U.S. Army Corps of Engineers	2016-136-FC-FLP-COE-ALG	ATF permit for pier structures and bulkhead. Add boat slip and deck structures.	Reviewed	1/29/2016	1/29/2016
U.S. Army Corps of Engineers	2016-046-FC-FLP-COE-NWP	NWP18 for parking and dumpster adjacent to a proposed commercial building.	Reviewed	10/29/2015	2/1/2016
U.S. Army Corps of Engineers	2016-138-FC-FLP-COE-ALG	Pier over wetlands to deck in Little Lagoon.	Reviewed	2/1/2016	2/1/2016
U.S. Army Corps of Engineers	2016-111-FC-FLP-COE-ALG	Pier spanning from uplands to boathouse waterward of wetlands	Reviewed	12/28/2015	2/1/2016
U.S. Army Corps of Engineers	2015-316-FC-FLP-COE-ALG-M1	Modify GP structure	Reviewed	2/1/2016	2/1/2016
U.S. Army Corps of Engineers	2016-039-FC-FLP-COE-ALG	Indented boat slip on canal near Town of Perdido Beach	Reviewed	10/26/2015	2/2/2016
U.S. Army Corps of Engineers	2015-429-FC-FLP-COE-NWP	Construct 20' x 2' segment of driveway across ditch, impacting 0.0009 acres (40 sq. ft.) of man-made wetlands	Reviewed	9/1/2015	2/5/2016
U.S. Army Corps of Engineers	2016-133-FC-FLP-COE-ALG	Construct 3' x 12' finger pier at end of existing pier and install 4x pilings to support a 12' x 12' boat slip with lift.	Reviewed	1/27/2016	2/5/2016
U.S. Army Corps of Engineers	2016-121-FC-FLP-BOEM	Drilling, temporary abandonment, and installation of subsea wellheads for Subsea Wells F, G, H, I, J, and K in Mississippi Canyon Area Block 788	Concur w/ Conditions	1/19/2016	2/11/2016

U.S. Army Corps of Engineers	2016-005-FC-FLP-COE-NWP	Relocate wetland on Gulf State Park property.	Reviewed	10/2/2015	2/16/2016
U.S. Army Corps of Engineers	2016-141-FC-FLP-COE-ALG	ATF permit for 6' x 70' pier over marsh and 26' x 10' boathouse	Reviewed	2/2/2016	2/16/2016
U.S. Army Corps of Engineers	2016-151-FC-FLP-COE-NWP	Replace 2,800' damaged water pipeline beneath Tensaw River via directional drilling. Temporarily impact 0.115 acres coastal wetlands.	Reviewed	2/16/2016	2/16/2016
U.S. Army Corps of Engineers	2015-380-FC-FLP-COE-ALG	Permit modification for dredging and pier	Reviewed	8/21/2015	2/17/2016
U.S. Army Corps of Engineers	2016-099-FC-FLP-COE-ALG	Construct pier and boathouse and dredge around boatslips.	Reviewed	12/15/2015	2/17/2016
U.S. Army Corps of Engineers	2016-085-FC-FLP-COE-ALG	Construct pier and boathouse with boat slip and two jet-ski lifts, add mooring pilings, construct lower platform, and replace bulkhead.	Reviewed	12/4/2015	2/23/2016
U.S. Army Corps of Engineers	2016-094-FC-FLP-COE-ALG	Construct new pier/boathouse and dredge for boatslip.	Reviewed	12/14/2015	2/24/2016
U.S. Army Corps of Engineers	COE-06-60-M5	Modification to Maintenance Dredging and Beach Nourishment West of Little Lagoon Pass	Reviewed	8/6/2015	2/29/2016
U.S. Army Corps of Engineers	2016-055-FC-FLP-COE-ALG	Reconfigure structures and boat ramp at MRD dock.	Reviewed	11/3/2015	2/29/2016
U.S. Army Corps of Engineers	2016-086-FLP-WITHDRAWN	Construct bulkhead and deck along bulkhead. Add pilings for slips.	Administratively Closed by Agency	12/4/2015	2/29/2016
U.S. Army Corps of Engineers	2016-097-FC-FLP-COE-LOP	Dredge and maintain an access channel and turnaround area at existing boat slip.	Concur	12/7/2015	3/2/2016
U.S. Army Corps of Engineers	2016-143-FC-FLP-COE-ALG	Replace existing deck roof with expanded 11' x 30' roof, install 2x pilings to expand boat slip, install boat lift, install 1x piling for swivel jet ski lift.	Reviewed	2/4/2016	3/9/2016

U.S. Army Corps of Engineers	2015-429-FC-FLP-COE-ALG	Fill 0.08 acre waterbottoms to nourish beach on Lot 3. Construct 111' x 4' pier with expansion features waterward of grassbeds, with 38' x 38' covered boat house.	Reviewed	9/1/2015	3/10/2016
U.S. Army Corps of Engineers	2014-342-FC-FLP-COE-NWP	After-the-Fact permit to place rip-rap below OHWM to stabilize 10' x 1' section of shoreline.	Reviewed	7/29/2014	3/10/2016
U.S. Army Corps of Engineers	2016-100-FC-FLP-COE-ALG	Construct 8' x 5' pier to 50' x 50' dock with covered 13' x 38' boat slip and lift. Retain/maintain 51' bulkhead.	Reviewed	12/15/2015	3/15/2016
U.S. Army Corps of Engineers	2016-095-FC-FLP-COE-ALG	300' pier and 40' X 40' boathouse. Install 3x mooring pilings.	Reviewed	12/14/2015	3/15/2016
U.S. Army Corps of Engineers	2016-146-FC-FLP-COE-ALG	Construct 5' x 480' pier over marsh with a 20' x 20' open deck and a 10' x 20' covered deck over water.	Reviewed	2/5/2016	3/16/2016
U.S. Army Corps of Engineers	2015-455-FC-FLP-COE-ALG-M1	Extension of Bulkhead behind marsh.	Reviewed	12/22/2015	3/17/2016
U.S. Army Corps of Engineers	2016-132-FC-FLP-COE-NWP*	Fill 0.023 acres of coastal wetlands for construction of single-family residence.	Concur w/ Conditions	1/27/2016	3/17/2016
U.S. Army Corps of Engineers	2016-166-FC-FLP-COE-NWP	Install 7,000' of new sanitary sewer force main via horizontal directional drilling.	Reviewed	2/25/2016	3/17/2016
U.S. Army Corps of Engineers	2016-155-FC-FLP-COE-NWP	Construct electric line under UT to Halls Mill Creek to provide single-family dwelling electrical service.	Reviewed	2/16/2016	3/17/2016
U.S. Army Corps of Engineers	2016-169-FC-FLP-COE-ALG	Construct 14' x 30' boat house with boat lift and sun deck.	Reviewed	2/26/2016	3/18/2016
U.S. Army Corps of Engineers	2016-148-FC-FLP-COE-ALG	Construct 15' x 30' boathouse and install boat lift within existing slip.	Reviewed	2/16/2016	3/24/2016
U.S. Army Corps of Engineers	2015-149-FC-FLP-COE-ALG	Add two 12' x 30' covered boathouses to existing pavilion, re-roof pavilion, install two boatlifts.	Reviewed	2/18/2015	3/26/2016
U.S. Army Corps of Engineers	2016-173-FC-FLP-COE-ALG	Construct 20' x 20' open deck, 30' x 24' covered boathouse and 30' x 6' covered deck. Replace 100' segment of failed bulkhead.	Reviewed	3/2/2016	3/28/2016
U.S. Army Corps of Engineers	2016-083-FC-FLP-COE-NWP	Construct retaining wall, walkway, and boat shelter	Reviewed	12/3/2015	3/28/2016

U.S. Army Corps of Engineers	2016-165-FC-FLP-COE-ALG	Construct 20' x 16' deck, 14' x 25' slip with boat lift, and 4' x 25' finger pier	Reviewed	2/23/2016	3/28/2016
U.S. Army Corps of Engineers	2016-062-FC-FLP-COE-ALG	Dredge 159 cy from residential boat slips. Dredge 36 cy new channel to receiving channel.	Reviewed	11/13/2015	3/30/2016

<b>Agency</b>	<b>Project ID</b>	<b>Project Name</b>	<b>Action</b>	<b>Application Date</b>	<b>Decision Date</b>
N/A	N/A	N/A	N/A	N/A	N/A

Agency	Project ID	Project Name	Action	Application Date	Decision Date
Bureau of Ocean Energy Management	2015-446-FC-OCS-BOEM	Installation of two subsea manifolds, installation of six lease term pipelines.	Concur w/ Conditions	9/15/2015	10/8/2015
Bureau of Ocean Energy Management	2015-416-FC-OCS-BOEM	Drill, complete, and temporarily abandon subsea well 002 in Desoto Canyon Area Block 4.	Concur w/ Conditions	8/28/2015	10/8/2015
Bureau of Ocean Energy Management	2015-445-FC-OCS-BOEM	Well jumper and commence production of Well A in Mississippi Canyon Area Block 255	Concur w/ Conditions	9/15/2015	10/8/2015
Bureau of Ocean Energy Management	2015-454-FC-OCS-BOEM	Drilling, temporary abandonment, and installation of subsea wellheads of Subsea Wells A, C, and D in Mississippi Canyon (MC) Area Block 475, Subsea Wells B, E, and F in MC 476 and Subsea Well G in MC 432	Concur w/ Conditions	9/21/2015	10/15/2015
Bureau of Ocean Energy Management	2016-003-FC-OCS-BOEM	Drill, test, and install a subsea tree for Subsea Wells E, F, G, and H in Mississippi Canyon Area Block 127 and Subsea Wells I and J in Mississippi Canyon Area Block 126	Concur w/ Conditions	10/2/2015	10/27/2015
Bureau of Ocean Energy Management	2016-012-FC-OCS-BOEM	Drilling, installation of subsea wellheads, and completion and abandonment of Wells A-F.	Concur w/ Conditions	10/8/2015	11/2/2015
Bureau of Ocean Energy Management	2016-023-FC-OCS-BOEM	Drilling and completion of 28 wells: 2 exploration wells, 7 injector wells, and 19 development wells in Desoto Canyon Area Block 353, and Mississippi Canyon Area Blocks 348, 391, 392, and 393	Concur w/ Conditions	10/13/2015	11/6/2015
Bureau of Ocean Energy Management	2016-033-FC-OCS-BOEM	Drilling and well completion of Subsea Well B in Mississippi Canyon Area Block 563.	Concur w/ Conditions	10/19/2015	11/13/2015
Bureau of Ocean Energy Management	2015-444-FC-OCS-BOEM	Install subsea wellheads, install lease term pipeline, and commence production from subsea well 002 in Desoto Canyon Area Block 4.	Concur w/ Conditions	9/15/2015	11/16/2015

Bureau of Ocean Energy Management	2016-045-FC-OCS-BOEM	Drilling, installation of subsea wellheads, and completion and abandonment of Wells A-C and AA	Concur w/ Conditions	10/28/2015	11/19/2015
Bureau of Ocean Energy Management	2016-059-FC-OCS-BOEM	Drilling, completion, testing, and installation of a subsea tree for Wells A, AA, B, and BB in Mississippi Canyon Area Block 127	Concur w/ Conditions	11/12/2015	12/7/2015
Bureau of Ocean Energy Management	2016-064-FC-OCS-BOEM	Drilling and completion of Subsea Wells A and B, located in Mississippi Canyon Area Block 257	Concur w/ Conditions	11/16/2015	12/15/2015
Bureau of Ocean Energy Management	2016-087-FC-OCS-BOEM	Drilling, completion, and installation of subsea wellheads for Wells A and B, located in Mississippi Canyon Area Block 565	Concur w/ Conditions	12/8/2015	1/11/2016
Bureau of Ocean Energy Management	2016-118-FC-OCS-BOEM	Install a subsea wellhead, a lease term pipeline, and commence production from well K003 in Mississippi Canyon Area Block 383	Concur w/ Conditions	1/15/2016	2/11/2016
Bureau of Ocean Energy Management	2016-145-FC-OCS-BOEM	Installation of subsea wellheads, installation of lease term pipelines, and commencement of production from Subsea Wells R-Y and Drill Center 2 located in Walker Ridge Area Blocks 464 and 508	Concur w/ Conditions	2/4/2016	3/3/2016
Bureau of Ocean Energy Management	2016-144-FC-OCS-BOEM	Drilling, completion, testing, and installation of subsea wellheads for Subsea Wells A, B, and C, located in Viosca Knoll Area Block 999	Concur w/ Conditions	2/10/2016	3/3/2016

<b>Agency</b>	<b>Project ID</b>	<b>Project Name</b>	<b>Action</b>	<b>Application Date</b>	<b>Decision Date</b>
Alabama Department of Environmental Management	MSC-05-15-E1	2nd Time Extension for Groundwater extraction wells: Deg-1 and Deg-2	Issue	9/28/2015	10/2/2015
Alabama Department of Environmental Management	MSC-04-10-E1	Time Extension for Dauphin Island Water and Sewer Authority Ground Water Extraction Well No. 6	Issue	9/1/2015	11/24/2015
Alabama Department of Environmental Management	2012-414-MSC-E1	Time extension of an existing permit authorizing the continued operation of groundwater production well DEG-3 to generate industrial processing supply water.	Issue	1/20/2016	1/26/2016

<b>Agency</b>	<b>Project ID</b>	<b>Project Name</b>	<b>Action</b>	<b>Application Date</b>	<b>Decision Date</b>
Alabama Department of Environmental Management	2010-289-NIP-E2	2nd Time Extension	Issued	1/12/2016	2/1/2016

<b>Agency</b>	<b>Project ID</b>	<b>Project Name</b>	<b>Enforcement Action Type</b>	<b>Decision Date</b>
Alabama Department of Environmental Management	2015-435	Unauthorized fill in coastal wetlands for septic pad	Notice of Violation	10/20/2015

**Table #9a: Regulated Use Permits Reviewed**

<b>Regulated Use Type</b>	<b># of Applications Received</b>	<b># for which Concurrence was Issued</b>	<b># for which Concurrence was Denied</b>	<b># Withdrawn or Cancelled</b>
Federal Licenses and Permits	129	99	0	3
Federal Agency Activities	10	7	0	0
Federal Assistance Activities	0	0	0	0
Outer Continental Shelf Activities	15	16	0	0
Variance Requests	0	1	0	0
<b>Total:</b>	<b>154</b>	<b>123</b>	<b>0</b>	<b>3</b>

*Note: Total number of applications/requests received may not be equal to number of decisions. Some decisions were made for applications/requests received during previous reporting periods, and some decisions were pending at time of this report.*

**Table #9b: Regulated Use Monitoring Activities:**

<b>Monitoring Inspections:</b>	<b>#</b>
Federal Licenses and Permits Sites	35
Federal Agency Sites	0
Outer Continental Shelf Sites	0
State Regulated Activity Sites	0
Variance Sites	0

**APPENDIX D:  
ADEM MEETINGS**

**FY 2016 SEMI-ANNUAL REPORT  
1st REPORT PERIOD  
FOR THE PERIOD ENDING March 31, 2016  
NOAA AWARD # NA15NOS4190159**

**ADEM  
SECTION 306 REPORTING**

**Task 306-07: ADEM COASTAL PROGRAM ADMINISTRATION:  
MEETINGS, FORUMS, TRAINING AND CONFERENCES**

<b>DATE</b>	<b>LOCATION</b>	<b>EVENT</b>
12/03/2015	Spanish Fort, AL	Water Quality Presentation
12/11/2015	Mobile, AL	Mobile Bay National Estuary Program Annual Breakfast
01/28/2016	Orange Beach, AL	Beach Initiatives Meeting
02/25-26/16	Doubletree Hotel Washington, D.C.	Annual CZM Program Manager's Meeting
03/02/2016	Robertsdale, AL	Weeks Bay Watershed Management Plan Stakeholder Workshop
03/31/2016	Mobile, AL	Mobile Harbor GRR Agency Meeting
04/01/2016	Mobile, AL	Three Mile Creek Watershed Integrated Core Group Meeting

**APPENDIX E:  
ACNPCP ACTIVITIES**

**FY 2016 SEMI-ANNUAL REPORT  
1st REPORT PERIOD  
FOR THE PERIOD ENDING March 31, 2016  
NOAA AWARD # NA15NOS4190159**

**ADEM  
SECTION 306 REPORTING**

**Task 306-07: ADEM COASTAL PROGRAM ADMINISTRATION:  
MEETINGS, FORUMS, TRAINING AND CONFERENCES**

<b>DATE</b>	<b>LOCATION</b>	<b>EVENT</b>
10/07/15	Mobile, AL	Fish River (Week's Bay) Watershed Management Plan RFP Review (Teleconference)
10/19/15	Gatlinburg, TN	Coastal States Organization's Coastal NPS Work Group - Chair National Teleconference Call- §6217 Programs Forum
10/26/15	Mobile, AL	SWCD Coordination with ACNPCP: Future Projects to support Coastal NPS
10/27/15	Mobile, AL	MC-NRCS : Regional Coordination for ACNPCP Projects
10/28/15	Mobile, AL	US Army Corps of Engineers-Mobile District-Mitigation Bank Interagency Review Team (MBIRT)
10/29/15	Bay Minette, AL	BC-SWCD : OSDS Workshop Contractor Coordination / <i>Coastal Alabama OSDS Inspection &amp; Maintenance Program – Sector 1</i>
10/30/15	Mobile, AL	*ACNPCP Presentation for Alabama Onsite Wastewater Training Center Certification: <i>Coastal Alabama OSDS I&amp;M Program</i> ACNPCP Presentation to coastal AOWB Certified OSDS Pumper/Installers
10/30/15	Mobile, AL	MC-SWCD : OSDS Workshop Contractor Coordination / <i>Coastal AL OSDS I&amp;M Program – Sector 1</i>
	Mobile, AL	MC-SWCD : Regional Coordination to support and implement ACNPCP Projects
11/02/15	Coden, AL	Fowl River Watershed Management Plan: Public Meeting
11/04/15	Mobile, AL	<i>Coastal AL OSDS I&amp;M Program – Sector 1</i> : ACNPCP Contractor Coordination with County Health Departments -Baldwin County Health Department and Mobile County Public Health
11/05/15	Mobile, AL	ACNPCP coordination with ADEM-MOB: ADEM-319 coordination for OSDS I&M Program
11/05/15	Southwest Alabama	ER Back-Up: ADEM Hazardous Materials Emergency Response Team- Coastal Alabama ACNPCP staff on Back-Up ER duty for SW Alabama (8 Counties): Provide 24/7 technical support and back up communications for Primary ER Staff to ADEM-MOB and ER staff.
11/06/15	Loxley, AL	NRCS Regional Coordination for ACNPCP Projects: Mapping and Soils Analysis
11/10/15	Mobile, AL	Mudbrick Media, LLC coordination with SWCDs to supply media needs for Coastal OSDS I&M Program – Sector 1 Workshops
11/10/15	Magnolia Springs, AL	*ACNPCP Implementation: <i>Coastal Alabama OSDS I&amp;M Program – Sector 1 Public Workshop / BC#1 @ Magnolia Springs Community Center</i>
11/11/15	Mobile, AL	MC-SWCD : OSDS Workshop Coordination / <i>Coastal Alabama OSDS I&amp;M Program – Sector 1 Planning Meeting</i>
11/12/15	Southwest Alabama	ER Primary: ADEM Hazardous Materials Emergency Response Team- Coastal Alabama ACNPCP staff on PRIMARY ER duty for SW Alabama (8 Counties): Provide 24/7 technical support and communications for ER events to State EMA, ADEM-MOB and ER staff.
11/12/15	Spanish Fort, AL	Coastal Alabama Clean Water Partnership -Steering Committee Meeting:

	5 Rivers Delta Resources Center	ADEM, SWCDs, ACNPCP, MBNEP, MS-AL Sea Grant, et al Primary stakeholders and partners forum for ACNPCP and ADEM-319 for coastal Alabama
11/12/15	Spanish Fort, AL 5 Rivers Delta Resources Center	Mobile Bay NEP -Project Implementation Committee (MBNEP-PIC): Group discussion of coastal Project Assessment Tools, Watershed Management Plans, other potential Projects.
11/12/15	Theodore, AL	<u>*ACNPCP Implementation:</u> <i>Coastal Alabama OSDS I&amp;M Program</i> – Sector 1 Public Workshop / MC#1 @ Alma Bryant Technical Center
11/13/15	Mobile	Post OSDS Workshop Coordination with SWCDs / <i>Coastal Alabama OSDS I&amp;M Program</i> – Sector 1: Lessons Learned
11/16/15	Orange Beach, AL	Alabama Assn of Conservation Districts/ 73 <sup>rd</sup> Annual State Conference -Urban Conservation Committee -Conservation Practices and Research Committee
11/17/15	Mobile, AL	ACNPCP Coordination with ADEM-FOD and ADEM-Water for 312 Review and future projects
11/18/15	Mobile, AL	ACNPCP Coordination with ADEM-Coastal for 312 Review approaches and future projects
11/23/15	Mobile, AL	Coastal States Organization’s Coastal NPS Work Group - Chair National Teleconference Call- §6217 Programs Forum : NOAA_OCM and EPA-HQ Federal Partners Meeting: New Submissions-Federal Approval Strategies and Prioritization
11/30/15 To 12/04/15	Hoover, AL	<u>Training:</u> Stream Functions Pyramid Certification / USEPA-Wetlands Div, USF&WS, and USACOE -Instructors: Will Harmon, Stream Mechanics, LLC and Rich Starr, USF&WS-Chesapeake Bay FO
12/07/15	Mobile, AL	OSDS Workshop Contractor Coordination / <i>Coastal AL OSDS I&amp;M Program</i> – Sector 1
12/08/15	Mobile, AL	ACNPCP Coordination with ADEM-FOD and ADEM-C&SW for 312 Review and future projects
12/08/15	Mobile, AL	Coastal States Organization’s Coastal NPS Workgroup - Chair / Executive Committee Call Coordination to develop WG agendas for State CNPCPs through this national Teleconference forum.
12/08/15	Weeks Bay, AL	<u>*ACNPCP Implementation:</u> <i>Coastal Alabama OSDS I&amp;M Program</i> – Sector 1 Public Workshop / BC#2 @ Weeks bay NERR Resources Center
12/09/15	Millbrook, AL	Alabama Clean Water Partnership Watershed Conference
12/09/15	Mobile, AL	USACOE- Mobile Bay Interagency Working Group : Upper Mobile Bay Beneficial Use Surveys
12/09/15	Weeks Bay, AL	Week’s Bay NERR Technical Advisory Committee
12/10/15	Mobile, AL	Mobile & Baldwin Water Festival Steering Committee
12/10/15	Theodore, AL	<u>*ACNPCP Implementation:</u> <i>Coastal Alabama OSDS I&amp;M Program</i> – Sector 1 Public Workshop / MC#2 @ New Hope United Methodist Church
12/11/15	Mobile, AL	Mobile Bay National Estuary Program’s <i>Annual Breakfast</i>
12/14/15	Mobile, AL	Gulf of Mexico Alliance (GOMA) Water Resources Team Teleconference
12/15/15	Bon Secour, AL	<u>*ACNPCP Implementation:</u> <i>Coastal Alabama OSDS I&amp;M Program</i> – Sector 1 Public Workshop / BC#3 @ Morgan’s Chapel UMC – Enfinger Center
12/17/15	Theodore, AL	<u>*ACNPCP Implementation:</u> <i>Coastal Alabama OSDS I&amp;M Program</i> – Sector 1 Public Workshop / MC#3 @ St. Phillip of Neri Church
12/18/15	Mobile, County, AL	<u>*ACNPCP Presentation:</u> <i>No Till Grain Drill Project</i> with NTGD Equipment Demonstration <i>Mobile County Farmers Field Day:</i> NRCS-MC & MCSWCD with ACNPCP, et al [Coastal Alabama No Till Grain Drill Project -Workshop #5]
1/07/16	Mobile, AL	Coastal States Organization’s Coastal NPS Workgroup - Chair / Executive Committee Call Coordination to develop WG agendas for State CNPCPs through this national Teleconference forum.
1/11/16	Mobile, AL	NRCS coordination with ACNPCP to develop Presentation:

		<i>Overview of the Alabama Coastal NPS Program</i> NRCS and ACNPCP coordination with MOWA Choctaw Tribal Council Work Group
1/11/16	Mobile, AL	ACNPCP Coordination with <i>Coastal Alabama OSDS Inspection and Maintenance Program</i> Contractors: BCSWCD, MCSWCD, BCHD, & MCHD.
1/12/16	Spanish Fort, AL	<u>Coastal Training Program Workshop: Actions for Compliance: Positive Steps for Contractors Toward Meeting Regulatory Requirements for Preventing Erosion, Controlling Sediment and Protecting Coastal Waterways</u> / ADCNR, WBNERR, ADEM, and the City of Spanish Fort
1/12/16	Mobile, AL	Dog River Watershed-Perch Creek Restoration Project Meeting: The Peninsula Group
1/12/16	Weeks Bay, AL	<u>*ACNPCP Implementation: Coastal Alabama OSDS I&amp;M Program</u> – Sector 1 Public Workshop / BC#4 @ Weeks Bay NERR Resources Center
1/12-15/16	Mobile, AL	ADEM-IWQMAR 2016: ADEM-FOD requests ACNPCP chapter & text contributions -Program reviews and edits
1/13/16	Spanish Fort, AL 5 Rivers Delta Resources Center	<i>Alabama Barrier Island Restoration Assessment: ALBIRA Objectives Workshop</i> -USACOE-Mobile District and USGS
1/14/16	Theodore, AL	<u>*ACNPCP Implementation: Coastal Alabama OSDS I&amp;M Program</u> – Sector 1 Public Workshop / MC#4 @ Alma Bryant Technical Center
1/15/16	Bay Minette, AL	<u>*ACNPCP Presentation: Alabama Coastal No Till Grain Drill Project</u> Gulf Coast Resources Conservation and Development Council -2016 Annual Conference
1/19/16	Calvert, AL	<u>*ACNPCP Presentation: Overview of the Alabama Coastal NPS Program: Outreach for Alabama Coastal No Till Grain Drill Project and Coastal Alabama OSDS Inspection and Maintenance Program</u> -NRCS and ACNPCP coordination with MOWA Choctaw Tribal Council Work Group
1/20/16	Montgomery, AL	<i>Alabama's 27th State Nonpoint Source Water Quality Conference: ADEM</i>
1/20/16	Magnolia Springs, AL	<u>*ACNPCP Implementation: Coastal Alabama OSDS I&amp;M Program</u> – Sector 1 Public Workshop / BC#5 @ Magnolia Springs Community Center
1/21/16	Mobile, AL	ACNPCP OSDS Workshop Contractor Report Coordination / <i>Coastal AL OSDS I&amp;M Program</i> – Sector 1
1/21/16	Theodore, AL	<u>*ACNPCP Implementation: Coastal Alabama OSDS I&amp;M Program</u> – Sector 1 Public Workshop / MC#5 @ New Hope United Methodist Church
1/25/16	Bon Secour, AL	<u>*ACNPCP Implementation: Coastal Alabama OSDS I&amp;M Program</u> – Sector 1 Public Workshop / BC#6 @ Morgan's Chapel UMC – Enfinger Center
1/26/16 To 1/30/16	Hoover, AL	<u>Training: Natural Stream Design –Project Assessment Review Checklist / USEPA-Wetlands Div, USF&amp;WS, and USACOE</u> -Instructors: Will Harmon, Stream Mechanics, LLC and Rich Starr, USF&WS-Chesapeake Bay FO
2/02/16	Mobile, AL	ACNPCP Coordination with ADEM-MOB and ADCNR-SLD CZMP: ACNPCP, 312 Review and future projects
2/02/16	Theodore, AL	<u>*ACNPCP Implementation: Coastal Alabama OSDS I&amp;M Program</u> – Sector 1 Public Workshop / MC#6 @ New Ship AME Zion Church
2/04/16	Mobile, AL	ACNPCP Coordination with ADEM-319: Scheduling 319 Grants w/review of future 6217 projects
2/04/16	Theodore, AL	<u>*ACNPCP Implementation: Coastal Alabama OSDS I&amp;M Program</u> – Sector 1 Public Workshop / MC#7 @ St. Phillip of Neri Church
2/08/16	Mobile, AL	ACNPCP Contractor Coordination / <i>Coastal AL OSDS I&amp;M Program</i> - Sector 1 Workshops Implementation and Reports
2/11/16	Mobile, AL	ACNPCP Coordination with Geologic Survey of Alabama (GSA), Alabama Forestry Commission (AFC), and USDA Forest Service: Availability of LIDAR and Mapping for Coastal Alabama
2/16/16	Bay Minette, AL	ACNPCP Contractor Coordination / <i>Coastal AL OSDS I&amp;M Program</i> - Sector 1 Workshops Implementation Reports for ACNCP and ADEM-319

2/16/16	Mobile, AL	Gulf of Mexico Alliance Teleconference: GOMA Education & Engagement Team PIT Workgroup discussion with GOMA and EE Steering committee updates
2/16/16	Mobile, AL	Coastal States Organization's Coastal NPS Work Group - Chair National Teleconference Call- §6217 Programs Forum : Discussion of CNPCP approaches to Urban-Roads, Highways and Bridges category development.
2/16/16	Theodore, AL	<u>*ACNPCP Implementation</u> : <i>Coastal Alabama OSDS I&amp;M Program</i> – Sector 1 Public Workshop / MC#8 @ American Legion Post # 250
2/17/16	Robertsdale, AL	Fish River (Week's Bay) Watershed Management Plan Steering Committee: Development of Week's Bay Watershed Management and Restoration Plan
2/18/16	Spanish Fort, AL 5 Rivers Delta Resources Center	Coastal Alabama Clean Water Partnership -Steering Committee Meeting: ADEM, SWCDs, ACNPCP, MBNEP, MS-AL Sea Grant, et al Primary stakeholders and partners forum for ACNPCP and ADEM-319 for coastal Alabama
2/18/16	Spanish Fort, AL 5 Rivers Delta Resources Center	Mobile Bay NEP -Project Implementation Committee (MBNEP-PIC): Group discussion of coastal Project Assessment Tools, Watershed Management Plans, other potential Projects.
2/22/16 To 2/26/16	Hoover, AL	<u>Training</u> : <i>Assessing and Restoring Headwater Mountain Streams</i> – Design Workshop/ USEPA-Wetlands Div, USF&WS, and USACOE -Instructors: Will Harmon, Stream Mechanics, LLC and Rich Starr, USF&WS-Chesapeake Bay FO
3/08/16	Mobile, AL Bishop State Community College	<i>Coastal Alabama Water Festival</i> : Steering Committee – Alabama Coastal Foundation, SWCDs, GCRC&D Council, MAWSS, and ADEM-319 Onsite meeting to review site facilities and plan event.
3/10/16	Mobile, AL	Gulf of Mexico Alliance Teleconference: GOMA Water Resources Team PIT Workgroup discussion of GOMA ReOrg, Action Plan III, Tier II Work Plan, updates for All Hands Conference in June 2016
3/11/16	Mobile, AL	ACNPCP Coordination with ADEM-319 with current Project Mid-Year Reports: - <i>Coastal Alabama OSDS Inspection and Maintenance Program</i> - <i>Alabama Coastal No Till Grain Drill Project</i>
3/11/16	Mobile, AL	Alabama Onsite Wastewater Association coordination with ACNPCP to make a presentation at the next statewide AOWA Conference. ACNPCP Presentation TBD: <i>Development of Coastal Alabama OSDS I&amp;M Program</i>
3/16/16	Robertsdale, AL	Fish River (Week's Bay) Watershed Management Plan Steering Committee: Presentation of Draft <i>Week's Bay Watershed Management and Restoration Plan</i>
3/17/16	Mobile, AL	Mobile County Soil & Water Conservation District Board Meeting (MCSWCD): ADEM-ACNPCP provides Technical Updates/Info for this Agriculture resources forum
3/21/16	Mobile, AL	Coastal States Organization's Coastal NPS Work Group – Chair/ National Teleconference Call- §6217 Programs Forum : Oregon Update, NOAA CNPCP document, CSO request to develop a 'CNPCP Status' document, and further discussion of GA –RB&H category update.
3/22/16	Mobile, AL	ACNPCP Coordination with SWCDs for Project Contracts: BCSWCD and MCSWCD
3/23/16	Bayou La Batre, AL Community Emergency Response Center	South Mobile County Community Development Corporation: -Charter Meeting to present new 501(c) coastal resource management entity.
3/24/16	Mobile, AL	Coastal States Organization's Coastal NPS Workgroup - Chair / Executive Committee Call Coordination to develop WG agendas for State CNPCPs through this national Teleconference forum.
3/24/16	Mobile, AL	Mudbrick Media, LLC coordination to assist media needs for Coastal OSDS I&M Program – AOWA State Conference Presentation
3/28/16	Mobile, AL	US Army Corps of Engineers-Mobile District-Mitigation Bank Interagency Review Team (MBIRT): Pre-conference technical assistance to review new Stream

		Mitigation Bank design proposal.
3/30/16	Mobile, AL	Follow up to prior ER Primary Incident: Saraland, AL ADEM Hazardous Materials Emergency Response Team- Coastal Alabama Provide technical support and communications for prior ER event to ADEM-MOB and ER staff.
3/31/16	Livingston, AL	*ACNPCP Presentation: <i>Development of Coastal Alabama OSDS I&amp;M Program</i> 29 <sup>th</sup> Annual Alabama Onsite Wastewater Association Trade Show and Onsite Conference. - AOWA, AOWB, APHD, and UWA
* Indicates ACNPCP Presentation products available upon request		

#### A. AGRICULTURE:

1.) **Coastal Alabama Regional NO TILL Grain Drill (NTGD) Program:** The continued implementation and monitoring of Agriculture-related measures are realized through the newest ACNPCP project being implemented through the local Soil and Water Conservation Districts using ADEM-319 funds. Each county has contracted to purchase this erosion stabilization equipment and through a series of Workshops, they are providing field demonstrations in order to educate the local public concerning their use and importance. This Program provides access and long-term maintenance, enabling maximum application for these machines for farmers participating within each coastal county. The machines will record acres of use and the SWCDs will tally by HUCS. Soil loss reduction analysis will be conducted as a result of these and associated practices. The No Till equipment was bid, ordered, and has been delivered to the SWCDs. During this year more of the **NTGD Field Demonstration / Workshops** were held (*Appendix C - ACNPCP Activities*). **A comprehensive EPA-319 Project Report is due September 30, 2016. The SWCDs will continue implementation of this project through 2016, with monitoring and tracking of its use projected for the next ten years.**

#### B. URBAN AREAS:

Other ADEM-ACNPCP staff coordination meetings, projects development, implementation activities, local, regional, and national events and training that support Urban Areas measures are tabulated in *Appendix C - ACNPCP Activities*.

1.) **ACNPCP Technical Advisory Projects for Urban Areas MMs.** Category efforts during this period that focused on addressing Urban Areas impacts and related issues have included ACNPCP's intensive involvement with Mobile Bay NEP:

a. ACNPCP has continued providing **Technical Assistance with developing NFWF funded Watershed Management Planning.** This involves current participation for **Fowl River, Bayou La Batre River, Bon Secour River-Oyster Bay, Weeks bay-Fish River, and Halls Mill Creek HUCs.** Future plans by Mobile Bay NEP to develop coastal prioritized Watershed Management Plans include **Sandy Creek-Wolf Bay and West Fowl River, and Tensaw-Apalachee River HUCs** as well.

b. ACNPCP continues to provide Technical Assistance to guide Implementation Projects being developed for the **D'Olive Branch Restoration Plan, Eight Mile Creek Watershed Management Plan,** and the newer **Three Mile Creek Watershed Management and Restoration Plan.** These efforts require intensive coordination with Mobile Bay NEP, ADEM-319, ADEM-Water Divisions programs, and the Nature Conservancy. Watershed Management Plans are in queue for approximately 19 of the 50 priority designated coastal HUCs, with funding proposals submitted for more. For more specific information see [http://www.mobilebaynep.com/the\\_watersheds](http://www.mobilebaynep.com/the_watersheds)

c. Other ACNPCP projects included technical assistance as needed by providing presentations of Coastal NPS concepts to the Public and partner agencies. (See *Appendix C - ACNPCP Activities*)

#### 2.) **Onsite Sewage Distribution Systems (OSDS):**

a. Using set-aside ADEM-319 funds, ACNPCP has secured concurrent Contracts with each agency to implement the **Coastal Alabama OSDS Inspection & Maintenance Program.** Contracts have been completed and executed in a timely manner for each: **ADPH-Baldwin County Health Department, Baldwin County Soil & Water Conservation District, Mobile County Health Department, and the Mobile County Soil & Water Conservation District.**

b. Four (4) Geographic Sewer Units as "**Sectors**" have been selected for each County, **based upon NRCS and SWCDs hydric mapping and expertise provided by the local Health Departments.**

c. An **MOU has been facilitated by the SWCDs** through the AOWB and the local Health Departments for **participation with participating state certified PUMPERS.**

d. **Project informational Fact Sheets and Workshop Flyer Templates** have been designed.

e. Alabama **Cooperative Extension System (ACES)** has provided PSA Radio time to publicize these efforts through local **iHeartMedia, Inc.** stations and social media on behalf of the SWCDs. Also the Contractors and Partners are reporting project Workshops in their social media outlets and newsletters.

f. **OSDS I&M Workshop Resident Folders** have been designed cooperatively by the Contractors to provide each resident with an **OSDS tracking and Pump-Out reminder** format.

g. **Strategic Workshop locations have been facilitated by the Contractors** for each County Sector with the gracious **participation of our OSDS I&M Workshop Hosts.** A total of 14 Workshops have implemented this **OSDS I&M Program in Sector 1.** (See *Appendix C - ACNPCP Activities*)

h. **The selected group of Contractors has worked well to complement one another and have assisted toward initiation and implementation of this Project.**

#### C. **OTHER ACNPCP PROJECTS :**

Projects continuing under development during this and next year includes continued coordination with ACNPCP for implementation of this year's **NRCS Gulf of Mexico Implementation (GOMI) Projects for Mobile County, and Baldwin County, Alabama,** which are being developed and augmented to address targeted key sub-watersheds (e.g. **Grand Bay Swamp and Fish River HUCs**) in coastal Alabama. Coordination has continued to support the joint **Alabama-Mississippi Clean Marina Program** being implemented through MS-AL programs. ACNPCP provides Technical Assistance for many DWH/ RESTORE-related project proposals and environmental projects.

***Alabama Current Connection Vol. IX, Issue 2***

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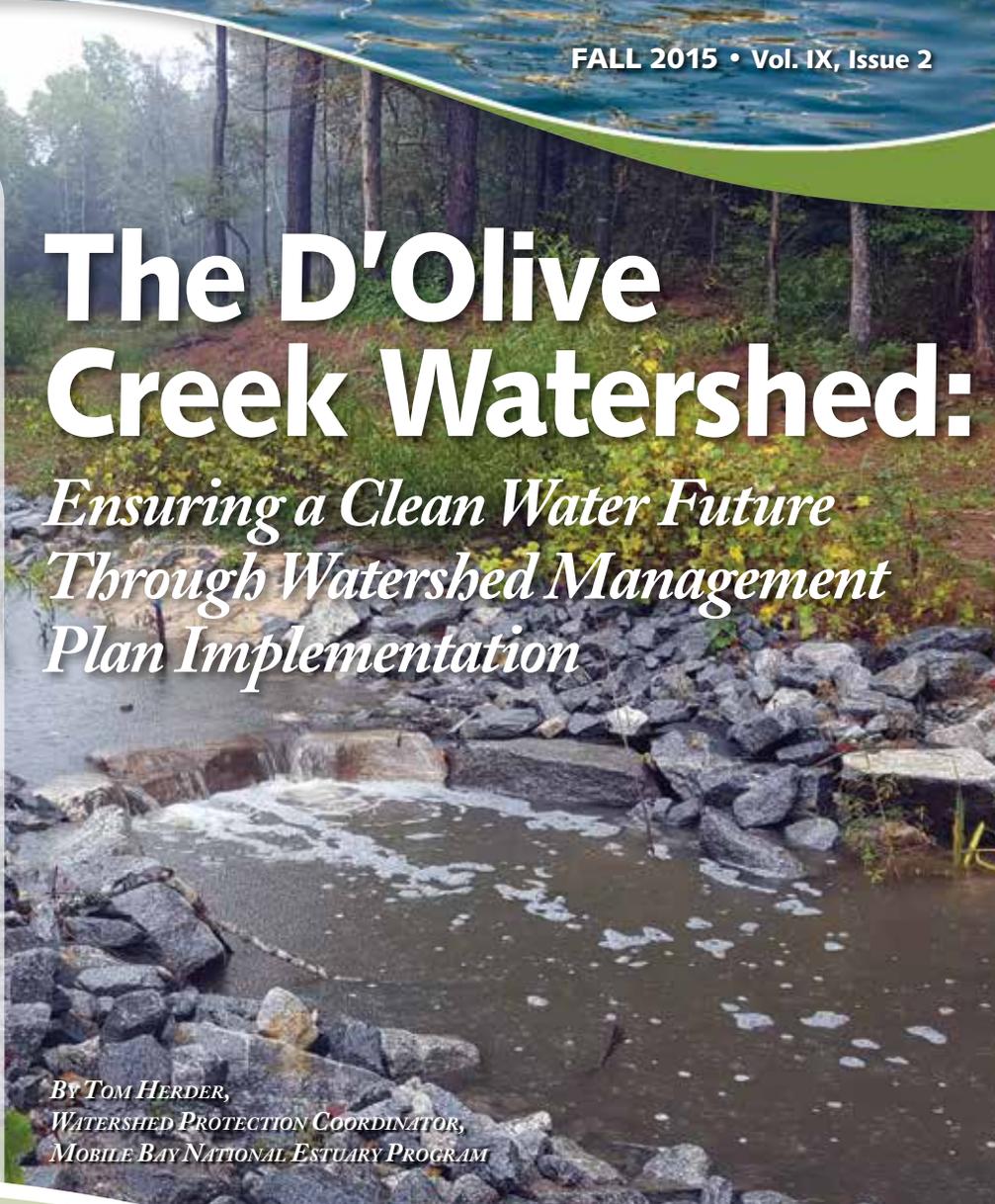
**R**estoration efforts along the Eastern Shore in the D'Olive Creek Watershed provide a great example of the value of a watershed planning approach to managing environmental resources. Watershed management plans (WMPs) are in-depth studies of relatively small land areas that drain to a single body of water, usually a stream or river. The 7,700-acre D'Olive Creek Watershed that includes portions of the cities of Daphne and Spanish Fort drains through Joe's Branch and Tiawasee and D'Olive creeks, through D'Olive Bay, and into Mobile Bay. The area has been plagued by excessive erosion and sedimentation since the early 1970s, and ongoing development continues to intensify problems there.

Marlon Cook of Geological Survey of Alabama (GSA) calls it "the perfect storm" of stormwater impacts, due to its hilly terrain; sandy, erodible soils; hardened, developed surfaces; and five and a half feet of average annual rainfall. The disappearance of over 70 percent of the submerged aquatic vegetation (SAV) that existed in Mobile Bay in the 1950s is blamed largely on excessive sedimentation. *Continued on page 15*

## The D'Olive Creek Watershed:

*Ensuring a Clean Water Future  
Through Watershed Management  
Plan Implementation*

BY TOM HERDER,  
WATERSHED PROTECTION COORDINATOR,  
MOBILE BAY NATIONAL ESTUARY PROGRAM

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Currently Inside



# Coastal Corner

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

## Clean Water and Beaches Equal Healthy Economy

**The Alabama coastline is home to beautiful beaches on the Gulf of Mexico. We are blessed with 53 miles of Gulf shoreline, which is an important part of the quality of life for many of the State's citizens and one of the State's greatest economic and environmental assets. The white sandy beaches and clear water of the coastal towns of Gulf Shores, Orange Beach and Dauphin Island are beloved and popular vacation destinations for Alabamians and out-of-state tourists.** The fine quality of the sand and gentleness of the surf make for some of the prettiest beaches in the world and are the top tourist destinations in the State.

The tourism industry in South Baldwin County provides for more than 50,000 jobs and generates more than \$2 million in revenue annually, and clean beaches and clean water is the linchpin of the industry.

While most of the time the Gulf beaches receive the focus, Alabama does have an additional 504 miles of coastal bays, lagoons, bayous and rivers. These areas are also important to the economy and environment of South Alabama.

One thing is for sure, a healthy coastal environment translates to a healthy economic climate. If we have dirty beaches and waters, then that can

jeopardize our entire quality of life as we know it. Trash and debris along our coasts and in our waterways can be harmful to our health, the environment and the economy. Most trash that ends up in the water begins its journey on land, often in streets or parking lots, but through stormwater runoff into our many waterways it finds its way to our bays, beaches, and the Gulf of Mexico.

The State of Alabama, along with the Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA), are working to reduce the amount of trash and litter that enters streams and

rivers, lakes and bays, beaches and coastlines, and ultimately the Gulf of Mexico. These actions include coastal cleanups, outreach and education, research and new program partnerships.

Most people know that trash and debris in the water compromises the health of humans, wildlife and the livelihoods that depend on a healthy ocean. Trash on the beach can be harmful to the health and safety of beach users. It also makes the beach look ugly and dirty. Trash threatens tourism and recreation and the critical dollars they add to our local economies. Dirty beaches discourage visitors and cause local beach communities to lose money



*Storm debris after the record flood in April 2014, Magnolia River*



from tourism and spend money on cleanup efforts. Trash complicates shipping and transportation by causing navigation hazards. Finally, marine animals can swallow marine debris causing suffocation or starvation. Sea birds have been known to swallow small plastic pieces (which look like fish eggs), and sea turtles have been known to swallow clear plastic bags (which look like jellyfish).

Unfortunately, what we see dirtying beaches and floating on the coastal water's surface is just the tip of the iceberg. Much more lies unseen beneath the surface and far away on the open water, but that doesn't make it any less important.

While we are making progress on trash and marine debris by coastal cleanups and efforts from local governments, we still experience huge problems during tropical storms and flooding events. Marine debris ends up in our coastal waters every day as a result of littering and poor waste management, but occasionally, large amounts enter near shore coastal waterways all at once, especially during natural disasters. Abandoned and derelict vessels, construction and demolition debris, and household hazardous waste are just a few of the types of marine debris we find in waterways after a disaster. The State of Alabama now has a plan that will help state and local officials, along with federal partners, respond to acute waterway debris releases from hurricanes and other natural disasters or man-made incidents.

The purpose of this plan which was developed by NOAA with input from

the State of Alabama is intended to improve preparedness for response and recovery operations following an acute waterway debris release incident in coastal Alabama. This plan outlines existing response structures at the local, state and federal levels to facilitate a coordinated, well-managed and immediate response to potential waterway debris incidents impacting coastal areas in the State of Alabama.

The plan addresses potential acute waterway debris incidents affecting Alabama's two coastal counties, Mobile and Baldwin. For purposes of this plan, the term waterway debris (or incident waterway debris) includes any solid material, including vegetative debris and debris contaminated with oil or hazardous material, which enters a waterway or shoreline following an acute release incident and poses a threat to the natural or man-made environment. This may include shoreline debris and debris in some inland, non-tidal waterways. This plan only specifically addresses "acute" waterway debris incidents, such as debris generated by natural disasters, and may not apply to chronic waterway debris issues.

The development of this plan will help the State of Alabama and our federal partners next time we experience a severe natural disaster. Additionally, this plan along with marine debris education and cleanup events will go a long way towards keeping our coastal habitats clean and healthy, helping maintain a high quality of life for generations to come.

## Alabama Coastal Comprehensive Plan (ACCP) *What is Your Vision?*

The Alabama Department of Conservation and Natural Resources has partnered with the U.S. Army Corps of Engineers' Mobile District, the Mississippi-Alabama Sea Grant Consortium, and the Mobile Bay National Estuary Program to develop a constituent-informed, 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;
- improve habitats for 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, nineteen visioning sessions have been conducted – seventeen with targeted focus groups and two with a broader public audience. In addition to these meetings, the ACCP website offers an opportunity for individuals to share their vision online as well as to view comments received thus far on an interactive map. Please visit [www.accp.usace.army.mil](http://www.accp.usace.army.mil) to get the latest update on the ACCP.

## Making a Case for the Watershed Approach to Coastal Resource Management

**O**n a recent Tuesday afternoon, I decided to go to the beach. With blue sky above me and waves constant, rolling, and lapping at my feet, I sat down on the white sand seeking inspiration for this article. For the most part I shared this stretch of beach with a willet, pecking for treasures in the sand. As I contemplated the intensive watershed planning underway and the challenges related to realizing the recommendations of each, I heard a message in the ebb and flow of the waves bringing in the high tide.

*We are all connected... agricultural fields, subdivisions, commercial stretches and industry, longstanding restaurants keeping our heritage alive, anglers, boats, and grains of sand – all connected by a web of water, ultimately making its way to a bay, through a sound, and out to the Gulf of Mexico.*

At present, Mobile Bay National Estuary Program is coordinating the development or implementation of seven watershed management plans across Mobile and Baldwin counties. Within the next couple of years, another 19 will be prepared, effectively producing management plans for all tidally-influenced watersheds in the state of Alabama.

Collectively, these watersheds cover a landscape of 22 municipalities and both counties and encompass 41 stream

segments designated “impaired” by the Alabama Department of Environmental Management for pollutants and impacts including ammonia, nutrients, low dissolved oxygen, siltation/sediment, pathogens, and organic enrichment. On the positive side, within these watersheds there are three water bodies designated as “Outstanding Alabama Waters” and 13 place-based grassroots groups of volunteer members committed to creating a clean water future for their communities, Mobile Bay, Mississippi Sound, Weeks Bay, Perdido Bay, Wolf Bay, and the Gulf of Mexico.

Through this watershed planning and subsequent prescribed actions, it is clear: The relationship between community growth and impaired waters develops over time. If we want to maintain a rich quality of life, which in coastal Alabama is intrinsically tied to our water-rich landscape, communities must seek new ways of controlling stormwater runoff (and the pollution carried by it) created by the hard surfaces related to community growth like driveways, sidewalks, streets, and rooftops.

In Mobile County, communities in the Dog River/Halls Mill/Garrows Bend drainage complex and Fowl River and Bayou La Batre River watersheds are engaged in learning about the areas of land draining into their rivers and creeks and how natural flows have been altered over time. They are learning about what types and levels of pollutants are impairing or threatening their water quality, why shorelines are eroding, where restoration is most prudent and cost

effective, and when results from lots of hard work will finally pay off in terms of clean water and resilient buffers to storms and stormwater runoff. As the plans are completed, the most important question becomes, “Who?” Armed with knowing what needs to happen to improve management of the lands and waters of these watersheds, whose responsibility is it to implement the plan? Local, state or federal government? Community groups? Business and industry? The NEP? Or all of the above?

### A Case Study: The D’Olive Watershed

In Baldwin County, the D’Olive watershed is being transformed. With one of the first “comprehensive” watershed management plans in hand, both the cities of Spanish Fort and Daphne have updated their subdivision regulations to better protect riparian buffers and control stormwater runoff. Responding to a request by the two cities, the MBNEP accepted a charge to champion restoration work necessary to remove Joe’s Branch, D’Olive Creek and Tiawasse Creek from the State’s 303(d) List of Impaired Waterbodies. To date 2.3 million dollars have been invested in restoration efforts, translating to an average of \$852 per linear foot of stream restored. Preliminary results from improving stormwater management and ecosystem function in a tributary to Joe’s Branch are impressive. Pre-construction vs. post construction data gathered by the Geological Survey of Alabama reveals a 97 percent reduction in sediment

leaving Joe's Branch which translates into significant reductions in sediment entering D'Olive Bay and Mobile Bay. In addition, 3,000 linear feet of riparian buffer have been stabilized and the same length of stream bed restored or strengthened to handle the volumes and velocities of stormwater runoff generated by a quickly urbanizing landscape. Additionally, best management practices, including grading and installation of drop inlets at the Spanish Fort ball fields and a concrete flume connection to two landscaped, detention basins with dissipation blacks and baffle dikes, were installed by Spanish Fort upstream of the restored streams to reduce both volume and velocity of stormwater runoff.

Not only do the on-the-ground efforts demonstrate success, the commitment to collaborative watershed management has remained strong. Since the plan was published in 2010, the City of Daphne has had three different mayors and Spanish Fort, two. Council membership has changed over the years, yet support for implementation of this plan has not diminished. The value of this collaboration cannot be overstated. Creating a resilient watershed will require the long-term commitment of government, business, and the citizens to responsibly grow their community by balancing growth with environmental protection. The cities of Daphne and Spanish Fort understand the costs associated with NOT factoring

environmental protection into the equation.

Managing our coastal resources by watershed is a clear demonstration of how we are, across geopolitical boundaries, connected by water. The watershed approach is instrumental in developing a shared understanding of conservation priorities across many different stakeholder interests, and this understanding is key to informing future land and water management decisions. Shifting the paradigm from traditional resource management (geopolitical boundaries) to a drainage basin or watershed management approach may seem like an absurd proposition. However, "only those who attempt the absurd can achieve the impossible" (*Chinese Fortune cookie*).

Watershed	Major Concerns	Community Vision	Status
Eight Mile Creek	Failing septic and sewer infrastructure; stormwater runoff	Clean water, passive recreation	Plan complete; mapping of septic infrastructure; stream restoration/passive park complete; stormwater improvements in Gum Tree Branch
D'Olive, Joe's Branch, Tiawasse Creek	Streambank erosion, sediment in water	Clean water, responsible development	Plan complete; 13 streams being restored; subdivision regulation changes
Three Mile Creek	Urban runoff, lack of access to resource, streambank erosion, sediment deposits in stream segments	Destination location for City of Mobile with trail along creek from USA to downtown; clean water for passive boating, fishing	Plan complete; first leg of trail in development; stormwater management improvements in Toulmins Spring; community capacity building in lower reaches of creek; partnership with USA students for implementing plan on campus
Fowl River	Shoreline erosion; marsh protection; stormwater runoff/litter; responsible development	Clean water, responsible development, resilient shorelines, fragile habitat conservation	Plan will be complete by 12/31; restoration underway for tip of Mon Louis Island; anticipate project development for living shorelines, wetland protection; wetland enhancement; community education
Dog River	Stormwater runoff/litter; erosion of streambanks; sediment deposits; lack of access to resource	Under development	Plan will be complete by 6/2016
Bon Secour	Streambank erosion; stormwater runoff/litter; development in headwaters	Under development	Plan will be complete by 9/2016
Fish River	Streambank erosion		Consultant selection underway, plan to be completed by 10/2016

# Volunteer Water Monitoring Engages Coastal Residents in Watershed Protection

BY CHRISTIAN MILLER, NON POINT SOURCE POLLUTION OUTREACH, AUBURN UNIVERSITY AND MOBILE BAY NATIONAL ESTUARY PROGRAM

**H**ave you ever wondered about the quality of water that is flowing through your favorite fishing spot or swimming hole? Did you assume, like so many others, that the state keeps a close eye on our streams, lakes, bayous and bays? Well, with more than 77,000 miles of streams and rivers and over half a million acres of lakes in Alabama, that would be a charge difficult to accomplish for even the most well-funded state agency. Established in 1992 to help fill this void in

water quality monitoring, Alabama Water Watch (AWW) is a volunteer water quality monitoring program covering all the major river basins of the state. The goal of AWW is to improve both water quality and water policy through citizen monitoring and action. To date, about 6,000 volunteers from 265 community groups have been certified as water monitors. Cumulatively, AWW monitors have tested 2,500 sites and submitted more than 72,000 data records statewide. This data is used by the Alabama Department of Environmental Management (ADEM) and countless researchers to guide more in-depth monitoring programs and assessments, initiate environmental regulations, and focus watershed planning efforts throughout the state.

Locally, volunteer monitoring has played an important role in understanding water quality trends throughout many of our coastal

watersheds including Dog River, Wolf Bay and Little Lagoon just to name a few. One of the great success stories of local water monitoring has been to establish Outstanding Alabama Water (OAW) classification for Wolf Bay. This classification, the highest of seven levels of waterbody classifications regulated by ADEM, protects Wolf Bay with higher water quality standards including more stringent restrictions on wastewater discharges and toxic substances into the bay. Essentially, less pollution is allowed to enter Wolf Bay due to its OAW status. This

Their tireless efforts not only gained Outstanding Alabama Water designation for Wolf Bay, but the data also continues to provide insight on water quality trends throughout the watershed.” The volunteers with WBWW believe that this OAW designation, along with the implementation of comprehensive watershed plans for the area, will continue to support the health of the estuarine habitats that contributes greatly to the local economy and the quality of life that drives so many people to coastal Alabama.



Water monitoring training at Bayfront Park in Daphne, Alabama

status was only obtained through the tireless monitoring efforts of Wolf Bay Watershed Watch (WBWW) and their army of volunteer water monitors. In 2007, after a decade of sampling and reporting bacteriological and water chemistry data, ADEM granted OAW status to Wolf Bay and several of its tributaries. According to Leslie Gahagan, current WBWW president, “Our water quality monitors are the heart of Wolf Bay Watershed Watch.

A need to attract and retain new coastal monitors has been identified as a primary concern by local watershed groups. Over time, many long-time volunteers quit monitoring and reporting water quality data for one reason or another. This creates gaps in historical data and makes it difficult to track trends in water quality. With the goal of increasing the ranks of volunteer coastal water monitors the Mobile Bay National Estuary Program, Alabama Clean Water Partnership, AWW, and a host of local grassroots groups have partnered to host regular local

certification trainings, provide access to testing kits and replenishment of chemical reagents, and match seasoned monitors with new volunteers in an effort to mentor. Participating in a volunteer water monitoring program is one way to become actively engaged in the watershed planning and implementation process and make a meaningful impact in protecting and restoring coastal watersheds.

# 28<sup>th</sup> Annual Alabama Coastal Cleanup a Success

By ANGELA UNDERWOOD, NATURAL RESOURCES PLANNER, ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES COASTAL SECTION

**T**he 28<sup>th</sup> Annual Alabama Coastal Cleanup was held on Saturday, September 19, 2015. This year, over 5,000 volunteers helped to “get the trash out of the splash” by walking, boating or scuba diving 31 different coastal and inland waterway zones across Mobile and Baldwin counties, as well as inland zones in the Blackwater and Sepulga watersheds and as far away as the Tennessee River.

Each year brings unusual finds, and this year was no exception. Along with the everyday litter such as plastic bottles and cigarette butts were couches, a television set and laptop computer. The most unusual find for the day came from the cleanup site at Fort Morgan where volunteers discovered the front end of a Nissan Pathfinder with a Texas license plate still attached!

Thank you to all those who supported the cleanup this year. This huge event



would not be successful without the hard work of our volunteers and the generous support from our sponsors: 2015 Presenting Sponsor - The Poarch Band of

Creek Indian, ADCNR Coastal Section, AL PALS, The National Oceanic and Atmospheric Administration, Mobile Bay National Estuary Program, Bebo’s, ExxonMobil, Alabama Power Company, Alabama Department of Transportation, Baldwin EMC, City of Gulf Shores, City of Orange Beach, Create a Clean Water Future, Compass Media, Florida-Bama, Home Depot, Ike’s Beach Service, LuLu’s, Riviera Utilities, The Original Oyster House, Utility Board of Gulf Shores, Evonik, Ineos Phenol, Vulcan Materials Company, ALFA, Honda Manufacturing of Alabama, Alabama Farmer’s Cooperative, Baldwin County Commission, Gulf Shores/Orange Beach Tourism and The Ocean Conservancy.



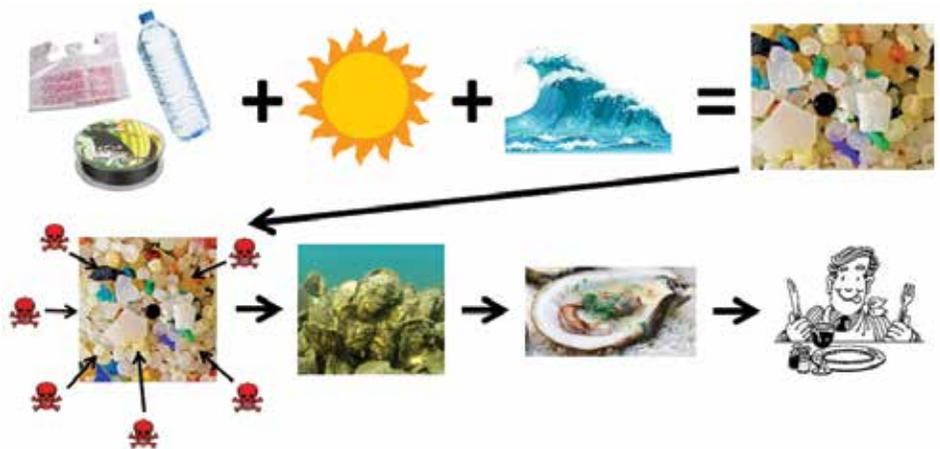
# Microplastics: *The Tiny, Yet Massive, Threat to Our World's Oceans*

BY CAITLIN WESSEL, PHD STUDENT, DAUPHIN ISLAND SEA LAB, UNIVERSITY OF SOUTH ALABAMA

**E**very summer millions of visitors from across the USA flock to the white sand beaches of coastal Alabama, ready to enjoy a little rest and relaxation. Unfortunately, unless you are visiting a beach that gets cleaned every morning, more often than not, you will also see litter. Human-made litter can be found throughout the world's oceans and seas, even in remote areas far from human contact, and is commonly referred to as **marine debris**.

What you may or may not notice in the sand are tiny, colorful pieces of plastic, called microplastics, which have washed ashore with the tide. In the northern Gulf of Mexico, microplastics (plastic particles smaller than 5mm) result mainly from the breakdown, by sunlight and waves, of larger plastic trash floating in the oceans but can also come from products containing microbeads, like toothpaste and face wash. Scientists from the University of Georgia estimated that 4.8 to 12.7 million metric tons of plastic trash made its way into the ocean in just one year (2010), and current estimates indicate that 92 percent of the plastic floating in the world's oceans are microplastics.

Microplastics have become a prominent pollution issue, not only in Alabama, but also throughout the world. They are small enough to be easily ingested by aquatic animals, particularly in marine and coastal environments where they float on the ocean surface. Microplastics

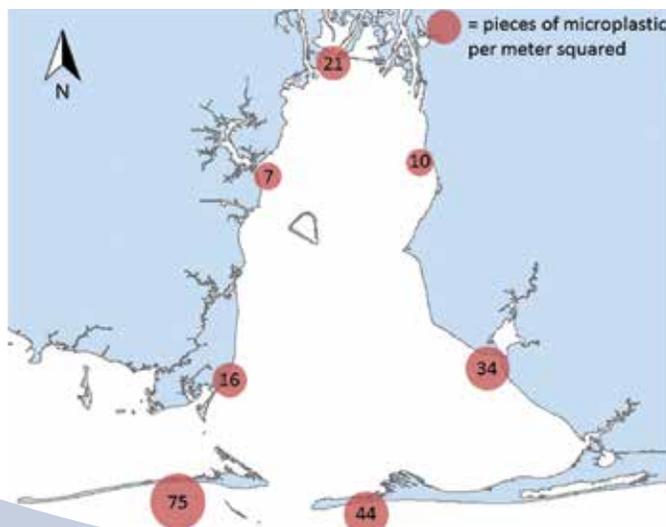


floating in the water column can be accidentally ingested by filter-feeders and then work their way up the food chain. Our plastic can affect everything from filter-feeding oysters and mussels to shorebirds, crabs, fish, sea turtles and even dolphins and whales!

Plastics also contain concentrated toxins from their manufacturing and also from absorbing toxins found in the water

column. These toxins can then be released from the plastics as they work their way through the digestive tract and end up in organ and muscle tissue. So do you need to worry about microplastics in your food? Maybe, but so far research has shown ingested microplastics accumulate mainly in the guts of organisms, although some pieces are small enough to enter the blood stream. Unfortunately, little research has been conducted about how much plastic we may be ingesting from our food and there is no information on how microplastics could be affecting humans.

Researchers at the Dauphin Island Sea Lab and the University of South Alabama are currently working on several projects with the Center for Environmental Resiliency and NOAA to determine how marine debris, big and small, are affecting Alabama and the northern Gulf of Mexico. Our data shows that the amount of marine debris accumulating on beaches **DOUBLES** between



April and May. We aren't sure yet what is responsible, but it is likely related to the increase in tourism and fishing during that time of year. Daily monitoring of shoreline trash on Dauphin Island suggests that beach supplies (chairs, tents, sand toys, etc.) left out overnight by beachgoers frequently end up washed out to sea by storms and high tide. Once exposed to constant sunlight and wave action, these large plastic items quickly begin to break down into smaller pieces and eventually become microplastics. So far everywhere we have looked for microplastics in Alabama, Florida, and Mississippi we have found them. All of us are responsible for the problem of marine debris, and it will take all of us to be the solution.

### So what can you do?

➤ For starters, recycle. But that in itself is not a solution to the problem since only about 5 percent of plastic is recoverable to make new products.

➤ We need to decrease the usage of single-use plastic items like grocery or sandwich bags and start using reusable bags and containers.

➤ Stop buying products that contain plastic microbeads. Read the label and look for words like microbeads, polyethylene, or polypropylene.

➤ Say NO to printed receipts. Over 250 million gallons of oil, 10 million trees and 1 billion gallons of water are consumed each year just for receipts printed in the USA, generating 1.5 billion pounds of waste.

➤ Use outdoor trash bins with lids. Trash blowing out of waste bins or the backs of pickup trucks accounts for 19 percent of litter.

➤ Buy a reusable mug or container for coffee and other drinks. Many places will even give you a discount for bringing your own cup.

➤ Drink filtered or tap water out of reusable containers instead of buying bottled water. Beverage bottles are the fourth most common litter item found in Alabama.

➤ All of us are responsible for the problem of marine debris, and it will take all of us to be the solution.

# Educational Kiosk Installed at Lulu's in Gulf Shores

BY MOBILE BAY NATIONAL ESTUARY PROGRAM STAFF

**L**ulu's restaurant in Gulf Shores and the Alabama Clean Water Partnership (ACWP) are teaming up to teach lessons about water quality in a fun interactive way. A touch-screen kiosk allowing children of all ages to navigate through multiple activities related to water quality has been installed on the grounds of the popular Gulf Shores, Alabama, eatery.

Representatives from the ACWP and the Mobile Bay National Estuary Program installed the kiosk which contains content in both English and Spanish. The content includes a short quiz to determine the user's knowledge of water and interactive video clips explaining the water cycle, watersheds, pervious surfaces, and their effects on watershed health. Users can also elect to be entered into a drawing to win a free iPad.

Gerald Tipton, General Manager at Lulu's, is excited to have tips on property to educate their guests on the important issue of water quality and stormwater runoff. The overall goal of the project is to reduce nonpoint source pollution flowing into Alabama waterways after heavy rainfall events.

The Alabama Clean Water Partnership, a state-wide, non-profit organization focused on stormwater education, along with project partners



Mobile Bay National Estuary Program, Alabama Department of Environmental Management, U.S. Environmental Protection Agency, Alabama Power Company, Montgomery Water Works and Sanitary Sewer Board, and Hamline University Office of Global and Environmental Protection, will work with Lulu's to make sure the kiosk runs smoothly and will inform users of events in their watershed if they desire to "stay in the loop." So, the next time you visit Lulu's for some fresh Gulf seafood, spend a few minutes at the kiosk and leave not only full and satisfied, but also informed and educated on how to create a clean water future along the Gulf Coast!



# Monitoring in D'Olive: *Making Sure We Are Getting It Right*

BY RENEE COLLINI, SCIENCE COORDINATOR, MOBILE BAY NATIONAL ESTUARY PROGRAM

**The stormwater-impacted D'Olive Watershed is the target of extensive efforts to restore condition and function not only at formerly-eroded stream restoration sites, but also downstream where water quality and provision of ecological services should also be enhanced.**

(See cover story.)

Restoration activities can impact a wide variety of ecosystem functions in the watershed, and to ensure the right factors are being monitored, a working group of experts in hydrology, marsh ecology, stream restoration, sedimentation, water quality, submerged aquatic vegetation, and biological indices from local, state, and federal agencies, academia, and the private sector was formed. The group developed the Mobile Bay Subwatershed Restoration

Monitoring Framework to standardize monitoring efforts in and around Mobile Bay and to comprehensively address four major focus areas that could be impacted: Sedimentation and Flow, Water Quality, Habitat, and Biology.

The working group then developed recommendations specific for D'Olive watershed based on the Framework. Leveraging efforts from local cities, academic institutions, federal partners, and ongoing monitoring efforts, a monitoring plan was developed that will quantify cumulative direct and indirect impacts and effects from the restorations.

## **Getting the Monitoring Done – A Group Effort**

The recommendations for a comprehensive assessment of restoration impacts will require a wide array of expertise to successfully monitor the recommended

parameters and time scales. The Geological Survey of Alabama (GSA) will monitor parameters to assess flow and sedimentation throughout the watershed. In addition to manual sampling, automatic samplers will be installed throughout the watershed that will provide great insight into variations in watershed response to rain events as stress from poorly functioning stream sections are reduced. These automated samplers will provide data on sediment and other water quality parameters. The additional water quality data will not only be utilized to track changes due to restoration, but also provide information that local cities may use in permitting. Consequently, the cities of Daphne and Spanish Fort are contributing maintenance assistance. There will also be water quality monitoring in D'Olive Bay. Experts in submerged aquatic vegetation (SAV) from Dauphin

Island Sea Lab will be conducting monthly sampling to determine if the water quality is suitable for SAV.

Assessing the quality and quantity of habitats is such an important and diverse task it will be addressed by three different efforts: habitat mapping, stream and riparian buffer assessment, and wetland assessment. The Mobile Bay National Estuary Program will map the extent and type of habitats throughout all of Mobile and Baldwin counties. These data will be compared to past mapping efforts and will be conducted again in the future allowing us to determine if habitat quantity has changed. Researchers from the University of West Florida and experts from Wetland Resources Environmental Consulting will measure many attributes of stream and wetland quality that indicate a healthy, functioning riparian buffer zone, stream habitat, and wetland habitat. The metrics being sampled were developed so that multiple state and federal agencies can utilize these data including the U.S. Fish and Wildlife Service and the Alabama Department of Environmental Management.

### Putting It All Together

The monitoring efforts from the various state, academic, and private partners will come together to demonstrate how D'Olive watershed will have changed over the coming years and to determine if the restorations have had a positive impact. High resolution sampling will demonstrate



*Marlon Cook of the Geological Survey of Alabama installs a real-time continuous water quality monitor in a tributary to D'Olive Creek to measure flow, dissolved oxygen, temperature, turbidity, and conductivity.*

changes in watershed responsiveness and long-term, large-scale sampling will provide insight into overall system improvements such as increased quality and quantity in habitats that provide crucial ecosystem services for the communities throughout D'Olive watershed. A science based organization, the MBNEP must show clear evidence of improvements

to determine if the restorations have been successful. The good news? Early monitoring in Joe's Branch, a tributary of D'Olive watershed, is already showing indicators of reduced turbidity and sedimentation – a good sign that the hard work is paying off.

## Mobile Bay Subwatershed Restoration Monitoring Framework

### SEDIMENTATION AND FLOW

Often the primary focus of restoration, it is important to quantify changes in sedimentation and erosion and flow rates at strategic locations throughout the watershed.

### WATER QUALITY

is impacted by restoration and is important to improvements in targeted habitats including submerged aquatic vegetation (SAV).

### HABITAT

Is crucial to ecological function and services. Quality and quantity of existing habitats and quantifying subsequent shifts is critical to tracking watershed scale impacts.

### BIOLOGY

Any identified threatened or endangered species that live within the watershed needs to be monitored and any shifts in population or critical habitat need to be tracked.

# It Looks Like Water to Me

BY MICHAEL SHELTON, COASTAL TRAINING PROGRAM AND WATERSHED COORDINATOR,  
ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, WEEKS BAY NATIONAL ESTUARINE RESEARCH RESERVE

**The people of Coastal Alabama share one thing in abundance, water. Some of the water is salty, some fresh, and much of it falls somewhere in between. Area waters range from large open expanses for boating to small meandering creeks just for splashing and everything in between. This abundance of water creates a responsibility to keep it healthy, clean, and clear for the enjoyment of future generations.**

All of us can see cloudiness in the waters after a rainfall event. Even cloudy, it still looks like water, and curious residents may be interested in learning more about the status of a local waterway. Citizens seeking to become more involved in a specific river or bay may say, "I am not a scientist, or I have no electronic gizmo to use for testing," but most of the volunteers who participate in Alabama Water Watch, a water quality monitoring program, are not chemists with expensive equipment. They are residents concerned about the conditions of the watery world around them. Alabama Water Watch educates volunteers about water health, trains them to use easy and accurate testing methods, and challenges them to stay involved. Once trained,

volunteers monitor conditions like dissolved oxygen and water clarity essential to keeping fish abundant and healthy. Water Watchers can be trained to check bacteria count, such as E. coli, that may be present in local waters and learn to identify classes of insects used to measure water quality. Insects, such as mayflies and dragonflies, spend their early lives as crawling underwater forms and without clean water, the young do not survive to become flying adults. To learn more about Alabama Water Watch, go to [alabamawaterwatch.org](http://alabamawaterwatch.org). Discover times and locations for the next training workshops and begin testing soon!

Of course, not everyone wants to do testing but may still be interested in the conditions of our local waters. Luckily for these folks there are professionals regularly checking the health of our bays and rivers. A great online resource to obtain information is [mymobilebay.com](http://mymobilebay.com). Operated by the Mobile Bay National Estuary Program and participating partners, numerous stations maintained by university, state, and federal scientists feed information into this website. Click on the location of

interest to access current water conditions. Several stations also report current weather conditions. Another website to examine is the Beach Monitoring Program ([www.adem.state.al.us/programs/coastal/beachMonitoring.cnt](http://www.adem.state.al.us/programs/coastal/beachMonitoring.cnt)) operated by the Alabama Department of Environmental Management and Department of Public Health where scientists test for bacteria at designated swimming beaches all

along the Alabama coast. Another location for information on bacteria testing at swimming beaches is the WaterKeeper® Swim Guide ([www.theswimguide.org](http://www.theswimguide.org)). This website provides information about swimming beaches on the Alabama coast

and the results of bacterial testing at each location. People who live or visit the coast deserve accurate and up to date information to help them understand the health of our local waters. All of these websites contain information to help citizens make educated decisions about swimming, boating and other water dependent activities. Take the time to take part in examining the health of our coastal waters.

*"...to the degree that man interferes with the natural order of things, he and his machines must do the work that Mother Nature did before."*

# Mobile Bay Oyster Trail Continues to Grow

BY MOBILE BAY NATIONAL ESTUARY PROGRAM STAFF

**T**he latest installment of The Oyster Trail was unveiled at the GulfQuest National Maritime Museum of the Gulf of Mexico on Sept. 17. The 26<sup>th</sup> overall and 13<sup>th</sup> placed in downtown Mobile is co-sponsored by the Mobile Bay National Estuary Program and Thompson Engineering/Watermark Design; "Estuary Gifts" was painted by native Mobilian James Foster.

On its face, Foster painted extraordinarily vivid scenes depicting the varied topography and biology of the lower reaches of the Mobile Bay watershed which supports some of the most unique plants, animals and birds on the planet. A focal point of the shell's inside scene is a three-dimensional pearl that Foster fashioned to scale where it rests inside a freshly opened Mobile Bay oyster.

During the unveiling, Thompson/Watermark's President John Baker said The Oyster Trail, along with the Gulf Quest Maritime Museum provide greater opportunity to educate locals and visitors to Mobile alike about the importance of the environment and the importance of Mobile Bay to our economy. "The health of Mobile Bay and surrounding watersheds is directly tied to the health of our communities and the quality of life we enjoy," Baker said. "While I'm certainly not a marine biologist, and I'm not trying to play one today, the oyster is an indicator species of the overall health of the bay. If we have poor water quality conditions in the bay, the oysters are the first to know it.

The Oyster Trail is a fun, educational and public-art treasure hunt throughout coastal Alabama. Look for the large fiberglass oysters that have been painted by local artists throughout the area and which can be found along the streets, within parks, and in lobbies. Each oyster has a fact plaque that includes important information about the oyster's ecological and economic benefit to Mobile Bay. Visitors to the trail are guided by a Trail Map which



"Estuary Gifts" unveiling at GulfQuest Maritime Museum. L-R: James Foster, Artist; P.J. Waters, Program Coordinator Mobile Bay Oyster Gardening Program; Marie Dyson, Oyster Trail Coordinator; John Baker, President Thompson/Watermark Design; Roberta Swann, Director Mobile Bay NEP; Tony Zdrozow, Executive Director GulfQuest Maritime Museum.

provides locations of the oysters. Trail Maps can be found in hotels, shops, visitor centers, etc., or can be downloaded.

Through sponsor donations, The Oyster Trail not only teaches people about the importance of healthy oyster populations as it relates to water quality, but the money is also used to fund the Mobile Bay Oyster Gardening Program. This volunteer-based program coordinated by the Auburn University Shellfish Laboratory on Dauphin Island focuses on education, restoration/enhancement and oyster research by "bringing the reef to the people."

Gardeners receive oyster spat in early July and grow them in baskets hung from their wharves until late November when they average about 2.5 inches. Their oyster offspring are collected and planted on reefs that have been degraded by storms, sedimentation and other causes. Volunteer gardeners have grown nearly 600,000 advanced stocker oysters for planting in and around Mobile Bay over the past 15 years, said Program Coordinator P.J. Waters. "Without the supporters, sponsors and artists who participate in The Oyster Trail,

the Mobile Bay Oyster Gardening Program would not exist," Waters said.

According to Director Roberta Swann, the MBNEP's support of The Oyster Trail has been steadfast since its inception because it includes on-the-water as well as educational benefits. "Not only does this Oyster Trail generate money to continue the gardening program, it provides educational facts about the value of oysters in our estuary," Swann said. "Not only can an adult oyster filter up to 50 gallons of water a day, oyster reefs provide habitat for other fish and shellfish. They can reduce wave energy in close proximity to the shore and most important, are at the very foundation of coastal Alabama heritage and culture. To secure a future of oysters in Alabama is vital to securing a healthy estuary and frankly, a tasty treat."

To learn more about or become a Mobile Bay Oyster Gardening Program volunteer, go to <http://www.oystertrail.com>. To learn more about the Mobile Bay National Estuary Program's efforts in watersheds across the area, go to <http://www.mobilebaynep.com>.

# A New Day for Alabama Water Resources:

## *Sustainability through Science, Management, and Political Will*

BY MARLON R. COOK, DIRECTOR GROUNDWATER ASSESSMENT PROGRAM, GEOLOGICAL SURVEY OF ALABAMA

**Modern water resource management initiatives began in Alabama in 1993, when the Alabama Office of Water Resources was created and began implementation of certificates of beneficial use that tracked water users withdrawing or diverting more than 100,000**

**gallons per day.** In 2008, the legislature formed the Permanent Joint Legislative Committee on Water Policy and Management. In 2011, Governor Robert Bentley commissioned the Alabama Water Agencies Working Group (AWAWG) with a mandate to establish a process to develop a water resource management plan for the state. The AWAWG includes the Office of Water Resources (OWR), Alabama Department of Environmental Management (ADEM), Alabama Department of Conservation and Natural Resources (ADCNR), Alabama Department of Agriculture and Industries (ADAI), and Geological Survey of Alabama (GSA). Governor Bentley included the State Climatologist Office in 2015.

The AWAWG was mandated by Governor Bentley to comprehensively investigate Alabama water issues and make recommendations and provide policy options. A report titled Mapping the Future of Alabama Water Resources Management: Policy Options and Recommendations was submitted to the Governor in December 2013. The report

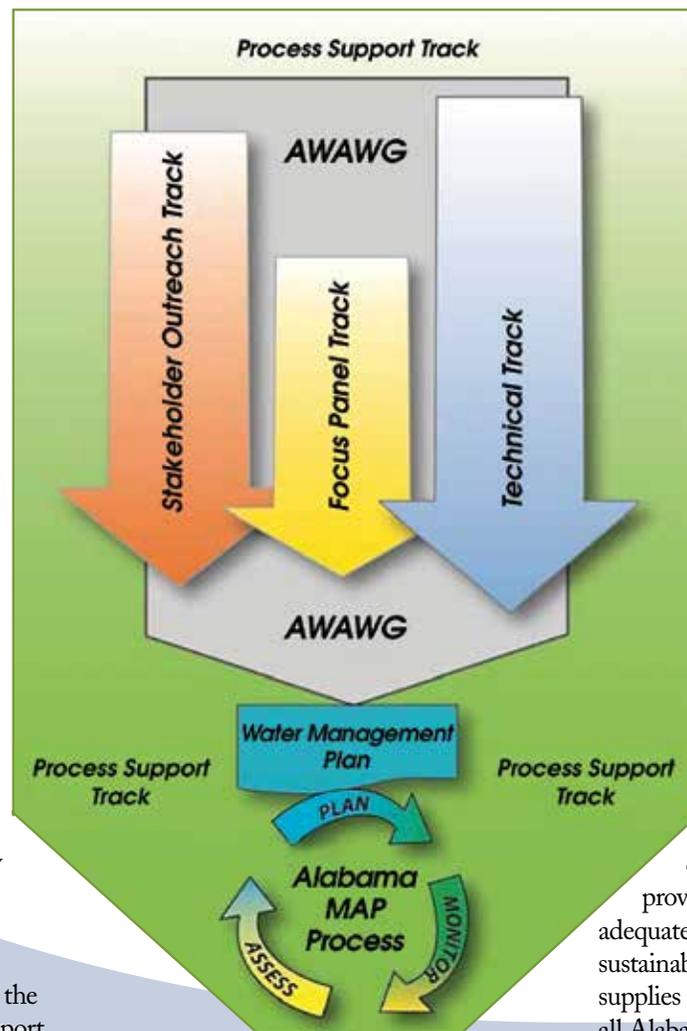
includes stakeholder opinions, descriptions of water resource issues, and a procedure consisting of four tracks (stakeholder outreach, focus area panels, technical, and process support) resulting in a water resource management plan. The management plan will be maintained in perpetuity using the

MAP process. MAP is a continuous process of Monitoring, Assessment, and Planning (fig. 1). The technical track was launched in 2014, with initiation of a statewide water resource assessment, consisting of a statewide groundwater assessment conducted by the GSA, and

statewide surface water assessment performed by OWR. Water resource assessments are multi-year efforts focusing on water availability. The focus area panel (FAP) track began in summer 2015 with establishment of five FAPs (Riparian and Other Legal Issues, Local/Regional Planning, Water Conservation, Efficiency, and Reuse) populated with invited experts in specified water resource fields. FAPs will convene for one year and will make recommendations to the AWAWG addressing each of the FAP issues. In late 2015, the AWAWG will convene a series of public meetings designed to solicit stakeholder input in the water resource management process.

A water resource management plan will include strategies for long-term, sustainable water resource development and protection, providing all Alabama water users with adequate water for economic development, sustainable agriculture, and public water supplies and insuring the quality of life that all Alabamians deserve.

### Alabama Water Management Road Map



## The D'Olive Creek Watershed *Continued from page 1*

In 2010, Thompson Engineering was contracted by the Mobile Bay National Estuary Program (MBNEP) to complete a D'Olive Creek WMP. Using scientific analysis and thorough community outreach, it provided watershed description and conditions, identified critical areas and issues, and recommended management measures with cost estimates, implementation strategies, and financing alternatives. It recognized sediment discharge as a particular problem there because of deeply eroded stream valleys, steep slopes, numerous tributary segments, highly erodible soils, and instability of exposed sediments. Of the 23 miles of watershed streams at the time of publication, it reported over two miles as substantially degraded, four miles currently being degraded, and six miles facing potential future degradation. The WMP's first implementation recommendation was to repair immediate problems. While the price tag for "stopping the bleeding" was expensive, it argued that doing nothing would result in deferred costs that would dramatically escalate as environmental deterioration continues.

In 2011, the collapsing banks of a degraded tributary to Joe's Branch along a wooded hillside at Westminster Village in Spanish Fort were on the verge of undermining Highway 31 to the north and impacting residences to the south. With contributions from ALDOT to match federal funding, MBNEP partnered with GSA, the AL Conservation Department's State Lands Division, AL Department of Environmental Management, and both cities to secure a Clean Water Act Section 319 Grant to fund a Thompson Engineering-designed step pool, stormwater conveyance (SPSC). Coarse sediments from collapsed stream banks choking downstream wetlands were first excavated and placed within the degraded channel to create an infiltration bed, and 32 boulder weirs were installed across and down its steep 1,000-foot length to create individual pools to slow velocity and reduce energy. This tributary

delivered 100,000 tons of sediment per square mile into Mobile Bay, the most ever documented by GSA for an Alabama stream. The SPSC withstood the extraordinary April 2014 rain event, reduced delivery of sediment by over 90 percent, and won a Gulf Guardian Award for the many partners responsible for the construction and implementation of this step pool design project.

Recognizing the effects of upstream erosion on estuarine nursery areas, MBNEP applied for and received a National Fish and Wildlife Foundation (NFWF) Gulf Environmental Benefit Fund Grant to repair the most critically degraded streams across the D'Olive Creek Watershed. This

landscape scale restoration includes 12 stream reaches and construction of three stormwater retention facilities in the watershed. Restoration of the first tributary, a 1,700-foot-long reach, was substantially completed in August 2015. Two major restorations, one near Mile Marker 31 between I-10 and route 90 and two segments of Tiawasee Creek in Daphne, will be under construction as early as late 2015. Three stream restorations in tributaries to Joe's Branch will follow in early 2016, along with construction of and improvements to two retention ponds. The remaining five restorations and construction of a major stormwater management facility will be completed by the end of 2017.

To determine whether this watershed-based approach to restoring conditions of estuarine habitat is effective, MBNEP's Science Advisory Committee has developed a comprehensive monitoring strategy. By measuring pre- and post-restoration condition of stream and wetlands downstream, as well as the distribution of SAV in D'Olive and Mobile Bays, scientists will be able to measure and describe improvements in the delivery of ecosystem services (like providing food, shelter, or nursery area or improving water quality) by critical coastal habitats.

*"The disappearance of over 70 percent of the submerged aquatic vegetation (SAV) that existed in Mobile Bay in the 1950s is blamed largely on excessive sedimentation."*

## 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:

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## Get Involved with the Watershed Management Plan for the Bon Secour Complex

A watershed management plan for the Bon Secour Basin is being developed, and we want to hear your voice and encourage you to participate in the planning process. The watershed planning approach will follow EPA guidance and address key elements and values deemed important to coastal Alabama. The project is designed to address issues such as:

1. Improved Water Quality and Biological Health

2. Green Infrastructure Planning and Education
3. Shoreline and Streambank Stabilization
4. Public Access
5. Environmental Awareness
6. Groundwater and Flooding Issues
7. Non-point Source Pollution
8. Stakeholder Concerns

There will be two community meetings in both the north and south

end of the watersheds over the one-year project time frame. The first meetings will be held in the Civic Center in Foley on Wednesday, December 2, 2015, at 5:00 p.m. and in the Gulf Shores Activity Center on Thursday, December 3, 2015, at 5:00 p.m. The general public and all stakeholders in these watersheds are encouraged to attend and participate in the planning to help create a clean water future in your local waterways!

