Mobile Bay National Estuary Program Management Conference

Infrastructure Transformations



Year Three Work Plan 2023 - 2024

Prepared by
Mobile Bay National Estuary Program
www.mobilebaynep.com

Preface

MBNEP's mission is to promote the wise stewardship of water quality and living resources of Alabama's estuaries. MBNEP's purpose is to catalyze actions of estuary stakeholders, build community organizational capacity for sound resource management, and leverage commitment and investment to ensure the estuary's sustainability. MBNEP's objectives are: 1) engage estuary stakeholders in the development of action plans; 2) expand resources and involvement in the implementation of these plans; and 3) promote how to best protect this nationally significant ecological, economic, and cultural resource to ensure its conservation for our lifetime and beyond. To maximize effectiveness in promoting estuary health, the program's guiding principles are:

<u>Those that live it know it</u> - Citizens, anglers, boaters, scientists, hunters, and others have a unique insight into the environmental challenges we face, what works, and what doesn't. **Stakeholder input is vital to developing long-term solutions to local challenges.**

<u>Economic opportunities must be available</u> - Our coast is an economic engine, creating significant wealth for our State each year from trade through the Port of Mobile, recreational, and commercial fishing, tourism, hunting, and coastal construction. **Protection of the livelihoods of our coastal residents** depends on high quality waters, vigorous populations of fish and wildlife, and a healthy mosaic of habitats providing essential natural functions.

<u>It happens in the river, in the sea, and on the street</u> - Residents, towns, cities, counties, business and industry, academia, community developers, and social services all have a vested interest in preserving the quality of life derived from Mobile Bay and coastal Alabama's estuaries. Involvement of citizens in carrying out activities aimed at improving the Bay and its watersheds is paramount to ensuring the long-term health and vitality of Alabama's estuaries. **Citizens must be actively engaged in balancing the many uses of the Bay so that we can preserve its unique natural resources for all our needs.**

Our vision: Alabama's estuaries (where the rivers meet the sea) are healthy and support ecological functions and human uses. Alabama's estuaries are integral to our common good.

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Background

On November 6, 2021, Congress passed the Infrastructure Investment and Jobs Act (known as the Bipartisan Infrastructure Law -- BIL), a significant investment in the nation's infrastructure and resilience. The BIL specifically identifies the National Estuary Programs (NEPs) as key partners for implementation and therefore provides additional funding to these programs. Funding through the BIL provides a historic investment to the NEP, more than doubling the current base funding of \$700,000 per estuary annually. The BIL provides an additional \$26.4 million, or \$909,800 per year for the next five years, to the NEPs beginning in fiscal year 2022 through fiscal year 2026. The BIL funding is available to the NEPs until fully expended.

As with annual appropriations distributed to NEPs to implement Section 320 of the Clean Water Act, the funds distributed under the BIL must implement a management conference and EPA approved Comprehensive Conservation and Management Plan (CCMP), and annual workplan specifically developed for BIL funds. The workplan for expenditure of BIL funds shall focus on these six priorities:

- 1. Measurable outcomes
- 2. Implementation of the Act's Made-in-America requirements
- 3. High labor standards for all jobs funded with BIL, including prevailing wages
- 4. 40% of BIL investments targeted to disadvantaged communities
- 5. Investments on building resilient infrastructure able to withstand impacts of climate change
- Coordination of investments with State, local, Tribal, and territorial governments to leverage BIL resources.

Through the BIL, the Mobile Bay National Estuary Program (MBNEP) has an unprecedented opportunity to reinforce the wise stewardship of Alabama's estuarine and coastal natural resources, while making communities more resilient to the impacts of climate change. The following five-year strategy will implement the CCMP for Alabama's Estuaries and Coast 2019-2023, with a focus on transforming how we monitor environmental conditions (*Estuary Status and Trends*); how we manage coastal Alabama shorelines (*Ecosystem Restoration and Protection*); and how we build the environmental management capacity of local governments to serve disadvantaged communities who are marginalized, underserved, and overburdened by pollution (*Technical Assistance and Capacity Building*). This strategy for use of BIL funds includes:

- **Expanded environmental monitoring** to better understand and address pollutant loading and contamination across our two coastal counties
- Improved and better coordinated shoreline management to strengthen the resilience of our first line of defense against rising seas and more intense and frequent storms resulting from climate change and
- **Installation of green infrastructure in underserved areas** to counter chronic flooding and other stormwater management challenges facing disadvantaged communities.

Geographic Distribution



The MBNEP's service area covers all of Mobile and Baldwin counties, from the Florida border on the east, across coastal Alabama to the Mississippi border to the west. In addition, the target area extends seaward to the three-mile submerged land State jurisdictional limit. It includes Mississippi Sound, west to the Mississippi/Alabama border and Perdido Bay, east to the Florida state line. Major waterways include the Tombigbee, Spanish, Tensaw, Apalachee, Blakeley, Escatawpa, Mobile, Alabama, Dog, Fowl, Fish, Magnolia, Bon Secour and Perdido rivers; Chickasaw, Norton, Three Mile, and Eight Mile creeks; Wolf and Perdido Bays, Little Lagoon; Mississippi Sound; and the Intercoastal Waterway.

MBNEP will target 40% of BIL funds to disadvantaged communities as identified by the Climate and Economic Justice Screening tool. Shoreline funds will target the western shore of Mobile Bay.

Environmental Monitoring will occur in Mobile Bay and begin in Western Perdido Bay, specifically in Peterson Branch.



Action Plan 2023-2024

The following budget and activity details summarize how MBNEP will utilize BIL funds to support transformative change through of the CCMP. Each project is identified by the relevant CCMP Goal followed by the correlated activity, its purpose, objectives, outputs, and expected outcomes. Each activity table indicates its relevance to the Clean Water Act, where applicable, project lead, expected partners, and other potential sources of funding.

The Action Plan Budget: 2022-2024

| | | <i>2021-2022</i> Year 1 | <i>2022-2023</i> Year 2 | <i>2023-2024</i> Year 3 |
|--------------------------------|--|----------------------------|----------------------------|----------------------------|
| CCMP | BIL Five-Year Strategy | | Budget Amount | |
| EST-1 | Coastal Environmental Monitoring Program | 125,240.70 | 49,999.70 | 100,000 |
| | Bay Monitoring | 75,240.70 | | |
| | Watershed Monitoring | 50,000.00 | 49,999.70 | 100,000 |
| ERP- 2 | Community Resilience Green Infrastructure Initiative | 393,647.50 | 443,647.50 | 342,471 |
| | Eightmile Creek Watershed Management Program | 150,000.00 | 100,000.00 | 100,000 |
| | TMC/Lower Chasaw: Gulf Village/Alabama Village | 75,000.00 | 100,000.00 | 50,000 |
| | Wolf Bay: Beulah Heights- Foley | 75,000.00 | 100,000.00 | 72,514 |
| | Magnolia River: Mills Neighborhood | 50,000.00 | 100,000.00 | 75,000 |
| | Project Delivery | 43,647.50 | 43,647.50 | 44,957 |
| ERP-3 | Comprehensive Shoreline Management Program | 272,241.37 | 297,482.37 | 348,659 |
| | Management Plan | 225,000.00 | | |
| | 50% Cost share program | | 250,241.00 | 300,000 |
| | Project Delivery | 47,241.37 | 47,241.37 | 48,659 |
| Subtotal Project Related Costs | | 791,129.57 | 791,129.57 | 791,130 |
| | Indirect Charges | 118,670.44 | 118,670.44 | 118,670 |
| Total Inf | frastructure Budget | 909,800.00 | 909,800.00 | 909,800 |
| | S/(D) | 0 | 0 | 0 |

EST: Coastal Environmental Monitoring Program

| Project | Coastal Environmental Monitoring Program |
|---|---|
| | ARCOS: Middle Bay Lighthouse Environmental |
| Activity Title | Monitoring Infrastructure |
| Year Initiated | 2022 |
| ССМР | EST-1.2 |
| BIL Justification | Support climate resilience, water quality and nutrient load monitoring |
| Objectives | Track environmental change by installing 1 monitoring station to collect continuous data on water conditions in Mobile Bay |
| Outputs/Performance Metrics | Continuous Monitoring of salinity, DO, temperature, turbidity, DOM, PH, Chlorophyl A |
| Outcomes | Improve ability to identify and mitigate the impacts of Climate Change on local conditions |
| Clean Water Act Relevance | Improve water quality monitoring; support TMDL implementation |
| Lead | Dauphin Island Sea Lab |
| Partners | MBNEP, GCOOS |
| Year 1: FY 2022 Budget | 75,240.70 |
| Year 2: FY 2023 Budget Year 3: FY 2024 Budget | |
| All Years: Total Budget | 75 240 70 |
| All reals. Total buuget | 75,240.70 |
| Status 3/31/2023 | Dauphin Island Sea Lab is in the process of coordinating with the Alabama Historical Commission to coordinate installation of monitoring equipment on Middle Bay Lighthouse. Installation anticipated summer, 2023. Equipment to be installed includes a profiling water quality monitoring system. |

ARCOS This station, part of a larger Dauphin Island Sea Lab monitoring network, provides longitudinal data to scientists and regulatory agencies tasked with predicting the impacts of climate-related changes to the Mobile Bay system. In addition, these data are incorporated into forecasting models that are utilized by local industries (e.g., commercial and recreational fisheries) to make business decisions that impact and improve their livelihood resilience. Gaps in the current data record caused by storm-related failures and instrument limitations have reduced the regional capacity to both monitor baseline conditions of Mobile Bay water quality and to prepare dependent stakeholders for shifting circumstances.

Year One: Funding provided contributes toward replacement of damaged platform infrastructure and the expansion of current monitoring through the addition of total chlorophyll sensors. Access to these publicly available data will be through the Dauphin Island Sea Lab, promoted via the MBNEP website, and communicated through the Management Conference.

Year Two: Project delayed. No funding allocated.

Year Three: Project complete. Data collection expanded and ongoing. Visualization and download of data can be done here: http://arcos.disl.org/

Activity Deliverables: None to date.

| Project | Coastal Environmental Monitoring Program |
|-----------------------------|--|
| Activity Title | Baldwin County Pilot Monitoring Program |
| Year Initiated | 2022 |
| CCMP | EST-1.2 |
| BIL Justification | Support climate resilience, water quality and nutrient load monitoring |
| Objectives | Implement mgt measures of watershed plans to monitor changes in environmental conditions due to climate change by installing 20 continuous sondes in key locations across Baldwin County to establish baselines and track trends |
| Objectives | and track trends |
| Outputs/Performance Metrics | Data report |
| Outcomes | Improve understanding of pollutant loads as impacts of climate change become more pronounced |
| Clean Water Act Relevance | Improve Water Quality monitoring; support TMDL implementation |
| Lead | MBNEP |
| Partners | Baldwin County, ADEM, GSA |
| Year 1: FY 2022 Budget | 50,000.00 |
| Year 2: FY 2023 Budget | 49,999.70 |
| Year 3: FY 2024 Budget | 50,000.00 |
| All Years: Total Budget | 149,999.70 |
| | |
| Status 3/31/2023 | Draft monitoring plan developed; Pilot Monitoring study for potential installation sites identified; meeting with ADEM to establish protocols and collaboration on data gathering and analysis |

Baldwin County Pilot Population growth and climatic changes will put additional stress on Baldwin County waterbodies due to projected increases in pathogen contamination from sanitary sewer overflows and stormwater runoff. Elevated rates of bacterial contamination continue to impact waterways throughout the County, necessitating more rigorous monitoring to determine primary contributors and potential mitigation strategies. The Alabama 2022 303(d) List of Impaired Water Bodies includes 47 impairment listings for 36 Baldwin County water bodies draining to either Mobile or Perdido bays. Of these, 15 were caused by pathogens (*Enterococcus* or *E. coli*) from pasture grazing, urban runoff/storm sewers, on-site wastewater systems, collection system failures, or unknown sources.

Year One: Funding will support the development of a pilot monitoring study on Peterson Branch in the Western Perdido Bay Watershed, a waterway selected by Baldwin County due to community interest and indications of high bacterial loads. This pilot will consist of monthly monitoring of a comprehensive suite of parameters as well as the development of a communications program using EPA's **How's My Waterway** to engage interested and involved residents.

Year Two: Funding will be used to continue to collect, synthesize, and communicate data and methods will be replicated and refined in another waterway further upstream in the Perdido River Watershed, with a goal of producing a protocol for gathering and communicating environmental conditions consistently in impaired watersheds.

Year Three: Funding will be used to refine monitoring strategy and adaptively manage the environmental monitoring program throughout the Perdido River watershed.

Activity Deliverables: None to date.

| Project | Coastal Environmental Monitoring Program |
|-----------------------------|--|
| Activity Title | Mobile County Pilot Monitoring Program |
| Activity Title | |
| Year Initiated | 2023 |
| ССМР | EST-1.2 |
| BIL Justification | Support climate resilience, water quality and nutrient load monitoring |
| Objectives | Implement mgt measures of watershed plans to monitor changes in environmental conditions due to climate change by installing 20 continuous sondes in key locations across Baldwin County to establish baselines and track trends |
| | |
| Outputs/Performance Metrics | Data report |
| Outcomes | Improve understanding of pollutant loads as impacts of climate change become more pronounced |
| Clean Water Act Relevance | Improve Water Quality monitoring; support TMDL implementation |
| Lead | MBNEP |
| Partners | Mobile County, ADEM, GSA |
| Year 1: FY 2022 Budget | |
| Year 2: FY 2023 Budget | |
| Year 3: FY 2024 Budget | 50,000.00 |
| All Years: Total Budget | 50,000.00 |
| | |
| Status 3/31/2023 | Project planning anticipated to begin summer, 2023 |

Mobile County Environmental Monitoring Program: Although Mobile County is not experiencing the same rate of growth as Baldwin County, watershed planning across tidally influenced drainage basins indicate an increasing trend in deteriorating surface water quality related to population growth and climatic changes, namely pathogen contamination from sanitary sewer overflows and stormwater runoff. Elevated rates of bacterial contamination, sedimentation, and other non-point sources of pollution are of particular concern in the urban/urbanizing areas of Fowl and Dog River and Three Mile Creek, necessitating more rigorous monitoring to determine the primary contributors and potential mitigation strategies. The Alabama 2022 303(d) List of Impaired Water Bodies includes 49 impairment listings for 35 Mobile County water bodies draining to either Mobile Bay or Mississippi Sound. Of these, 14 were caused by pathogens (*Enterococcus* or *E. coli*) from pasture grazing, urban runoff/storm sewers, on-site wastewater systems, collection system failures, or unknown sources.

Year Three: Funding will support the development and implementation of a monitoring strategy for Mobile County with a focus on tidally influenced drainages. This strategy will consist of monthly monitoring of a comprehensive suite of parameters as well as the development of a communications program using EPA's **How's My Waterway** to engage interested and involved residents.

Activity Deliverables: None to date.

ERP: Comprehensive Shoreline Resilience

| Project | Comprehensive Shoreline Management |
|-----------------------------|--|
| | |
| Activity Title | Shoreline Management Plan Phase One |
| Year Initiated | 2022 |
| ССМР | ERP 3.1 |
| | |
| BIL Justification | Support climate resilience |
| | resilience by creating 1 shoreline management plan to |
| | guide future actions by Federal, State, and local agencies |
| Objectives | working collaboratively with waterfront property |
| | |
| Outputs/Performance Metrics | NA |
| | |
| Outcomes | NA |
| | Improve water quality; improve monitoring of wetland |
| Clean Water Act Relevance | function and coverage |
| Lead | MBNEP |
| | Mobile County, City of Mobile, University of South |
| | Alabama, US Army Corps of Engineers, ADCNR, NMFS, |
| Partners | TNC |
| Year 1: FY 2022 Budget | 225,000 |
| Year 2: FY 2023 Budget | |
| Year 3: FY 2024 Budget | |
| All Years: Total Budget | 225,000 |
| | |
| | |
| | |
| | |
| | |
| | |
| Status 3/31/2023 | Request for Qualifications in progress to develop plan. |

Shoreline Resilience Plan Manmade alterations of our waterways for development, industry, transportation, navigation, and shoreline armoring have exacerbated pressures along Alabama's coast, threatening its ability to recover and adapt to environmental changes, and resulting in the loss of 1) valuable intertidal fishery habitat, 2) infrastructure protection, and 3) property. To ensure the long-term resilience of these shorelines and their ability to provide a first line of defense for the flora, fauna, people, and industries who depend on it, a Shoreline Resilience Plan will be developed for the Western Shore of Mobile Bay.

Year One: Funds will be used to produce a comprehensive shoreline resilience Plan built on the lessons learned from significant investments already made in stabilizing publicly owned shores. The planning process will include extensive outreach to waterfront property owners, wave climate modeling, and a prioritization process for identifying which shorelines are most stressed and/or vulnerable to climate change impacts.

Year Two: No funds allocated.

Year Three: No funds allocated.

Activity Deliverables: None to date.

| Project | Comprehensive Shoreline Management |
|-----------------------------|---|
| | |
| Activity Title | Climate Ready Shorelines Cost Share Program |
| Year Initiated | 2023 |
| ССМР | ERP 3.2 |
| | |
| BIL Justification | Support climate resilience |
| | resilience by investing in shoreline restoration projects |
| | supported by Federal, State, and local agencies working |
| Objectives | collaboratively with waterfront property owners. |
| | 1200 linear feet of stabilized, resilient shoreline using |
| Outputs/Performance Metrics | nature-based solutions |
| | Improve resilience of first line of defense along |
| Outcomes | Alabama Coast |
| | Improve water quality; improve monitoring of wetland |
| Clean Water Act Relevance | function and coverage |
| Lead | MBNEP |
| | |
| | |
| Partners | University of South Alabama |
| Year 1: FY 2022 Budget | |
| Year 2: FY 2023 Budget | 250,241 |
| Year 3: FY 2024 Budget | 300,000 |
| All Years: Total Budget | 550,241 |
| | |
| | |
| | |
| | |
| | |
| | |
| Status 3/31/2023 | No Activity |

Shoreline Resilience Fund Investigating development of incentives for living shorelines as a habitat conservation strategy along residential coasts, (Scyphers, 2019) it was determined only 18% of residents with vertical armoring would be likely to adopt a living shoreline technique without additional incentives. However, when homeowners who initially indicated living shoreline implementation as less than "very likely" were offered a cost-share, the percentage likely to opt for living shorelines increased by 67%. Overall, the presence of a cost-share had a positive effect on 42.5% of participants, and the generally positive effect was statistically similar across all percentages offered, indicating that the amount of cost-share did not substantially influence decision-making. The results of this study indicate that even small economic incentives can influence property owner decisions.

Year One: NA

Year Two: Funds used to create a Shoreline Resilience Fund will provide an incentive to private waterfront property owners to engage as partners for the long-term resilience and protection of Alabama's coastal shores by actively collaborating on restoration strategy development, prioritization of impacted shoreline reaches, and determination of match allocations sufficient to incentivize action.

Year Three: Additional funding will be added to this fund and made available to support implementation of the recommendations included in the shoreline resilience plan.

Activity Deliverables: None this period.

| Project | Project Delivery |
|-----------------------------|---|
| Activity Title | Shoreline Program Manager |
| Year Initiated | 2022 |
| ССМР | |
| BIL Justification | Support climate resilience |
| Objectives | Improve shoreline management, stabilization, and resilience of the western shore through active and authentic engagement of property owners |
| Outputs/Performance Metrics | NA |
| Outcomes | NA |
| Clean Water Act Relevance | Improve water quality; improve monitoring of wetland function and coverage |
| Lead | MBNEP |
| Partners | |
| Year 1: FY 2022 Budget | 47,241.37 |
| Year 2: FY 2023 Budget | 47,241.37 |
| Year 3: FY 2024 Budget | 48,658.61 |
| All Years: Total Budget | 143,141.35 |
| | |
| | |
| Status 3/31/2023 | No activity |

Shoreline Project Manager: 50% FTE project manager to ensure project delivery of planning and fund.

TAC: Justice 40: Green Infrastructure Program

| Project | Justice 40 Green Infrastructure Program |
|-----------------------------|--|
| | |
| Activity Title | Eight Mile Creek Watershed Plan |
| Year Initiated | 2022 |
| ССМР | ERP-1.1 |
| | |
| BIL Justification | Support climate resilience, water quality, Justice 40 |
| | |
| | |
| | Develop 1 plan for improving environmental conditions |
| | and long-term management in a disadvantaged and |
| Objectives | underserved community |
| | |
| Outputs/Performance Metrics | WMP |
| | Improve environmental management of disadvantaged |
| Outcomes | and underserved community |
| | Improve Water Quality monitoring; support TMDL |
| Clean Water Act Relevance | implementation |
| Lead | MBNEP |
| | |
| | ADEM, City of Prichard, City of Mobile, Mobile County, |
| Partners | Alabama Cooperative Extension |
| Year 1: FY 2022 Budget | 150,000.00 |
| Year 2: FY 2023 Budget | 130,000.00 |
| Year 3: FY 2024 Budget | |
| . ca. c zez- baager | |
| All Years: Total Budget | 150,000.00 |
| | |
| | Request for Qualifications released May 5, 2023. |
| Status 3/31/2023 | Contractor selection is currently in progress. |

| Project | Justice 40 Green Infrastructure Program |
|------------------------------|--|
| | |
| Activity Title | Eight Mile Creek Watershed Plan Implementation |
| Year Initiated | 2023 |
| ССМР | ERP-2.1 |
| | |
| BIL Justification | Support climate resilience, water quality, Justice 40 |
| | |
| | Implement high priority project from Eight Mile Creek |
| | Watershed Management Plan (TBD- Septic Maintenance |
| | Program or Green Infrastructure installation in urban |
| Objectives | area) |
| Outputs/Douformanas Mastrias | TDD |
| Outputs/Performance Metrics | TBD |
| Outcomes | Improve water quality; Improve ability to mitigate the impacts of Climate Change |
| Outcomes | |
| Clean Water Act Relevance | Improve Water Quality monitoring; support TMDL implementation |
| Lead | MBNEP |
| | marte: |
| | ADEM, City of Prichard, City of Mobile, Mobile County, |
| Partners | Alabama Cooperative Extension |
| Year 1: FY 2022 Budget | · |
| | |
| Year 2: FY 2023 Budget | 100,000.00 |
| Voor 2. EV 2024 Budget | 100,000,00 |
| Year 3: FY 2024 Budget | 100,000.00 |
| All Years: Total Budget | 200,000.00 |
| | |
| | |
| | |
| | |
| | |
| | |
| Status 3/31/2023 | No activity |

<u>Eight Mile Creek Watershed Management Plan</u> A significant portion of the of the Eight Mile Creek Watershed comprises traditionally underserved, low-income, largely minority communities of Prichard, Alabama, disproportionately affected by poverty and pollution. Statistical means for the 37 census blocks within or intersecting with the boundaries of this Watershed indicate 66% of the population are people of color with 52% classified as low income. With known sources of pathogenic bacteria loads

such as septic system failures, sanitary sewer overflows, failing sanitary sewer infrastructure, and illicit discharges, little has been invested to mitigate water quality contamination issues.

In 1998, both Eight Mile Creek and Gum Tree Branch were placed on ADEM's 303(d) List of Impaired Waters for exceeding the maximum allowable levels of pathogens (fecal coliform). Both waterbodies were classified as Fish and Wildlife use, except for a section of Eight Mile Creek from Gum Tree Branch upstream to U.S. Hwy 45 that is listed as Public Water Supply. ADEM identified urban runoff, failing septic systems, and sanitary sewer collection system failure as the probable sources of pollution in the Eight Mile Creek Watershed (which includes Gum Tree Branch).

In 2004, the US Environmental Protection Agency (EPA) approved the pathogen TMDL for Eight Mile Creek/Gum Tree Branch indicating Eight Mile Creek would require a 72% reduction in pathogen loads. In 2005 the Mobile Bay National Estuary Program (MBNEP) initiated a monitoring program within the Eight Mile Creek Watershed with funding from the US EPA Gulf of Mexico Division. This program was a three-phase effort to examine the hydrology, Watershed characteristics, and pathogen loads, and determine the source of pathogens in the Watershed. Phase One involved collecting samples at ten monitoring stations located on Eight Mile Creek and Gum Tree Branch. Phase Two mapped data from the sampling events and coupled it with information about existing conditions of the Watershed and Phase Three attempted to identify sources of impairment across the Watershed. This information formed the basis of the Eight Mile Creek Watershed Management Plan produced by the MBNEP in 2011. Unfortunately, however, there was little funding available to implement its recommendations. Although studies of septic system failures CIR Septic System Study (2014) and drainage improvement needs Prichard Drainage Study (2016) were completed, little on-the-ground action has been taken to address the needs in this underserved area.

Year One: Funding will be used to update this watershed plan and weave it into a regional planning effort along the western side of the Mobile Tensaw Delta, currently underway. By updating the plan and rebuilding partnerships throughout the watershed, MBNEP will follow its publication with future Infrastructure fund investments to jumpstart improved environmental protection across this area. The watershed planning process will follow MBNEP's standard operating procedures including requirements to address U.S. Environmental Protection Agency's *Nine Key Elements* while also providing recommendations for how to conserve what people value across coastal Alabama: Access to the water and open spaces; healthy shorelines; robust populations of fish and wildlife; preservation and promotion of the area's heritage and culture; community and ecological resilience; and water that is fishable, swimmable, drinkable.

Year Two: BIL funds will be used to install green infrastructure at a location to be determined during the planning process. Project selection will be based on "biggest bang for the buck" in terms of the installation's ability to reduce pathogen loading into Eight Mile Creek.

Year Three: Implementation of priorities in the watershed management plan will continue. MBNEP will seek opportunities to leverage BIL funding to extend the reach and impact of funds.

Activity Deliverables: None this period.

<u>Justice40 Green Infrastructure Initiative</u>

According to the Climate and Economic Justice Screening Tool (CEJST), there are multiple areas throughout Mobile and Baldwin counties which meet the CEJST definition of disadvantaged communities. To spur investments in green infrastructure in these areas, MBNEP will use BIL funds as an incentive for local governments to improve environmental conditions, reduce flooding, and improve stormwater management in these underserved areas.

MBNEP will recruit interest from both local government as well as public housing authorities and use information compiled in existing watershed management plans to guide project development.

Years One and Two: MBNEP will solicit interest from local government and public housing authorities. From the selection

Almore

Bay Minette

Saraland

Mobile

Foley

Figure 1 Climate and Economic Justice Sceening Tool (BETA)

process, up to three different communities/areas will be selected for stormwater planning and project implementation. These three communities will be the sole recipients of Infrastructure funding for the remainder of the five-year period.

An equity strategy will guide priorities based on the following criteria:

- Area of identified need in a watershed management plan
- Area of chronic flooding
- Number of indices met in CEJST
- Level of commitment and willingness to leverage funds on part of agencies.

Year Three: MBNEP will solicit, through a Request for Qualifications procurement process, a team of engineers to create and implement stormwater plans for transforming selected locations into low impact development and nature-based solutions-oriented demonstration sites.

Activity Deliverables: None this period.

| Project | Justice 40 Green Infrastructure Program |
|-----------------------------|--|
| | |
| Activity Title | Wolf Bay: Beulah Heights- Foley |
| Year Initiated | 2022 |
| ССМР | ERP 2.1 |
| BIL Justification | Support climate resilience, water quality, Justice 40 |
| Objectives | Improving environmental conditions and long-term management in a disadvantaged and underserved community by installing green infrastructure in at least two locations to reduce chronic flooding |
| Outputs/Performance Metrics | Flooding reduction of 35% |
| Outcomes | Improve resilience of low-income public housing community |
| Clean Water Act Relevance | Improve Water Quality monitoring; support TMDL implementation |
| Lead | City of Foley |
| Partners | MBNEP, Foley Housing Authority |
| Year 1: FY 2022 Budget | 75,000.00 |
| Year 2: FY 2023 Budget | 100,000.00 |
| Year 3: FY 2024 Budget | 72,514.00 |
| All Years: Total Budget | 247,514.00 |
| | |
| | |
| Status 3/31/2023 | Stormwater management plan currently being developed with funding from City of Foley. |

| Project | Justice 40 Green Infrastructure Program |
|-----------------------------|--|
| | |
| Activity Title | Magnolia River: Mills Neighborhood |
| Year Initiated | 2022 |
| ССМР | ERP 2.1 |
| BIL Justification | Support climate resilience, water quality, Justice 40 |
| Objectives | Improving environmental conditions and long-term management in a disadvantaged and underserved community by installing green infrastructure in at least two locations to reduce chronic flooding |
| Outputs/Performance Metrics | Flooding reduction of 35% |
| Outcomes | Improve resilience of disadvantaged community |
| Clean Water Act Relevance | Improve Water Quality monitoring; support TMDL implementation |
| Lead | City of Foley |
| Partners | MBNEP, Ecumenical Ministries of Baldwin County |
| Year 1: FY 2022 Budget | 50,000.00 |
| Year 2: FY 2023 Budget | 100,000.00 |
| Year 3: FY 2024 Budget | 75,000.00 |
| All Years: Total Budget | 225,000.00 |
| | |
| | |
| | |
| Status 3/31/2023 | No activity. |

| Project | Justice 40 Green Infrastructure Program |
|-----------------------------|--|
| | |
| Activity Title | TMC/Lower Chasaw: Gulf Village/Alabama Village |
| Year Initiated | 2022 |
| ССМР | ERP-2.1 |
| BIL Justification | Support climate resilience, water quality, Justice 40 |
| Objectives | Improving environmental conditions and long-term management in a disadvantaged and underserved community by installing green infrastructure in at least two locations to reduce chronic flooding |
| Outputs/Performance Metrics | Flooding reduction of 50% |
| Outcomes | Improve resilience of low-income public housing community |
| Clean Water Act Relevance | Improve Water Quality monitoring; support TMDL implementation |
| Lead | MBNEP |
| Partners | Mobile County, Mobile Housing Authority, Groundwork Mobile County |
| Year 1: FY 2022 Budget | 75,000.00 |
| Year 2: FY 2023 Budget | 100,000.00 |
| Year 3: FY 2024 Budget | 50,000.00 |
| All Years: Total Budget | 225,000.00 |
| | |
| Status 3/31/2023 | Contractor selection currently in progress. Initial meetings with Mobile Housing Authority and Mobile County to coordinate actions. |

| Project | Justice 40 Green Infrastructure Program |
|-----------------------------|---|
| | |
| Activity Title | Project Delivery |
| Year Initiated | 2022 |
| ССМР | MPA |
| BIL Justification | Support climate resilience, water quality, Justice 40 |
| | Improving environmental conditions and long-term |
| | management in a disadvantaged and underserved |
| Objectives | community through active and authentic engagement |
| | |
| Outputs/Performance Metrics | NA |
| | |
| Outcomes | NA |
| | Improve Water Quality monitoring; support TMDL |
| Clean Water Act Relevance | implementation |
| Lead | MBNEP |
| Partners | |
| Tarthers | |
| Year 1: FY 2022 Budget | 43,647.50 |
| | |
| Year 2: FY 2023 Budget | 43,647.50 |
| _ | |
| Year 3: FY 2024 Budget | 44,956.93 |
| All Voors: Total Budget | 132,251.93 |
| All Years: Total Budget | 132,231.33 |
| | |
| | Outreach to Bay Minette, Foley, Mobile Housing |
| Status 3/31/2023 | Authorities; Draft Engagement Plan. |

Outreach Project Manager: 50% FTE project manager to ensure project delivery.

MPA: Administration

| Project | Administration |
|-----------------------------|-------------------------------|
| | |
| Activity Title | Indirect Costs to Host Agency |
| Year Initiated | 2022 |
| ССМР | MPA |
| | |
| BIL Justification | |
| Objectives | |
| Outputs/Performance Metrics | |
| Outcomes | |
| Clean Water Act Relevance | |
| Lead | MBNEP |
| Partners | |
| Year 1: FY 2022 Budget | 118,670.44 |
| Year 2: FY 2023 Budget | 118,670.44 |
| Year 3: FY 2024 Budget | 118,670.43 |
| All Years: Total Budget | 356,011.30 |
| | |
| Status 3/31/2023 | |

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