



Clean Water Act Section 319(h)  
Alabama Coastal Nonpoint Pollution Control Program  
Watershed Program Workplan

**Section 1 PROJECT INFORMATION**

Name of Project

Lillian Recreation Park Low Impact Development Project

Name of Sponsoring Organization

Marine Environmental Sciences Consortium

Sponsor Address (Number and Street, City, State, and ZIP code)

ATTN: Mobile Bay National Estuary Program (MBNEP)  
101 Bienville Blvd.  
Dauphin Island, AL 36528-4603

Sponsor Organization Type (check one)

- Municipality                       County Government  
 University                               State Government  
 Nonprofit 501(c)(3)

Federal Identification Number

██████████

Unique Entity Identifier (UEI) / Entity ID

██████████

**Section 2 PROJECT CONTACT INFORMATION**

Project Contact

Roberta Swann, Director MBNEP

Project Coordinator (if different than project contact)

Christian Miller, Public Sector Program Lead MBNEP

Address (Number and Street, City, State, and ZIP code)

118 N Royal St., Suite 601  
Mobile, AL 36602

Address (Number and Street, City, State, and ZIP code)

118 N Royal St., Suite 601  
Mobile, AL 36602

Telephone Number

251-431-6409

Telephone Number

251-459-8872

Email Address

rswann@mobilebaynep.com

Email Address

cmiller@mobilebaynep.com

**Section 3 PROJECT FUNDING REQUEST**

Section 319 (Federal Funds) Requested

\$ 276,954.00

Match Funds (Non-Federal)\*

\$ 396,000.00 & (Required In-kind Match)

Total Project Cost

\$ 672,954.00

*\*Must be equal to a minimum of 40% of the Total Project Budget.*

Is this project a continuation of another Section 319-funded Project?

Yes                       No

Has the applicant ever received Section 319 funds?

Yes                       No

The project includes an Municipal Separate Storm Sewer Systems (MS4) area:

Yes                       No

Choose an MS4.

# Alabama Workplan for Section 319 ACNPCP Watershed Project

## Section 4 PROJECT DESCRIPTION

### River Basin

- |                                        |                                         |                                             |                                     |
|----------------------------------------|-----------------------------------------|---------------------------------------------|-------------------------------------|
| <input type="checkbox"/> Alabama       | <input type="checkbox"/> Chattahoochee  | <input type="checkbox"/> Escambia           | <input type="checkbox"/> Tallapoosa |
| <input type="checkbox"/> Black Warrior | <input type="checkbox"/> Chipola        | <input type="checkbox"/> Escatawpa          | <input type="checkbox"/> Tennessee  |
| <input type="checkbox"/> Blackwater    | <input type="checkbox"/> Choctawhatchee | <input type="checkbox"/> Mobile             | <input type="checkbox"/> Tombigbee  |
| <input type="checkbox"/> Cahaba        | <input type="checkbox"/> Coosa          | <input checked="" type="checkbox"/> Perdido | <input type="checkbox"/> Yellow     |

### Project Location

<u>Waterbody Name(s)</u>	<u>12 digit USGS HUC(s) and Watershed Name</u>	<u>County</u>
UT to Caney Bayou	031401060703 – Caney Bayou-Perdido River	Baldwin
UT to Perdido Bay	031401070104 – Palmetto Creek – Perdido Bay	

This project addresses:

- TMDL?  
The pathogen TMDL for Perdido Bay (031401070103) was developed in 2010. The document calls for 96% reduction from NPS sources.
- Impairment(s) for a waterbody on the current 303(d) List?

Watershed Management Plan(s) (EPA 9-Element Plan) Name and Year      Plan & Checklist Attached:  Yes

Western Perdido Bay Watershed Management Plan (In Final Review)

### NPS Pollutant(s) to be addressed by the project.

- |                                                             |                                             |                                               |
|-------------------------------------------------------------|---------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> Low Dissolved Oxygen               | <input type="checkbox"/> Organic Enrichment | <input checked="" type="checkbox"/> Nutrients |
| <input checked="" type="checkbox"/> Sedimentation/Siltation | <input type="checkbox"/> Pesticides         | <input type="checkbox"/> pH                   |
| <input checked="" type="checkbox"/> Pathogens/Bacteria      | <input type="checkbox"/> Oil and Grease     | <input checked="" type="checkbox"/> Other:    |

### Nonpoint Pollution Source(s) to be addressed, include the percentage to which the project addresses the source.

*Total must equal 100%*

Percent	Percent	Percent
_____	NPS All Sources	_____
_____	Agriculture	_____
_____	Animal Feeding Operations	_____
_____	Silviculture	_____
_____	Construction	_____
100%	Urban Runoff/Stormwater	_____
		Resource Extraction
		Land Disposal/Storage/Treatment
		Hydrologic Modification
		Marinas and Recreational Boating
		Other NPS Pollution: _____

### Expected Estimated Pollutant Load Reductions

(Due to Project Implementation)

Pounds of Nitrogen	39.12 lbs/yr
Pounds of Phosphorus	5.53 lbs/yr
Tons of Sediment	1.28 tons/yr
Other (Pathogens, etc.):	2%

### Model Used (STEPL, Other)

PLET
PLET
PLET
Estimate ***

\*\*\*Pathogen reduction estimate is based off best professional judgment.

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## Section 5 PROJECT PARTNERS

<b>Name of Partner</b>	<b>Type(s) of Commitment to Project Success</b> <i>(Describe the commitment of time, activities, or other specified resource for the project.)</i>	<b>Letter of Support Attached</b>
Mobile Bay National Estuary Program (MBNEP)	MBNEP operates under the umbrella of the Marine Environmental Sciences Consortium. MBNEP will be the lead entity on this endeavor. They will coordinate with ADEM, the Lillian Recreational Park (LRP), and all other partners to complete tasks, facilitate stakeholder outreach, assist with conducting watershed characterization, administratively oversee implementation, and track all activities.	<input checked="" type="checkbox"/> Yes
Lillian Recreation Park (LRP)	LRP will contribute support, wherever possible, through project management, demonstrations gardens, and educational projects. They may also provide in-kind match through project promotion using project implementation committee or staff volunteer time to assist in meeting project needs and deliverables.	<input checked="" type="checkbox"/> Yes
Baldwin County Commission & Baldwin County Environmental Advisory Committee (EAC)	As a citizen led committee, the EAC will serve the role of citizen and stakeholder input on the project to guide in project direction and progress at EAC meetings during the life of the project. BCC will assist in NPS pollution and water quality education by distributing outreach materials and publicizing stakeholder opportunities for project participation within the watershed. In addition, they will offer guidance and technical assistance on the project, where possible.	<input checked="" type="checkbox"/> Yes
Alabama Water Watch (AWW)	Assist in certification of water quality training and education of citizen and student volunteers. AWW will also offer support of volunteer watershed activities such as workshops.	<input checked="" type="checkbox"/> Yes
Baldwin County Master Gardeners	Master Gardeners will provide help in planting and establishing the native vegetation in the bioswales and bioretention and assist with the development of the demonstration gardens.	<input type="checkbox"/> Yes
Baldwin County Soil and Water Conservation District (BC-SWCD)	BC-SWCD will provide match in the form of in-kind services for two years of the Baldwin County Water Festival and other educational/conservation school activities.	<input type="checkbox"/> Yes

## Section 6 PROJECT GOAL(S)

The goal of this project is to restore water quality in Perdido River and Perdido Bay by providing a partnership approach to implementing best management practices (BMPs) and education/outreach activities as identified in the “Western Perdido Bay Watershed” (2024). Other goals include:

1. Increase knowledge about coastal Alabama, its unique characteristics and environment, and provide education to a host of different age groups through outreach to the community.
2. Install low impact design (LID) BMPs to demonstrate how they are beneficial to urban environments.
3. Reduce nonpoint source (NPS) pollutants entering the Outstanding Alabama Waterway of Wolf Bay.
4. Work with the local municipality to increase knowledge about stormwater management and protection available through Baldwin County Zoning options.

# Alabama Workplan for Section 319 ACNPCP Watershed Project

## Section 7 PROJECT ABSTRACT (Limit 1 Page)

Lillian Recreation Park's property is located on the borderline of Palmetto Creek – Perdido Bay (031401070104 ) and Caney Bayou – Perdido River(031401060703). With a commitment to fostering sustainable practices and enhancing the health of stakeholders and surrounding ecosystems, Lillian Recreation Park is uniquely positioned to spearhead initiatives aimed at addressing pathogen impairment and improving stormwater management. By leveraging its resources and community connections, the park will play a vital role in mobilizing stakeholders, educating the public, and implementing effective strategies to restore and protect these vital water bodies for future generations.

The Perdido Bay watershed, crucial ecological zones in the Gulf Coast region, are currently impaired due to elevated pathogen levels, significantly impacting local ecosystems and community health. This Perdido Bay portion was originally placed on Alabama's 2006 §303(d) list of impaired waters for pathogens based on data collected by ADEM in 2001 and 2002. Perdido Bay is currently on the §303(d) list for pathogens (Enterococci) from the Lillian Bridge (US Hwy 98) to its source (the mouth of the Perdido River). This area only includes water on the Alabama portion of the bay and totals an area of 4.21 square miles. Perdido Bay is located in the Perdido-Escambia River Basin and forms in southeastern Baldwin County.

In 2008, a §303(d) sampling study was performed by ADEM on the listed portion of Perdido Bay for additional water quality assessment. ADEM collected samples from several different stations, including stations at mid-channel as well as near-shore beach monitoring stations (sampled year-round from 2006 - Present). Further review of the general water quality and intensive Enterococci study revealed that the listed area of Perdido Bay was still not meeting the pathogen criterion applicable to its most stringent use classification (Swimming). Each station was carefully examined, and the data compiled to identify specific areas of impairment. Specifically, the "Kee Avenue" beach station showed an unacceptable number of both single sample and geometric mean (geomean) exceedances, while the other mid-channel stations showed no exceedances. Therefore, a TMDL was developed for the listed portion of the bay specific to the data collected and all pertinent information available.

This project aims to assess and mitigate pathogen contamination through a comprehensive, multi-faceted approach involving volunteer citizen water quality monitoring, stakeholder engagement, and the implementation of best management practices (BMPs). A critical factor contributing to pathogen impairment in these watersheds is the inadequate management of stormwater runoff. Urbanization and land use changes have increased impervious surfaces, resulting in higher volumes of untreated stormwater entering local water bodies. This runoff can carry pathogens from various sources, including pet waste, agricultural runoff, and failing septic systems. By developing and implementing effective stormwater management strategies, we can significantly reduce pathogen loading and improve overall water quality. This project will evaluate current stormwater systems and identify areas for improvement, incorporating green infrastructure solutions such as rain gardens, permeable pavements, and bioswales to enhance water infiltration and filtration.

We will implement BMPs such as bioswales, bioretention, native vegetation, pet waste stations, porous pavement and geogrids. Educational workshops and outreach programs will empower local communities to adopt practices that protect and restore watershed health. By addressing both pathogen impairment and stormwater management, this project seeks to enhance the ecological integrity of the Perdido River and Perdido Bay watersheds, safeguard public health, and restore recreational opportunities. Our integrated approach aims to create a sustainable framework for ongoing water quality management, benefiting both the environment and the communities that depend on these vital water resources.

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**Section 8 PROJECT OBJECTIVES**

<b>Task 1. Project Administration</b>	
<b>Objective</b>	To effectively plan, implement, monitor, and evaluate all work performed under this project including technical and financial supervision, as well as, preparation of status reports.
<b>1.1 Subtask</b>	<p>MBNEP will work with partners to develop semi-annual section 319 grant reports. They will be complete, accurate, and timely. Conference calls at least quarterly, with the ADEM project manager(s), will be scheduled to discuss project activities.</p> <p>Semi-Annual reports will be submitted on March 1 and September 1 every year the project is open. These reports should include but not be limited to the following components:</p> <ul style="list-style-type: none"> <li>• An overview of the project</li> <li>• Summary of the work that has been completed for the goals, objectives, tasks, and subtasks with an emphasis on lessons learned</li> <li>• All deliverables completed in that quarter (i.e. copies/summaries/ listings of meetings, pictures of events, BMPs, load reductions, reports, brochures, circulars, articles, media releases, presentations, etc.)</li> <li>• Summaries of education and outreach, technology transfer, and technical assistance provided</li> <li>• An estimation of the percentage completion of each subtask.</li> </ul>
<b>1.1.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Quarterly meeting notes with conference calls with ADEM</li> <li>• Semi-annual ADEM 319 reports</li> <li>• Deliverables achieved in the reporting period</li> </ul>
<b>1.2 Subtask</b>	<p>MBNEP will develop and review the final Section 319 Grant Report that will be submitted to ADEM within 60 days of the cooperative agreement end date. This report will provide at a minimum the following information:</p> <ul style="list-style-type: none"> <li>• An overview of project and project goals and objectives</li> <li>• Evaluation of achievement of project goals and milestones</li> <li>• Narrative and documentation of completion of project objectives, project tasks, dates of completion, deliverables, and measures of success</li> <li>• Summary of BMPs and associated load reductions</li> <li>• Give a brief description of the expenses (both federal and match) that were procured during the project and any variations from the original budget</li> <li>• Describe education/outreach, public participation, technology transfer, technical assistance, and the effectiveness of the education outreach efforts</li> <li>• Discuss partnerships and tasks completed by each entity</li> <li>• Describe successes, challenges, and lessons learned, and future activity</li> </ul>
<b>1.2.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Final comprehensive and accurate Section 319 Grant report</li> <li>• All Deliverables achieved will be submitted</li> <li>• Any Deliverables not achieved will be accompanied with justification of why not</li> </ul>
<b>1.3 Subtask</b>	MBNEP will perform accounting functions for project funds and will submit appropriate reimbursement forms to ADEM at least quarterly but no more than

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	monthly. Invoices should reflect work done during that processing period and deliverables received. The final invoice will be submitted to ADEM within 45 days of the cooperative agreement end date.
<b>1.3.1. Deliverable</b>	<ul style="list-style-type: none"> <li>• Invoices</li> <li>• Back-up documentation to support invoices</li> </ul>
<b>1.4 Subtask</b>	Provide at least one (1) descriptive project news release <u>annually</u> to mass media news outlets (such as local newspaper, television, radio, magazine, bulletin, etc.) that covers/services the watershed area and mentions the funding source(s).
<b>1.4.1. Deliverable</b>	<ul style="list-style-type: none"> <li>• Copy of each news release</li> </ul>
<b>Measure of Success</b>	Accurate and timely reports, invoices, and news releases that meet the requirements of the Cooperative Agreement. The news coverage will help to promote the project, its partners, awareness of ways to get involved and improve water quality within local watersheds, and knowledge of NPS pollution.

<b>Task 2. Stakeholder Involvement</b>	
<b>• Objective</b>	Provide opportunities for local stakeholders and partners to learn about, participate in, and leverage resources for improving water quality within the watershed.
<b>.1. Subtask</b>	Facilitate at least 2 public/private sector stakeholder meetings annually to identify project needs, promote this project, seek continued input/partnering, and leverage other funds and resources.
<b>.1.1. Deliverable</b>	<ul style="list-style-type: none"> <li>• Outreach letters/e-mails</li> <li>• Lists of attendees for each meeting</li> <li>• Meeting agendas and minutes</li> </ul>
<b>.1.1.1. Measure of Success</b>	Minimum of ten (10) people in attendance at each meeting with a list of tasks to be accomplished by stakeholders/partners to move the project forward.

<b>Task 3. Best Management Practices (BMP) Implementation and Load Reduction Estimations</b>	
<b>• Objective</b>	Implement NPS BMPs that are technically sound, environmentally protective, and economically sensible to protect water quality using a watershed or ecosystem-based conservation and restoration approach. These BMPs will help restore natural hydrology, remediate the effects of post-construction stormwater pollution, and improve the water quality.
<b>.1. Subtask</b>	Design BMPs to mitigate CWA Section 319 (h) NPS program priority pollutants (e.g., nitrogen, phosphorus, and sediment) or applicable pollutants of concern identified on CWA Section 303(d) lists of impaired waters (i.e., siltation), and work with stakeholders to obtain access agreements, apply for and receive applicable permit(s), design bmp sites, and bid project.
<b>.1.1. Deliverable</b>	<ul style="list-style-type: none"> <li>• Design Plans</li> <li>• Applicable permit(s)</li> <li>• Landowner access agreements executed.</li> <li>• Execution of construction contract.</li> <li>• Acceptance of change order by contractor.</li> <li>• Scheduling and mobilization of contractor.</li> <li>• Bid Contract Documents</li> <li>• Construction timeline established</li> <li>• All materials sourced and ordered including boulders and vegetation (live stakes, bare roots, containers, seed, etc.)</li> </ul>

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<b>Subtask 3.2</b>	Installation of BMPs for stormwater management, as well as nps and pathogen reduction.
<b>3.2.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Photo documentation of BMPs/Stormwater Control Measures (SCMs)</li> <li>• List of BMPs/SCMs, as well as their latitude and longitudes.</li> <li>• As Built Construction Plans</li> </ul>
<b>Subtask 3.3</b>	Complete the Inspection and Substantial Completion of Construction with photographs and signoff by the engineer of record for the project.
<b>3.3.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Inspection with Pictures</li> <li>• Substantial Completion of Project Certification Form</li> <li>• Maintenance Workshop with Entity Required to Maintain Project Area and summary of the workshop will be included during the reporting requirement</li> </ul>
<b>Measure of Success</b>	Communication from the beginning design/coordination phase to the construction phase and the post construction maintenance requirements. Certification that the project is 100% stable and complete. Completed information about the BMPs implemented with exact locations of the BMPs.
<b>Subtask 3.4</b>	Monitor or model (i.e., Chesapeake Bay Model, Step-L, PLET, etc.) water quality data to report NPS pollutant load reduction estimates in EPA's GRTS resulting from implementation of "on-the-ground" BMPs.
<b>3.4.1 Deliverable</b>	Pollutant load reduction estimates for nitrogen, phosphorus, and sediment will be estimated by the consultant and reported to the ADEM NPS Unit semi-annually
<b>Measure of Success</b>	Calculation of Reduction of NPS Pollutants by modeling for nitrogen, phosphorus, and sediment load reductions.

<b>Task 4. Education and Outreach</b>	
<b>4. Objective</b>	Conduct education and outreach activities to promote the project and increase knowledge in preventing and reducing NPS pollution and water concerns within the coastal watersheds.
<b>.1. Subtask</b>	Hold litter pickups challenges in association with PALs/Keep AL Beautiful, the County, Perdido River and Perdido Bay Watershed, and other stakeholders to help reduce litter entering the watershed.
<b>.1.1. Deliverable</b>	<ul style="list-style-type: none"> <li>• Advertisement for the event</li> <li>• Pictures of the event</li> <li>• Sign-in sheet, waiver, and number of participants</li> <li>• Summary of the event (number of pounds collected; City personnel, pay rate, disposal fee, mileage for trucks, length of time for event, etc.)</li> </ul>
<b>.2. Subtask</b>	BCSWDA will host two Clean Sweep collection days for Baldwin County residents.
<b>.2.1. Deliverable</b>	<ul style="list-style-type: none"> <li>• Summary of the Event to include at a minimum – description of event, number of people that participated, amount of hazardous waste collected, etc.</li> <li>• Flyer or Advertisements for the Event</li> <li>• Pictures of the Event</li> </ul>
<b>4.3 Subtask</b>	BCSWDA will perform litter patrol in the Lillian Community during the grant period.
<b>4.3.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Summary of the Event to include at a minimum – description of event, amount of litter collected, etc.</li> <li>• Pictures of the Event</li> </ul>

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<b>4.4 Subtask</b>	Conduct the Water Festival with the BC-SWCD for one year.
<b>4.4.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Announcements</li> <li>• Agendas</li> <li>• Presentation rubrics</li> <li>• Summary of event</li> <li>• Sign-in sheets</li> <li>• Photos</li> </ul>
<b>4.5 Subtask</b>	Coordinate and schedule a minimum of two Alabama Water Watch (2) workshops/field days.
<b>4.5.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Announcements</li> <li>• Agendas</li> <li>• Presentations</li> <li>• Summary of event</li> <li>• Sign-in sheets</li> <li>• Before/after surveys</li> <li>• Photos</li> <li>• Copies of information provided.</li> </ul>
<b>4.6 Subtask</b>	Develop demonstration gardens that highlight sustainable practices and plants native to the Perdido Bay area. Design garden areas that highlight different types of gardens that would be conducive to the area, including wetlands, pollinators, native plants, rainwater, and other types of gardens.
<b>4.6.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Develop information about plants in each of the garden areas.</li> <li>• Handouts available on the different gardens, outlining what flowers/plants are included and how to care for them.</li> <li>• Photos of garden areas.</li> <li>• Structures, possibly metal house outlines, that call attention to the garden areas.</li> </ul>
<b>4.7 Subtask</b>	Hold environmental camp annually to teach children about environmental issues and encourage them to take action to protect the environment. Develop environmental stewardship, including recycling practices. Help young people understand the interconnectedness of nature and their role in preserving it
<b>4.7.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Identify topics and activities for the camps.</li> <li>• Hold two environmental camps per year.</li> <li>• Minimum of twenty students per camp.</li> </ul>
<b>4.8 Subtask</b>	Baldwin County SWCD has several environmental/conservation-oriented school trips and activities throughout the school year. These activities will be garnered as match. It could be a farm day, soil judging competition, conservation activities, etc.
<b>4.8.1 Deliverable</b>	<ul style="list-style-type: none"> <li>• Summary of the Event to include at a minimum – description of event, number of people that participated, amount of hazardous waste collected, etc.</li> <li>• Flyer or Advertisements for the Event</li> <li>• Pictures of the Event</li> </ul>
<b>4.9 Subtask</b>	Low Impact Development/Smart Yards Workshop will explore scientifically based, environmentally sustainable landscape practices that help to filter runoff, reduce fertilizer usage, and encourage rainwater infiltration to improve the water quality of the stormwater runoff from residential lots. This workshop, aimed at business owners and homeowners, will discuss different types of green infrastructure that can be implemented and the planning, installation, water and fertilizer use, and BMP

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	<p>maintenance involved. It will also help set a level of expectation for labor requirements during and after installation and provide a visual expectation of how the BMPs will stabilize/mature.</p>
<p><b>4.9.1 Deliverable</b></p>	<ul style="list-style-type: none"> <li>• Summary of the Event to include at a minimum – description of event, number of people that participated, amount of hazardous waste collected, etc.</li> <li>• Flyer or Advertisements for the Event</li> <li>• Agenda and Workshop Handouts</li> <li>• Survey of before and after knowledge of topics covered in the course</li> <li>• Pictures of the Event</li> </ul>
<p><b>4.10 Subtask</b></p>	<p>Educational Signage will be placed in strategic areas around the park to engage readers in nature-based solutions, watershed stewardship, and the reduction of nonpoint source pollutants.</p>
<p><b>4.10.1 Deliverables</b></p>	<ul style="list-style-type: none"> <li>• Educational Signs installed at the Lillian Recreation Park.</li> </ul>
<p><b>4.1.1.1 Measures of Success</b></p>	<ul style="list-style-type: none"> <li>• Summaries of all education and outreach activities to document outreach to the community.</li> <li>• Number of people educated</li> <li>• Amount of litter removed from the watershed</li> <li>• Amount of waste collected</li> <li>• Advertisement of city services and partners to help foster stewardship in watershed</li> <li>• Partner contributions and match contributions documented</li> <li>• Increase in community buy-in of the watershed improvements and restoration process</li> <li>• Watershed education for the community at all levels (professional, children, adults, college age, teen, etc.)</li> <li>• A 15% increase in knowledge is anticipated based on the comparative analysis of the before and after survey results.</li> </ul>

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**Section 9 PROJECT MILESTONE SCHEDULE**

*Check the Quarter(s) applicable to when each objective will occur. Some objectives will occur in multiple quarters.*

#	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 5	Quarter 6	Quarter 7	Quarter 8
1	<input checked="" type="checkbox"/>							
2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*This is a draft document that has not been approved by the ADEM.*

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## Section 10 FUNDING REQUESTED (See Attached Budget)

### \*\*\*Important Notes

*Non-Federal match must be a minimum of 40% of the total project budget.*

*Management Measures implemented should be a minimum 70% of federal funding request.*

*A federally approved rate documentation is required for fringe and indirect.*

*Design and permitting costs are minimal for grant funds.*

*Volunteer Time: The rate of volunteer time is based on the current (2018) Independent Sector's Value of Volunteer Time for Alabama, which can be found at [https://independentsector.org/resource/vovt\\_details/](https://independentsector.org/resource/vovt_details/)*

*Mileage: The mileage rate is based on the current State mileage rate, which can be found at <https://comptroller.alabama.gov/mileage-rates/>.*

## Section 11 FUNDING REQUESTED – ITEMIZED EXPENSES

*Describe items, services, or expenses associated with each line item.*

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## Personnel/Salary:

Project Manager Salary:  $(\$35.27/\text{hour} * 200 \text{ hours}) = \$7,054.00$

Project Manager Fringe:  $(\$7,054.00 * 35.2\%) = \$2,483.01$

Grants Manager Salary:  $(\$35.10/\text{hour} * 30 \text{ hours}) = \$1,053.00$

Grants Manager Fringe:  $(\$1,053.00 * 36\%) = \$379.08$

Director Salary:  $(\$69.91/\text{hour} * 20 \text{ hours}) = \$1,398.20$

Director Fringe:  $(\$1,398.20 * 29\%) = \$405.48$

Total Federal = \$12,772.77

Total Match = \$0.00

Project Total = \$12,772.77

## Travel:

School Bus Travel to Baldwin County Water Festival:

- Loxley  $(\$1.75/\text{mile} * 35.2 \text{ miles}) = \$61.60$
- Silverton  $(\$1.75/\text{mile} * 45.6 \text{ miles}) = \$79.80$
- Newton  $(\$1.75/\text{mile} * 59.2 \text{ miles}) = \$103.60$
- Belforest  $(\$1.75/\text{mile} * 44 \text{ miles}) = \$77.00$
- Rockwell  $(\$1.75/\text{mile} * 30.2 \text{ miles}) = \$52.85$
- Spanish Fort  $(\$1.75/\text{mile} * 37.8 \text{ miles}) = \$66.15$
- Fairhope West  $(\$1.75/\text{mile} * 56 \text{ miles}) = \$98.00$
- Daphne  $(\$1.75/\text{mile} * 46 \text{ miles}) = \$80.50$
- Daphne East  $(\$1.75/\text{mile} * 41.4 \text{ miles}) = \$72.45$
- Stapleton  $(\$1.75/\text{mile} * 17.2 \text{ miles}) = \$30.10$
- Delta  $(\$1.75/\text{mile} * 19 \text{ miles}) = \$33.25$
- Bay Minette  $(\$1.75/\text{mile} * 7 \text{ miles}) = \$12.25$
- Robertsdale  $(\$1.75/\text{mile} * 47.8 \text{ miles}) = \$83.65$
- Foley  $(\$1.75/\text{mile} * 67.8 \text{ miles}) = \$118.65$
- Pine Grove  $(\$1.75/\text{mile} * 5.6 \text{ miles}) = \$9.80$

Total Federal = \$0.00

Total Match = \$979.65

Project Total = \$979.65

## Education and Outreach:

Smart Yards and LID Workshop = \$3,000 Professional Service Contract with ACES Smart Yards Personnel

Educational Signage =  $\$1200/\text{sign} * 2 \text{ signs} = \$2,400.00$

Litter Clean-up =  $(20 \text{ volunteers} * \$29.82/\text{hour} * 3 \text{ hours} * 2 \text{ events}) = \$3,578.40$

SWCD – School Activities =  $(\$29.82/\text{hour} * 4 \text{ hours} * 20 \text{ volunteers} * 2 \text{ years}) = \$4,771.20$

Hazardous Waste Days =  $(\$30,000 \text{ for disposal of hazardous materials}) + (40 \text{ people} * \$29.82/\text{hour} * 4 \text{ hours} * 2 \text{ events}) = \$39,542.40$

Dumpster Days =  $(\$24,000.00 \text{ for set up, roll off, and disposal fees}) = \$24,000$

Baldwin County Water Festival volunteers =  $(106 \text{ volunteers} * \$29.82/\text{hour} * 5 \text{ hours} * 2 \text{ events}) = \$30,082.80$

Baldwin County Water Festival supplies for edible aquifer =  $(\$18.68 \text{ for a 35 pack of sprites} * 2) + (\$28.68 \text{ for a 35 pack of cokes}) + (\$2.49 \text{ for a pack napkins} * 4) + \$1.99 \text{ for 100 straws} (*3) + \$7.99 \text{ for 10 individual ice cream cups} * 25) + (\$24.98 \text{ for 15 paper towel rolls}) + (1.69 \text{ for 25 gummy worm packet} * 12) = \$356.93$

Baldwin County Water Festival supplies for water cycle bracelets =  $(\$9.99 \text{ for 2 rolls of bracelet leather} * 3) + (\$6.89 \text{ for 1,000 beads} * 5) + (\$12.43 \text{ for 200 animal beads} * 2) = \$89.28$

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Baldwin County Water Festival bus driver fees =  $(\$17.25/\text{hour} * 6 \text{ hours} * 40 \text{ bus drivers}) = \$4,140.00$   
 Baldwin County Water Festival lunch for volunteers =  $(\$3.58 \text{ for } 16 \text{ pack of hamburger buns} * 10) + (\$25.98 \text{ for } 18 \text{ burger patties} * 10) + (\$9.36 \text{ for } 72 \text{ slices of cheese} * 3) + (\$10.98 \text{ for } 3 \text{ ketchup}) + (\$14.88 \text{ for } 3 \text{ mayo}) + (\$6.48 \text{ for } 2 \text{ mustard}) + (\$18.48 \text{ for } 50 \text{ chip pack} * 4) + (\$19.98 \text{ for } 186 \text{ paper plates}) = \$449.92$   
 Stakeholder Meetings =  $(15 \text{ people} * \$29.82/\text{hour} * 1.5 \text{ hours} * 4 \text{ events}) = \$2,683.80$   
 Alabama Water Watch Training =  $(10 * \$29.82/\text{hour} * 2 \text{ events} * 6 \text{ hours}) = \$5,367.60$   
 Smart Yards Training =  $(\$29.82/\text{hour} * 4 \text{ hours} * 15 \text{ people}) = \$1,702.80$   
 Educational Signage Installation =  $(\$29.82/\text{hour} * 2 \text{ hours} * 4 \text{ people}) = \$238.56$

Total Federal = \$5,400.00  
 Total Match = \$117,803.69  
 Project Total = \$123,203.69

**Supplies:**

Stakeholder, Education and Outreach Materials: \$200.00  
 Stakeholder, Education and Outreach Materials: \$250.00  
 Litter Clean-up:

**Management Measures: (See Table Below for federal breakdown of Management Measures)**

Engineering Design and Oversight: (\$40,048.83)  
 Engineering Design and Oversight: (\$32,000.00)  
 Management Measures BCC Removal of Gravel and Dirt to County C&D Landfill: Skid Steer \$275/day \* 3 days + 2 employees \* \$440/day \* 3 days + 2 dump truck \* 3 days \* \$775/day + load fee \$125\*5 loads = 7420.00  
 Management Measures BCC Removal of Gravel and Dirt to County C&D Landfill: Skid Steer \$275/day \* 3 days + 2 employees \* \$440/day \* 3 days + 2 dump truck \* 3 days \* \$775/day + load fee \$125\*5 loads = 7420.00

Total Federal: \$280,341.83  
 Total Match: \$46,840.00  
 Total For the Project: \$327,181.83

**Other:**

*Indirect Costs = Total Modified Direct Costs \* 23.2% =  $(\$12,772.77 + 1156 + 50,000 + 46,905 + 22344 + 22500 + 50000 + 40,048.83) * 23.2\% = \$164,422.77 * 23.2\% \text{ off campus rate} = \$58,319.37 \text{ with } \$18,000 \text{ being paid on the federal side of the budget and } \$40,319.37 \text{ being waived as match.}$*   
*Indirect Costs (Cost Share) =  $(\$32,000 + \$200) * 23.2\% = \$7,470.40$*

Total Federal: \$18,000.00  
 Total Match: \$47,789.77  
 Total For the Project: \$65,789.77

**Sources of Match:**

Volunteer Hours  
 Baldwin County  
 Indirect Costs  
 Baldwin County Soil and Water Conservation District Activities  
 PALS

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<b>Section 12 Management Measures</b>							
<i>Best Management Practice (BMP) Description</i>	<i>Federal Cost Share Per Unit</i>	<i>Total Units Installed</i>	<i>Unit</i>	<i>Federal</i>	<i>Non Federal</i>	<i>Total</i>	<i>Primary Pollutant</i>
4.1 Bioretention	\$15.00	3127	Square Feet	\$46,905.00	\$0.00	\$46,905.00	Stormwater Volume, Pathogens, Sediment, Nutrients
4.2 Bioswales	\$38.00	588	Square Feet	\$22,344.00	\$0.00	\$22,344.00	Nutrients, Pathogens, Sediment
4.3 Geo-grid	\$8.00	9481	Square Feet	\$75,848.00	\$7,420.00	\$83,268.00	Stormwater Volume, Sediment
4.4 Porous Pavers	\$12.00	6058	Square Feet	\$72,696.00	\$7,420.00	\$80,116.00	Stormwater Volume, sediment
4.5 Pet Waste Stations	\$289.00	4	Stations	\$1,156.00	\$0.00	\$1,156.00	Pathogens
4.6 Native Vegetation	\$6.06	3715	Square Feet	\$22,500.00	\$0.00	\$22,500.00	Stormwater Volume, Sediment, Pathogens, Nutrients
<b>Total</b>				<b>\$241,449.00</b>	<b>\$14,840.00</b>	<b>\$256,289.00</b>	

\*\*\*\$92,905.00 with associated match will be taken out of the FY2020 NPS Project Budget. This amount corresponds to the bioretention, bioswales, pet waste stations, and native vegetation which can help with a pathogen impairment. The other federal amount will be taken from the Alabama Coastal Nonpoint Pollution Control set aside for implementing the Urban Component of the Program and focusing on Post Construction.

Map Attached:  Yes

**Section 13 PUBLIC INFORMATION AND EDUCATION**

Public education and information are an important part of any project. Education efforts can help alter human behavior in a way that supports the protection and improvement of water quality in rivers and streams.

Education activities will consist of workdays and educational events, all designed to demonstrate the success of the installed BMPs to mitigate NPS and pathogens pollution reduction and stormwater management. Activities will target the public, municipal officials, and other local stakeholders.

Education efforts may include, but are not limited to:

- Community clean-up days to remove trash and debris from the watershed. At least two of these will be planned (one yearly). Clean-up days will be organized in collaboration with project partners and may include local groups. Litter clean-ups help local stakeholders build a relationship with the environment. Clean-ups can foster a sense of ownership and a willingness to act in ways that are protective of water quality.
- Low Impact Development/Smart Yards Workshop will explore scientifically based, environmentally sustainable landscape practices that help to filter runoff, reduce fertilizer usage, and encourage rainwater infiltration to improve the water quality of the stormwater runoff from residential lots. This workshop, aimed at business owners and home owners, will discuss different types of green infrastructure that can be implemented and the planning, installation, water and fertilizer use, and BMP maintenance involved. It will also help set a level of expectation for labor requirements during and after installation and provide a visual expectation of how the BMPs will stabilize/mature.
- Dumpster Days will provide Lillian residents with an annual opportunity to properly dispose of waste to reduce littering/dumping and decrease the amount of household debris entering the Perdido watershed during rain and high wind weather events.
- Hazardous Waste Drop-off Day will occur annually to reduce hazardous waste from entering ground and surface water from spill events. The Park will provide drop locations for the safe disposal of items that should not be discarded during household trash collection.
- AWW Training Workshops are workshops that educates volunteers on how to collect water samples using scientific equipment and standardized techniques. Participants will learn how to record, analyze, and understand general water quality data. This in turn empowers participants to make positive environmental impacts in their community. There could be water chemistry sampling, stream biomonitoring, pathogen sampling and/or bacteria blitz sampling.
- Baldwin County Water Festival will help educate fourth graders throughout the watershed and county about groundwater, reducing NPS Pollution, and being good stewards for water resources.
- A Stakeholder Meeting informs the public of ongoing watershed efforts, emphasizes the importance of community-based involvement, allows the public to express concerns and ideas, and provides the opportunity for public participation.

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- Educational Signage will be placed in strategic areas around the park to engage readers in nature based solutions, watershed stewardship, and the reduction of nonpoint source pollutants and the importance of stormwater management and zoning.
- Baldwin County Extension System has a group of lessons known as the Master Environmental Educator Lessons. These cover a variety of different topics such as Alabama Water Watch, Backyard Wildlife Habitat, Groundwater Pollution, Stormwater Pollution, Recycling, Invasive Plant Species, etc. and can be checked out to teach at local schools.
- Demonstration Gardens will house different techniques such as rainwater harvesting demonstrations, rain garden demonstrations, native plants, constructed stormwater wetland area, etc. This will help give out information about nature-based solutions and additional ways park visitors can be better watershed stewards on their own property with actionable ideas or information that they could implement themselves.

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# Alabama Workplan for Section 319 ACNPCP Watershed Project

## Section 14 ATTACHMENTS

### List (Please Describe)

Western Perdido Bay Watershed Management Plan

Partners' Letters of Support will be submitted before execution of a Cooperative Agreement

Map of selected BMP implementation sites

EJ Screening Tool Report

## Section 15 PROJECT AUTHORIZATION

*I authorize that to the best of my knowledge the contents of this application are true and accurate. I understand that, if funded, the contents of this application will be used to draft a grant agreement between the Alabama Department of Environmental Management and the Sponsoring Organization as a mechanism for executing the grant project.*

\_\_\_\_\_  
Signature of Sponsoring Organization's Authorized Representative

\_\_\_\_\_  
Date (Month, Day, Year)

Typed Name: David England  
Title: Director of Finance & Administration  
Email Address: dengland@disl.edu

### ADEM USE ONLY

Project FY/#:	
Date REC'D:	