

Florida Water Quality Improvement Program

RESTORE Council Proposal Document

General Information

Title:

Florida Water Quality Improvement Program

Project Abstract:

The State of Florida, through the Florida Department of Environmental Protection (FDEP) was awarded RESTORE Act Council-Selected Restoration Component funds to establish the Florida Water Quality Improvement Program (WQIP) in 2022. The WQIP supports the primary RESTORE Comprehensive Plan goal to restore water quality and quantity throughout the Florida Gulf Coast by underwriting a suite of linked, high-priority water quality improvement projects. Projects may include stormwater treatment, wastewater treatment enhancements, sediment reduction, and land acquisition. Planning and implementation projects in Florida watersheds that drain to the Gulf of America will be considered, see Figure 1 for a map of Florida watersheds that flow to the Gulf of America.

WQIP activities are intended to result in water quality restoration with anticipated environmental benefits that include fewer algal blooms, fish kills, beach closures, and fish and shellfish consumption restrictions as well as healthier seagrass and other submerged aquatic vegetation and wildlife habitat and improved recreational opportunities/experiences. The WQIP framework allows for administration of project funding to target projects that deliver cumulative benefits to the Gulf and link environmental benefits between WQIP projects and other restoration projects in a watershed or region. Combining or leveraging projects within a geographic area contributes to large-scale water resource improvements while maximizing each dollar. Program duration is 7 years.

FPL Category: Cat1: Planning/ Cat2: Implementation

Activity Type: Program

Program: Florida Water Quality Improvement Program

Co-sponsoring Agency(ies): N/A

Is this a construction project?:

Yes

RESTORE Act Priority Criteria:

- (II) Large-scale projects and programs that are projected to substantially contribute to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast ecosystem.
- (III) Projects contained in existing Gulf Coast State comprehensive plans for the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region.

Priority Criteria Justification:

Florida's WQIP addresses Priority Criteria II and Priority Criteria III described in the Gulf Coast region (Council 2022). The WQIP funds a suite of intrinsically linked restoration or conservation water resource improvement projects with the primary goal of reducing excess nutrients and other pollutants to the Gulf of America. Project selection criteria prioritize projects included in other state or federal restoration planning documents, such as Basin Management Action Plans (BMAPs), Alternative Restoration Plans (ARPs), Surface Water Improvement Management (SWIM) plans, the State Expenditure Plan (SEP), and Florida Trustee Implementation Group (FL TIG) restoration plans that identify both the need and benefits of such projects and which are based on strong science.

Deepwater Horizon (DWH) funds have been invested throughout Florida's Gulf Coast watersheds to improve water quality, hydrology, and habitats. DWH funds have leveraged state and local investments that develop total maximum daily loads (TMDLs), ARPs, BMAPs and SWIM plans. The WQIP builds upon numerous state and local efforts to assess and restore water quality. State environmental agencies, including FDEP, the Florida Fish and Wildlife Conservation Commission (FWC), and the state's Water Management Districts (WMDs) continue to collaborate with DWH funding partners to ensure that investments target priority water quality improvement restoration activities. The WQIP enables Florida to increase funding for critical projects that have significant, measurable improvements to water quality and help restore or maintain water quality to support natural resources, ecosystems, fisheries, beaches, and coastal wetlands. WQIP's project selection ensures collective contributions to large-scale water quality and habitat restoration by reducing excessive nutrients and other pollutants to impaired fresh, estuarine, and marine waters in the Gulf Coast ecosystem.

Project Duration (in years): 7

Goals

Primary Comprehensive Plan Goal:

Restore Water Quality and Quantity

Primary Comprehensive Plan Objective:

Restore, Improve, and Protect Water Resources

Secondary Comprehensive Plan Objectives:

N/A

Secondary Comprehensive Plan Goals:

N/A

PF Restoration Technique(s):

Reduce excess nutrients and other pollutants to watersheds: Agriculture and forest management

Reduce excess nutrients and other pollutants to watersheds: Erosion and sediment control

Reduce excess nutrients and other pollutants to watersheds: Stormwater management

Reduce excess nutrients and other pollutants to watersheds: Wastewater system improvements

Location

Location:

Florida watersheds that drain to the Gulf of America, including Perdido, Pensacola, Choctawhatchee – St. Andrew, Apalachicola – Chipola, Ochlocknee – St. Marks, Suwannee, Springs Coast, Withlacoochee, Tampa Bay, Tampa Bay Tributaries, Sarasota-Peace-Myakka, Charlotte Harbor, Caloosahatchee, Everglades West Coast, Everglades, and Florida Keys

HUC8 Watershed(s):

South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Perdido Bay)

South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Escambia(Lower Conecuh)

South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Perdido)

South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Florida Bay-Florida Keys)

South Atlantic-Gulf Region(Southern Florida) - Southern Florida(Caloosahatchee)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Peace)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Myakka)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Peace(Charlotte Harbor)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Sarasota Bay)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Manatee)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Little Manatee)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Alafia)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Hillsborough)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Tampa Bay)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Crystal-Pithlachascotee)

South Atlantic-Gulf Region(Peace-Tampa Bay) - Tampa Bay(Withlacoochee)

South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Waccasassa)

South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Econfina-Steinhatchee)

South Atlantic-Gulf Region(Suwannee) - Suwannee(Lower Suwannee)

South Atlantic-Gulf Region(Suwannee) - Suwannee(Santa Fe)

South Atlantic-Gulf Region(Ochlockonee) - Ochlockonee(Lower Ochlockonee)

South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Apalachicola)

South Atlantic-Gulf Region(Apalachicola) - Apalachicola(New)

South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Apalachicola Bay)

South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(St.

Andrew-St. Joseph Bays)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle
Coastal(Choctawhatchee Bay)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle
Coastal(Pensacola Bay)
South Atlantic-Gulf Region(Apalachicola) - Apalachicola(Chipola)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle Coastal(Yellow)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Florida Panhandle
Coastal(Blackwater)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Choctawhatchee(Pea)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Choctawhatchee(Lower
Choctawhatchee)
South Atlantic-Gulf Region(Choctawhatchee-Escambia) - Escambia(Escambia)
South Atlantic-Gulf Region(Suwannee) - Aucilla-Waccasassa(Aucilla)
South Atlantic-Gulf Region(Ochlockonee) - Ochlockonee(Apalachee Bay-St. Marks)

State(s):
Florida

County/Parish(es):

FL - Escambia
FL - Pasco
FL - Calhoun
FL - Pinellas
FL - Charlotte
FL - Citrus
FL - Collier
FL - Columbia
FL - Dixie
FL - Franklin
FL - Gadsden
FL - Gilchrist
FL - Sarasota
FL - Sumter
FL - Suwannee
FL - Taylor
FL - Union
FL - Wakulla
FL - Alachua
FL - Bay
FL - Bradford
FL - Glades
FL - Gulf
FL - Hamilton
FL - Santa Rosa
FL - Walton

FL - Washington
FL - DeSoto
FL - Hardee
FL - Hernando
FL - Highlands
FL - Hillsborough
FL - Holmes
FL - Jackson
FL - Jefferson
FL - Lafayette
FL - Lee
FL - Leon
FL - Levy
FL - Liberty
FL - Madison
FL - Manatee
FL - Marion
FL - Monroe
FL - Okaloosa
FL - Hendry

Congressional District(s):

FL - 3
FL - 14
FL - 15
FL - 26
FL - 11
FL - 13
FL - 20
FL - 16
FL - 18
FL - 12
FL - 1
FL - 19
FL - 25
FL - 2
FL - 17
FL - 28

Narratives

Introduction and Overview:

The Florida Water Quality Improvement Program (WQIP) restores and protects water resources throughout the Florida Gulf Coast by underwriting intrinsically linked high-priority water quality improvement projects that reduce excess nutrients and other pollutants to watersheds (Council 2019). Nutrients and other pollutants that reach Florida's coastal waters can contribute to or

exacerbate persistent harmful algal blooms, such as red tides, which can in turn deplete oxygen levels, result in fish kills and reduce the extent of submerged aquatic vegetation (SAV). Bacteria and pathogen problems can lead to beach and swimming closures and restrictions on fish and shellfish harvesting. RESTORE's 2019 Planning Framework document (Council 2019) presents stressors, approaches and techniques that underpin WQIP's primary objective to restore, improve, and protect water resources. Furthermore, Florida Governor Ron DeSantis' Executive Orders 19-12 and 23-06 directs immediate action toward the protection of Florida's environment and water quality by FDEP and other environmental agencies. State investments are used to develop and implement Basin Management Action Plans (BMAPs), Surface Water Improvement (SWIM) plans, and other restoration programs that target water resource protection and restoration of both surface waters and groundwater and coordinate multiagency responses, in coordination with local watershed stakeholders, to the most critical environmental issues facing Florida.

Section 303(d) of the Clean Water Act requires states and U.S. Territories to designate impaired waterbodies. Florida employs a watershed management approach to monitor and assess water quality using methodology set forth in FDEP's Impaired Waters Rule, Chapter 62-303, Florida Administrative Code (F.A.C.). The State works with stakeholders to identify solutions and management strategies to address impairments and improve water quality. Florida coordinates with stakeholders to develop and implement BMAPs, ARPs and SWIM plans, and implements the Nonpoint Source (NPS) program, which together guide implementation actions toward restoring impaired waters or waters not attaining standards in Florida. These programs focus on reducing nutrients and other pollutants to meet TMDLs or other priority water body goals (Figure 2).

The Florida Legislature created the SWIM Act in 1987 to protect, restore, and maintain Florida's highly threatened surface water bodies and directed the state's five water management districts (WMDs) identify a list of priority waterbodies within their authority, and implement plans to improve them. Each WMD prepares (and updates) SWIM Plans, which are based on water quality and other data collected within their district that is analyzed and used to make decisions based on best available science (BAS) before being finalized following extensive public involvement.

FDEP prepares an Integrated Water Quality Assessment every two years to provide a comprehensive snapshot of the quality of Florida's waters (FDEP 2024a). The report includes lists of impaired waterbodies and waters not attaining standards (See Figure 2). Additionally, the Statewide Annual Report, required by section 403.0675, Florida Statutes (F.S.), reports on the status of protection and restoration actions through TMDLs, ARPs, BMAPs, Minimum Flow Levels (MFLs), and Recovery and Prevention Strategies (FDEP 2024).

Florida's watershed restoration process involves a multi-pronged approach that begins with setting standards, identifying impaired waterbodies using an FDEP and U.S. Environmental Protection Agency (EPA)-approved process to produce a scientifically defensible analysis, and prioritizing impaired waterbodies for development of restoration targets known as TMDLs that establish the maximum amount of a pollutant that a waterbody can absorb and still meet the water quality standards that protect human health and aquatic life. This comprehensive process

involves collecting data from various sources to characterize the watershed, water quality, pollutant loads and responses. Load/concentration reductions are calculated for the watershed through watershed models or other scientific tools and analyses to meet the TMDL (Figure 3). TMDL reductions are allocated to categories of point sources and nonpoint sources, with a margin of safety incorporated into estimates to account for uncertainties in the analysis. TMDLs are adopted by rule, approved by the Environmental Protection Agency (EPA), and are enforceable under Florida law (FDEP 2023). Depending on the circumstances, a basin working group may be formed to develop a Basin Management Action Plan (BMAP) to guide TMDL implementation and restoration activities. FDEP works closely with watershed stakeholders to ensure they understand and support the approaches for developing and implementing the TMDLs and BMAPs (FDEP 2024 a).

A BMAP is a framework for water quality restoration that contains a comprehensive set of solutions to achieve the pollutant reductions established by a TMDL. Examples include permit limits on regulated facilities, urban and agricultural best management practices, wastewater and stormwater infrastructure, regional projects and conservation programs designed to achieve pollutant reductions established by the TMDL. A BMAP is developed with local stakeholders and relies on local input and commitment for successful implementation. BMAPs are adopted by Secretarial Order and are legally enforceable. BMAPs are updated every five (5) years and use an adaptive management approach that allows for incremental load reductions through the implementation of projects and management strategies, while simultaneously monitoring and conducting studies to better understand the water quality and hydrologic dynamics. The adaptive management process includes setting up mechanisms for making course corrections within the BMAP framework as new information is made available, such as additional data analysis and updated models, new environmental law requirements, stakeholder feedback, and other management strategies necessary to restore the waterbody. Progress is tracked by assessing project implementation, pollutant loads and water quality analyses. FDEP continues to work with local and regional partners to share information and identify additional projects necessary to meet reduction milestones established in BMAPs to achieve the TMDLs and inform funding priorities (FDEP 2024).

Watershed restoration plans that implement TMDLs can be achieved through the development of a BMAP, other restoration plan or regulatory requirements such as permit requirements, National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) bacteria pollution control plans (BPCPs) or TMDL implementation plans. In addition, there are opportunities for stakeholders to develop plans that address impairments and improve water quality before TMDL development and adoption that are known as ARPs and are recognized by the U.S. Environmental Protection Agency (EPA) and by the state in the Impaired Waters Rule (FDEP 2023).

Local stakeholders may have completed, ongoing and/or planned (in the near future) restoration activities, or may have implemented management strategies that are expected to improve the water quality of an impaired waterbody. In such cases where restoration projects have been or will soon be completed, documentation provided to the department and U.S. EPA may be sufficient to show that the waterbody is reasonably expected to attain its applicable water quality standards. These waterbodies will be listed as category 4b (Reasonable

Assurance Plan) or 4e (Ongoing Restoration Activities) (FDEP 2023).

After review of additional water quality data over time, FDEP may determine that progress is insufficient to restore an impaired waterbody listed as 4b or 4e. If so, developing a TMDL may be the next option for restoration (FDEP 2023).

Florida will use a watershed/estuary-based approach to guide project selection to ensure projects chosen for WQIP are the best suited to address the watershed stressors and provide the best regional benefits.

The public is involved with WQIP selection criteria and project selection. FDEP will hold a webinar for the public to review the project selection criteria and will make a draft list of projects available for public review and comment. The final projects list(s) and workplans will be submitted to Council staff for BAS external review and approval.

Partners: Florida will rely on existing relationships with local governments, WMDs, National Estuary Programs (NEP), Non-Governmental Organizations (NGO), Florida's RESTORE Act Centers of Excellence (COE), the Gulf Consortium, FL TIG, NFWF, and other Council members to advance water quality restoration through WQIP and around the state.

Goals/Objectives: Upland, estuarine, and marine habitats are intrinsically connected. The WQIP will continue to identify and select projects that link benefits between selected projects and with other restoration projects in a watershed or region to build upon one another and maximize benefits using Planning Framework (Council 2019) priority techniques to address pollution from existing sources. Infrastructure projects intended to support new development or growth are not eligible for funding under WQIP. The Council seeks to “optimize ecosystem restoration benefits by advancing large-scale solutions that take into account the environmental conditions of a given region of the Gulf” (Council 2022). WQIP focuses on addressing the stressors identified in TMDLs, BMAPs, ARPs, SWIM, and other approved restoration plans to achieve the Council’s goal of restoring water quality and quantity. Florida also relies on its robust, science-based assessment methodology for evaluating the attainment of applicable water quality standards and collaborates on management strategies to address the desired outcome of restoration, improvement, and protection of water quality and water quantity.

Commitments: Florida has some of the most comprehensive nutrient water quality standards in the nation (FDEP 2013). Of twenty-nine (29) coastal states, Florida is one of seventeen (17) to have a fully approved nonpoint pollution control program that satisfies all conditions in accordance with the Coastal Zone Management Act (FDEP 2021a). The protection and restoration of water resources and other natural resources is guided by comprehensive planning efforts, including SWIM plans; a NPS management program; the Florida Gulf Environmental Benefit Fund Restoration Strategy (GEBF), which is an overarching framework for restoring and conserving the natural resources of Florida’s Gulf Coast (FWC and FDEP 2018) and key programs such as TMDLs, ARPs, BMAPs, MFLs and Recovery and Prevention Strategies. To date, thirty-three (33) BMAPs have been developed and adopted by Secretarial Order (although not cited in this activity description, links to BMAPs and SWIM Plans are provided in the Bibliography as non-cited literature). The majority of BMAPs address nutrient impairments,

some also target fecal indicator bacteria contamination, and some specifically address pollution in springs areas. The watershed assessment and resultant BMAP process quantifies the nutrient and other pollutant loads within the watersheds, allocates responsibilities for reductions and provides management strategies and measured desirable outcomes in several Florida watersheds. For example, water quality improvement projects in the Caloosahatchee BMAP were identified in the BMAP and subsequent updates and strategically address stormwater, wastewater, septic and agricultural nutrient sources, with project review taking place annually. As of 2024 implementation of verified water quality projects have reduced 890,812 lbs./yr. of total nitrogen and 98,775 lbs./yr. of total phosphorus (FDEP, 2024) in the Caloosahatchee BMAP. The BMAP framework enables adaptive strategy refinement in response to empirical conditions and project progress and ensures sustained progress with focused actions as seen in the Caloosahatchee BMAP. The Governor's Executive Orders 19-12 and 23-06 also provide a clear indication of the state's commitment to improving water quality throughout the state.

Florida plans to apply Best Available Science (BAS) reviews of WQIP that were completed upon original application of the program in Funded Priorities List 3b. This is justified due to the methods remaining largely the same and the scientific integrity of the program potentially increasing, but not decreasing. Florida is deeply engaged in water quality restoration on a statewide basis and lends significant credibility and experience to the practice of restoring water quality.

Environmental Stressors: Florida's planning efforts discussed above have identified stressors and threats such as nutrient pollution from a variety of sources such as densely clustered septic systems, urban and agricultural fertilizers, stormwater runoff, and wastewater and stormwater infrastructure (Badruzzman et al. 2012; Carey et al. 2010; Nagy et al. 2012). Florida's SWIM Act recognizes that reducing NPS loadings requires a comprehensive, long-term approach that relies on cooperative watershed management among all levels of government. SWIM plans, several of which were updated with DWH funds, evaluate and address water quality and quantity stressors at a watershed level. For example, the 2017 Apalachicola River and Bay SWIM plan update, funded through GEBF, recommended projects that address NPS pollution and septic system impacts (NWFWM 2017a), and the Choctawhatchee River and Bay SWIM plan update recommended projects to address nutrients, Dissolved Oxygen, and bacteria from erosion, wastewater, urban stormwater runoff, and septic tanks (NWFWM 2017b).

Environmental Benefits: The WQIP is intended to reduce the potential for algal blooms, fish kills, beach closures, and fish and shellfish consumption restrictions while improving seagrass and other SAV health, wildlife habitat, and recreational opportunities. WQIP funding targets projects that provide cumulative benefits to the Florida Gulf Coast and link environmental benefits between selected projects and other restoration projects in a watershed or region to promote large-scale water quality improvements.

FPL Planning Framework: The WQIP emphasizes the use of priority techniques, including stormwater management, erosion and sediment control, land acquisition, wastewater system improvements and reuse, stormwater treatment, septic tank abatement, and sediment reduction to achieve the goal of restoring water quality and quantity with the objective of restoring, improving, and protecting water resources overall. Projects selected for WQIP support the

overarching goal of restoring water quality, are identified in approved state and federal restoration plans, and leverage other funding sources for successful implementation.

Costs: \$45,000,000. Projects that leverage other funding sources will be prioritized under WQIP selection criteria to maximize cost-benefits and support large-scale restoration.

Timeline: The duration of program planning and implementation is expected to be 7 years.

Proposed Methods :

WQIP relies on FDEP's statewide method for water resource management, called the watershed approach. This approach manages water resources based in hydrologic units rather than political or regulatory boundaries. FDEP assesses each basin as a system and evaluates aquatic resources from a basin-wide perspective that considers the cumulative effects of human activities, and addresses pollution accordingly. The watershed management approach is intended to improve the health of water resources by strengthening coordination among many activities, such as monitoring, stormwater management, wastewater treatment, wetland restoration, BMPs, land acquisition, and public involvement (FDEP 2024a). Florida screens projects with selection criteria presented to the public for review and comment for relevance to their specific water quality needs. WQIP focuses on stormwater treatment, wastewater treatment, septic tank abatement, sediment reduction, and land acquisition practices targeted at waterbodies that have been designated as impaired under the Clean Water Act (CWA) 303(d) impaired waters list and other waters not attaining nutrient standards. WQIP-funded Infrastructure projects address pollution from historic and existing sources such as wastewater, septic systems, stormwater runoff, and other nonpoint sources. WQIP is not intended to support new growth or development. Projects selected under the WQIP will significantly reduce pollutants impacting priority watersheds. Successful water quality improvements reduce the potential for algal blooms, fish kills, beach closures, and fish and shellfish consumption restrictions, and also improve seagrass and other SAV, habitat and wildlife, and recreational opportunities and experiences.

Projects that are selected to reduce pollutants will be evaluated using the water quality assessment and modeling approaches similar to those used by FDEP under its Impaired Water Rule, BMAPs and ARPs to ensure improved water quality at these locations will also provide benefits to the overall system (FDEP 2024a). Water quality modeling will incorporate the data necessary to address project resilience to increased rainfall and sea level rise. Estimated water quality improvements for stormwater and wastewater project techniques (e.g., wastewater system improvements) will be derived from site-specific information and performance standards, where available, and peer-reviewed sources summarized in the Statewide Best BMP Efficiencies for Crediting Projects in BMAPs and ARPs (FDEP 2021b), such as Advanced Waste Treatment. By providing estimated water quality improvements through quantitative means (e.g., nutrient reduction in lbs.), individual projects can be evaluated together for combined effects and comprehensive restoration.

Project selection is based on similar considerations has been used in existing Florida financial assistance programs, in state planning documents (e.g., the GEBF Restoration Strategy, the SEP, etc.), and for funds distributed under other DWH restoration programs since 2013 (GEBF

and NRDA) (FWC and FDEP 2018). Florida has already established various financial assistance programs and funding collaborations targeted at improving water quality, such as Nonpoint Source Management Grant Program (Section 319 and Water Quality Grants), State Revolving Fund, Water Quality Improvement Grant Program (formerly Wastewater Grant Program), Springs Restoration Grant Program and WMD cooperative funding agreements, all of which utilize BAS selection criteria.

FDEP will host a webinar to present project selection criteria for the public to review. A summary of selection criteria presented below will be refined according to priority and need. The criteria may be refined to address specific restoration techniques. Similar to NRDA restoration planning, FDEP will initiate a call for WQIP projects. Project proponents may submit a proposal for consideration using a project portal. A technical review panel of agency experts will assess the project proposals submitted against the selection criteria and develop a draft list of projects proposed for funding. The draft project list will be published on the Florida DWH website for public review and comment. Florida will finalize the list after review of the public comments and will submit the final project list(s) and workplans to Council staff for BAS external review and Council staff approval.

WQIP selection criteria will ensure that selected projects collectively contribute to large-scale water quality and habitat restoration by reducing excessive nutrients and other pollutants to fresh, estuarine, and marine waters. Projects will be selected in accordance with the extent to which they address overall program goals and objectives and contributes to large-scale restoration efforts across Florida's Gulf Coast region; can leverage other funding; incorporate BAS and best management practices (BMPs); are technically feasible and cost effective; have some aspects of planning, engineering and design, or permitting underway to show project readiness; and provide synergistic benefits with other restoration activities or projects. Selection criteria are intended to select high-quality projects that maximize the extent and success of restoration under the WQIP.

Selection Criteria 1: Eligibility Screening

Geographic Relevance: Projects must be geographically located within the 8-digit HUCs identified in this activity description.

Relevant Goals and Objectives: Projects, at a minimum, must meet the primary Comprehensive Plan goal of restoring water quality and quantity and the primary objective of restoring, improving, and protecting water resources.

Management Capabilities: Project sponsors receiving funding will need to demonstrate strong operation and management capabilities and financial resources to assure long-term success. This screening criteria is not intended to prevent small or disadvantaged communities from participating in the program.

Selection Criteria 2: Technical Basis and Justification

Alignment with Planning Framework: Projects should demonstrate alignment with the Council's Planning Framework, including restoration priorities, approaches, and techniques (i.e., stormwater management, septic tank removal, erosion and sediment control, etc.).

Proposed in Existing Plans: Projects already proposed in existing plans (e.g., BMAPs, SWIM plans, GEBF Restoration Strategy, SEP, etc.) will be given greater consideration as these

projects have typically been previously vetted for BAS, feasibility, cost effectiveness, multiple benefits, etc.

Benefits: Projects should have clear benefits to impaired or other priority water bodies, including those already identified in BMAPs, ARPs, or SWIM plans to maximize benefits within a watershed. Priority will be given to projects that link environmental benefits between selected WQIP projects and other restoration projects in a watershed or region. In addition, projects should clearly outline how their implementation will result in the environmental benefits outlined in the proposal (e.g., nutrient or other pollutant reduction, etc.)

Best Available Science: Projects should clearly explain reliance on BAS.

Selection Criteria 3: Feasibility

Technical Efficacy and Constructability: Projects should demonstrate feasibility. Such demonstration can be achieved through modeling, completion of feasibility studies, examples of successful analogous projects, etc.

Resilience: Projects should be designed to be resilient and account for factors such as hurricanes and flooding. Projects with resilience considerations built into the designs/plans will be given greater consideration.

Cost-effectiveness: Projects should outline their proposed funding needs and justification for cost effectiveness. Projects that show cost savings or that have significant benefit-to-cost ratios will be prioritized.

Schedule: Projects must demonstrate project readiness and indicate their proposed schedule through completion, with significant or critical project milestones clearly identified.

Risk: Projects must clearly identify any potential risk to project success. Projects should discuss strategies to mitigate the identified risks.

Selection Criteria 4: Project Status and Leveragability

Project Status: Projects will indicate the state of readiness to proceed. Projects showing a readiness to proceed will receive higher priority.

Matching or Leveraged Funds: Projects will include a discussion on matching or leveraged funds (including in-kind contributions). Projects that include matching or leveraged funds from other sources will be given greater consideration. This screening criteria is not intended to prevent small or disadvantaged communities from participating in the program.

Environmental Compliance: Projects should identify all required environmental compliance approvals or permits needed for the project. Projects that will achieve greater levels of environmental benefits above the required compliance levels will be given greater consideration.

Use of BMAPs to improve water quality is recommended by Florida's Blue-Green Algae Task Force (FDEP 2019), and states "spatially focused suites of projects in areas likely to yield maximum pollutant reduction [should] be identified and prioritized in all BMAP areas. Integrated monitoring and modeling of implemented BMAP projects should be conducted to ensure that projects are working as expected. Such efforts are, in fact, key to the assessment process and allow for adjustments to be made if necessary." Florida uses its Harmful Algal Bloom (HAB) monitoring and coordinated multiagency HAB response to populate an Algal Bloom Dashboard. Information from the Algal Bloom Dashboard are incorporated into FDEP's Protecting Florida Together website, which communicates to the public a broad scope of information on Florida's water quality (FDEP 2024a).

Project selection for WQIP prioritizes projects identified in other state or federal restoration planning documents (e.g., BMAPs, ARPs, SWIM plans, the State Expenditure Plan (SEP), and Florida Trustee Implementation Group (FL TIG) restoration plans) that identify both the need and benefits of such projects. Because initial project planning, technical review, stakeholder engagement, and identification of risks are typically part of the development of these restoration plans, this approach promotes use of BAS and improve the likelihood of project success. Project selection will also account for proposals that address stressors associated with Waters Not Attaining Standards (WNAS) (see Figure 2), with an emphasis on those not attaining nutrient standards. The designation of WNAS is backed by strong science as required in Chapter 62-303, F.A.C. Project-level BAS review ensures that selected projects will meet the scientific rigor of WQIP. Collaboration with Natural Resource Damage Assessment (NRDA), National Fish and Wildlife Federation (NFWF)-Gulf Environmental Benefit Fund, or other state and federal funding programs allows the WQIP to fund more or larger projects more efficiently, maximizing investments to achieve large-scale restoration.

Environmental Benefits:

Water bodies along the Gulf make up a gradient of saltwater, estuarine, and freshwater environments. Florida's abundance of surface waters provides valuable habitat for fish and wildlife, and serve multiple uses for the people who live, work, and visit Florida. The CWA and Florida laws recognize the influence of human activities on ecosystem health and aim to develop policies and regulations to protect and improve water quality. In Florida, freshwater, estuarine, and coastal water quality impairments are associated primarily with nutrients, low Dissolved Oxygen (DO), and fecal indicator bacteria (FDEP 2024a). High concentrations of Total Nitrogen (TN) and Total Phosphorus (TP) can result in excessive algae growth, leading to low DO, inhibition of seagrass growth, negative aquatic food web impacts, and health threats to wildlife and humans (Badruzzman et al. 2012; Beck et al. 2019; Greening et al. 2014; Tomasko et al. 1996). Fecal bacteria in waters results in beach closures, human health risks, and restrictions on fish and shellfish harvesting.

The WQIP will improve water quality and biological integrity by selecting projects that enhance or eliminate septic systems, upgrade wastewater treatment systems, improve stormwater treatment and reduce pollutant loading to Florida Gulf Coast waterways. Selected water quality improvement projects will eliminate significant sources of nutrients, bacteria, sediment, and other pollutants from entering waterways, which will have a positive impact on seagrass, fish and shellfish populations, and recreational uses. The WQIP goals align with goals identified in TMDLs, BMAPs, ARPs, SWIM plans, and other approved restoration plans that have led to implementation of projects that have successfully reduced pollutant loadings in multiple waterways along Florida's Gulf Coast. This provides assurances that the WQIP's anticipated benefits (e.g., reduced pollutant loads, improved surface water quality, improved habitat for seagrass and other aquatic species, etc.) can be achieved.

The WQIP will achieve the Council's Comprehensive Plan goal of restoring water quality and water quantity and its associated objective of restoring, improving, and protecting water resources through implementation of priority water quality improvement projects. A key

difference between existing state programs and the WQIP is that the latter allows for the administration of funding that targets projects providing cumulative benefits to the Gulf and that links environmental benefits between selected projects and other restoration projects in a watershed or region. Linking projects in this way maximizes environmental benefits and contributes to large-scale water quality improvements.

Florida has a robust approach to sampling and monitoring waterbodies. It collects water quality data through multiple monitoring networks. FDEP's Strategic Monitoring Program ensures waters on Planning or Study Lists meet data sufficiency requirements for the determination of waterbody impairment following the Impaired Waters Rule. The Status Monitoring Network estimates the statewide resource condition of lakes, flowing waters and aquifers with a known statistical confidence through probabilistic sample surveys (FDEP 2024a). The Trend Monitoring Network examines long-term changes in Florida's ambient water quality. The network consists of 129 fixed stations. Each BMAP includes water quality monitoring stations to assist with the identification of source areas and understand progress towards water quality improvement. The data collected by FDEP, the WMDs, counties, and cities feed into these programs, which all use scientifically sound methodologies, techniques, and quality assurance (QA) protocols for data collection. This waterbody-specific data will be used, where appropriate, to document the benefits of projects implemented under the WQIP.

The WQIP will integrate quantification of environmental benefits into the selection of restoration projects using WQIP metrics (e.g., acres of lands acquired, or lbs. of nutrients reduced) so that projects are selected based in part on desired ecological quality with options to attain the desired conditions based on a broad spatial foundation to achieve overall water quality, health, and resilience of the larger ecosystem.

Success will be achieved through improved water quality; reduced potential for algal blooms, fish kills, beach closures, and fish and shellfish consumption restrictions; and improved SAV health, wildlife habitat, and recreational experiences. Tying together projects with existing plans (e.g., BMAPs, ARP, SWIM plans, the NFWF GEBF Strategy) ensures thorough planning for successful tracking of restoration efforts as projects continually build upon and contribute to one another during the restoration strategy development process (FWC and FDEP 2018). These synergistic, watershed-level improvements are leading to positive water quality trends in other regions. In Tampa Bay, NEP Comprehensive Conservation Management Plan (CCMP) projects have resulted in improved water quality (Chlorophyll-a, Total Nitrogen, and DO) and seagrass coverage in the watershed approaching conditions observed in the 1950s (Greening et al. 2014). The success in Tampa Bay was achieved through the use of sound science, management plan development with identified projects, broad stakeholder engagement and support, and multiple funding partners, both government and business/industry, and work is ongoing. As of the **2024 assessment (TBNMC, 2025)**, all four Tampa Bay segments met their respective chlorophyll a criteria. The WQIP has been designed to build on the lessons learned in Florida restoration efforts.

Like Basin Management Action Plans, Reasonable Assurance Plans, such as Tampa Bay's, follows a structured adaptive management approach: monitoring, threshold assessment, targeted investigation, and assimilative capacity re-evaluation, and consideration of iterative

load target updates (TBNMC 2002 and 2022). This framework enables adaptive strategy refinement in response to empirical conditions and ensures sustained progress with focused actions.

WQIP is designed to address needs in watersheds where water quality standards are not being attained. FDEP's efforts to address "priority" waterbodies does not mean that waters on the 303(d) list are the only priorities for restoration. Other impaired waters may be the subject for alternative restoration activities, such as ARPs. Others may have improving water quality trends or additional source identification information suggesting naturally high levels of the given pollutant. Therefore, waters labeled "priority" through the establishment of TMDLs are those that are favorable for developing site-specific TMDLs within the next two-year period. FDEP's robust assessment efforts also produce information that can allow for WQIP projects to address water quality issues before they rise to the level of being designated as impaired and listed on the state's 303(d) list.

Metrics:

Metric Title: RES002 : Watershed management - # upgrades to stormwater and/or wastewater systems

Target: 0.99

Narrative: Florida uses this metric as a program-wide metric to evaluate the success of the WQIP and its benefits toward watershed management and water quality by upgrading septic systems (or connecting to sewer systems); stormwater runoff treatment improvements; and upgrades to wastewater treatment and infrastructure, among others as applicable. Target values or ranges of values will be provided, as project activities are identified. Not all projects or activities funded under this program will be captured by this metric. Additional metrics will be determined to capture the benefits of each technique utilized under this program; specifically, each project or activity selected under the WQIP will have specific metrics aimed at evaluating the success of the individual activity.

Metric Title: HM001 : Nutrient reduction - Lbs. N avoided or removed

Target: 0.99

Narrative: Florida uses this metric as a project or activity metric. The purpose of this metric will be to verify that a reduction or avoidance of nitrogen (N) loading has been completed, and the performance measure will be the project or activity's ability to reduce pounds (lbs.) of N. Once a project or activity is selected a target value will be established. Project or activity success will be evaluated and determined as the lbs. of N successfully removed using WQIP funding. The outcome will be a decrease in lbs. of N entering water bodies.

Metric Title: HM003 : Nutrient reduction - Lbs. P avoided or removed

Target: 0.99

Narrative: Florida uses this as a project or activity metric. The purpose of this metric will be to verify that a reduction of phosphorus (P) loading has been completed, and the performance measure will be the project or activity's ability to reduce pounds (lbs.) of P. Once a project or activity is selected a target value will be established. Project or activity success will be evaluated and determined as the lbs. of P successfully removed using program funding. The outcome will be a decrease in lbs. of P entering water bodies.

Metric Title: HM004 : Sediment reduction - Lbs. sediment avoided or removed

Target: 0.99

Narrative: Florida will use this as a project or activity metric. The purpose of this metric will be to verify that a reduction of sediment loading has been completed, and the performance measure will be the project or activity's ability to reduce lbs. of sediment loading. Once a project or activity is selected a target value will be established. Project or activity success will be evaluated and determined as the lbs. of sediment successfully removed using program funding. The outcome will be a decrease in lbs. of sediment entering water bodies.

Metric Title: HC003 : Land acquisition - Acres acquired in fee

Target: 0.99

Narrative: Florida will use this as a project or activity metric. The project or activity metrics may be adjusted as needed once projects or activities are funded. Metrics may be added, removed, or replaced as appropriate at the project work plan application stage. Once a project or activity is selected a target value will be established. Project or activity success will be determined as the total number of acres acquired in fee. The purpose of this metric will be to verify that acquisition has been completed, and the performance measure will be an executed and recorded deed. Upon transfer of the parcel to public ownership, this metric will be complete. The outcome will be an increase in protected acres.

Risk and Uncertainties:

Projects come with potential risks and uncertainties, including cost overruns and public controversy. Risks will be minimized through direct public engagement and ongoing transparency, careful cost estimates and reasonable contingencies, effective planning and design, third-party construction oversight, and nimble adaptive management. Bad weather can also delay project completion, but good planning and construction management will minimize the impact. Operating entities receiving funding will have to document strong operation and

management capabilities and financial resources to assure long-term project success.

As part of project selection, the WQIP will encourage resilience and adaptation planning in the engineering and design (E&D) for selected projects. FDEP is committed to considering resilience for projects selected for funded through WQIP.

On a project-specific basis, Florida will require project sponsors to submit a monitoring and adaptive management plan that will address responses to unavoidable risk. Adaptive management strategies will be implemented as needed to improve project performance and achieve project and program success. Adaptive management is an iterative process that links project monitoring to management decisions; adjustments are made to management approaches based on observed outcomes (NRC 2004). These plans will outline the goals and objectives of the project, the uncertainties and risks associated with the project, the monitoring parameters and methods, and adaptive management strategies if the outcome of monitoring does not meet the project's success metrics.

Monitoring and Adaptive Management:

Monitoring is conducted on two levels: programmatic and project specific. Programmatic monitoring focuses on the programmatic metrics specified below. At the project level, monitoring specifies metrics for each project that are tied to natural resource outcomes and validate restoration techniques and appropriate application of best management practices. Programmatic and project-level monitoring is conducted to understand, document, and analyze how well projects perform compared to the expected outcomes and to provide lessons learned. Monitoring will help guide future project selection and adapt the WQIP to ensure its goals and objectives are achieved. Water quality can be monitored on a project basis using a variety of techniques, including baseflow, storm flow, inflow vs. outflow, time series, and paired watersheds, depending on specific project objectives and site characteristics. With the general exception of inflow vs. outflow monitoring, most of these monitoring approaches generally require a sustained period to account for climatic and precipitation variability. To the extent feasible, both program and project monitoring will use FDEP's monitoring networks discussed above. Under the WQIP, project implementors will be required to submit a monitoring and adaptive management plan. These plans should be based on existing, peer-reviewed guidance documents, such as the NRDA MAM Manual and the Council Observational Data Plan Guidance (DWH NRDA Trustees 2021; Council 2021). The monitoring objectives outlined in project-specific plans are applicable to both long- and short-term outcomes, such as the following:

Long-term outcomes:

Evaluation of long-term water quality trends. This requires multiple years of data collection following specific project implementation, including an evaluation of historical and baseline data for affected areas, as available.

Short-term outcomes:

Specific facility performance (e.g., inflow vs. outflow pollutant concentration or load reduction monitoring).

Data Management:

FDEP will provide a central location to access data and other information related to the projects funded under the WQIP and make it available to the Council, regional partners, stakeholders, and any person or entity upon request. An Observational Data Plan and Data Management Plan for the WQIP will be submitted to the Council.

Data will be collected pursuant to approved QA plans. All grab sample data collected, analyzed, and reported will comply with Chapter 62-160, F.A.C., and will be documented using standardized project-specific datasheets, as appropriate. Handwritten hardcopy data will be scanned to PDF files and transcribed into a standard digital format. QA plans will specify minimum field and laboratory QA, methodology, reporting, auditing, and data usability requirements. Grab sample data will be input into WIN, the Watershed Information Network. WIN provides a platform for data providers to submit their data and perform data quality checking interactively prior to allowing the data to be migrated into the published WIN environment. WIN is used to store and manage data and to report data to interested users and the EPA). Data can be accessed through a web-based interface at <http://prodenv.dep.state.fl.us/DearWin/public/welcomeGeneralPublic?calledBy=GENERALPUBLIC>.

Collaboration:

Florida held meetings with local governments, WMDs, NEPs, NGOs, Florida's RESTORE Act COE, the Gulf Consortium, and other Council members through the Commitment and Planning Support (CPS) award. BMAPs, ARPs and SWIM plans have extensive stakeholder outreach during plan development and throughout implementation, including numerous public meetings and public education materials. Project selection will consider each project's ability to leverage other funds to expand the impact of awards. Leveraging could occur using DWH funds or federal, state, or local government matching funds, including Florida's State Revolving Fund loans and grants, annual springs funding, TMDL project funding, NPS grants, Florida legislative-directed project funding, the Gulf Consortium State Expenditure Plan, the Gulf Coast counties' Multi-Year Implementation Plans, Florida Gulf Coast NEP CCMPs, estuary programs in the Panhandle CCMPs, and potentially those projects and programs identified in the Governor's Executive Orders.

Public Engagement, Outreach, and Education:

Extensive stakeholder outreach is inherent to BMAP, ARP and SWIM plan development. WQIP leverages these efforts to engage the public. BMAPs and ARPs target ecosystem restoration activities and support community objectives (FDEP 2024a). As with BMAPs and ARPs, a defining characteristic of the SWIM program is that it is conducted primarily through cooperative projects that are prioritized with regional stakeholders and implemented, owned, operated, and maintained by local governments and other watershed partners to help ensure continuing success. Consequently, Florida's BMAP, ARPs and SWIM programs have established strong foundations for public engagement and education activities. Public engagement and education are integral for determining projects that contribute to the overall goal of improving water quality. These efforts have focused on many of the stressors targeted by the WQIP, allowing the program to readily connect with the public and build on previous engagement and education

efforts. These efforts encourage participation in the WQIP, ensure that communication about the value of projects reaches a large audience, and promotes successful collaboration among watershed partners. Additionally, FDEP provides funding opportunities for public engagement and education through Clean Water Act 319(h) grants for nonpoint Source pollution education. FDEP has funded over 100 projects statewide that educate or engage with the public on topics such as non-point source pollution, low-impact development and green stormwater infrastructure, and on-site sewage treatment and disposals systems. Some of the projects are part of longstanding efforts to engage with the public, such as the Florida Friendly Landscaping™ Program which was established in 1993 in partnership with the University of Florida's Institute of Food and Agricultural Sciences. The program teaches environmentally friendly landscaping through nine (9) science-based principles with a goal of reducing nonpoint source pollution through proper fertilization, irrigation, and pesticide use on residential and commercial landscapes (UF 2024). Another example of an educational campaign and resource is FDEP's Green Stormwater Infrastructure webinar series, which promotes the preservation of local water quality through smart stormwater management (FDEP 2024b). These activities help gain stakeholder insight and buy-in and build capacity for communities to understand the direct impacts of their choices on water resources and furthermore they provide resources to promote behavior change or implement best management practices for water quality.

Public outreach is ongoing with other DWH funding programs, such as NRDA, which began in restoration efforts 2012. The FL TIG has funded over 80 projects in Florida to date and developed three Restoration Plans, two of which direct NRDA funds to water quality, nutrient reduction, and recreational enhancements (FL TIG 2019, FL TIG 2024). The NRDA process incorporates a rigorous public engagement process that provides stakeholders and the public with opportunities to submit project ideas via state and federal web-based portals, comment on projects at the draft Restoration Plan stage, and comment on proposed projects. Florida also embarked on a comprehensive public outreach campaign as part of its NFWF GEBF Gulf Restoration Strategy development (FWC and FDEP 2018). The WQIP leverages successful DWH public engagement structures without expending much of the WQIP administrative budget to do so.

Leveraging:

Funds: \$11,250.00

Type: Leveraging

Status: Received

Source Type: Other

Description: The WQIP leveraged some of its CPS federal award to develop the project selection criteria for multiple FPL3b programs and present draft selection criteria in a public webinar. It is anticipated that the selection criteria and process will be adapted to future FPL programs. CPS funds are utilized for an array of activities that support planning and collaboration efforts to prepare grant applications prior to implementing specific projects through federal awards. The selection criteria put greater emphasis on projects that leverage other funding sources. Therefore, it is expected that individual projects will also leverage other federal funds and state funds. See Methods section for a

description of selection criteria.

Funds: \$3,388,067,339

Type: Leveraging

Status: Received

Source Type: State

Description: The WQIP will potentially leverage other state funds including the Water Quality Improvement Grant Program (formerly Wastewater Grant Program), Springs Restoration Grant Program, and regional water quality grant programs. Additionally, Water Management Districts also fund projects through cooperative funding agreements (not reflected in this leveraging amount). The WQIP selection criteria emphasizes projects that leverage other funding sources, thus utilizing leverage opportunities at the project level. In the past 7 years, more than 1,174 community water quality projects have been funded statewide.

Funds: \$425,000,000.00

Type: Leveraging

Status: Received

Source Type: Other Federal

Description: American Rescue Plan Act funding for 68 Water Quality Improvement Grant Projects statewide.

Environmental Compliance:

Some aspects of the WQIP comply with National Environmental Policy Act (NEPA) using the Council's NEPA Categorical Exclusion (CE) for planning, research, or design activities (Section 4(d)(3) of the Council's NEPA procedures). Selected implementation projects will be required to comply with all applicable federal laws in the Council's Environmental Checklist as well as state and local laws. Because Council NEPA regulations allow the use of member NEPA CEs where appropriate (Section 4(d)(4) of the Council's NEPA Procedures), selected project NEPA compliance will occur using the appropriate documentation (Environmental Assessments, Environmental Impact Statements, or CEs). Some projects may be able to rely on existing member NEPA documents, including CEs (e.g., EPA §6.204 (a) (ii) ii).

Bibliography (All references listed below that were published prior to 2025 may reference the Gulf of Mexico. This nomenclature has been retained to maintain the integrity of the referenced material. The Council recognizes the name change Gulf of America):

Badruzzman, M., Pinzon, J., Oppenheimer, and J. Jacangelo. 2012. Sources of nutrients impacting surface waters in Florida: A review. Journal of Environmental Management 109:80–92. <https://www.sciencedirect.com/science/article/pii/S030147971200237X?via%3Dihub>.

Beck, M.W., E.T. Sherwood, J.R. Henkel, K. Dorans, K. Ireland, and P. Varela. 2019. Assessment of the cumulative effects of restoration activities on water quality in Tampa Bay, Florida. Estuaries and Coasts 42:1774–1791.

<https://link.springer.com/article/10.1007/s12237-019-00619-w#citeas>.

Carey, R.O., G.J. Hochmuth, C.J. Martinez, T.H. Boyer, V.D. Nair, M.D. Dukes, G.S. Toor, A.L. Shober, J.L. Cisar, L.E. Trenholm, and J.B. Sartain. 2012. Regulatory and resource management practices for urban watersheds: The Florida experience. *HortTechnology* 22(4):418–429.

Deepwater Horizon (DWH) Natural Resource Damage Assessment (NRDA) Trustees. 2021. Monitoring and Adaptive Management Procedures and Guidelines Manual Version 2.0. Appendix to Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the DWH Oil Spill. <http://www.gulfspillrestoration.noaa.gov/>.

Florida Administrative Code. 2016. Department of Environmental Protection. Identification of Impaired Surface Water (Impaired Waters Rule), Chapter 62-303.
<https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-303>

Florida Administrative Code. 2018. Department of Environmental Protection. 62-160. Quality Assurance. <http://flrules.elaws.us/fac/62-160>.

Florida Department of Environmental Protection (FDEP). 2013. Implementation of Florida's Numeric Nutrient Standards. April 2013.
https://floridadep.gov/sites/default/files/NNC_Implementation.pdf.

_____. 2017. Final 2016 Progress Report for the Alafia River Basin Management Action Plan.
<https://floridadep.gov/dear/water-quality-restoration/documents/alfafia-river-basin-bmap-2016-annual-progress-report>

_____. 2019. Blue-Green Algae Task Force Consensus Document #1.
https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.

_____. 2021a. Florida Nonpoint Source Program Update.
https://floridadep.gov/sites/default/files/EPA%20Approved%202021%20Florida%20NPSM%205-year%20plan_ADA.pdf.

_____. 2021b. Statewide Best Management Practice (BMP) Efficiencies for Crediting Projects in BMAPS and Alternative Restoration Plans, Draft September 2021.
<https://floridadep.gov/dear/water-quality-restoration/content/methods-calculating-project-reductions>.

_____. 2024. 2024 Statewide Annual Report. <https://floridadep.gov/star>

_____. 2024a. Final Integrated Water Quality Assessment for Florida: 2024 Sections 303(d), 305(b), and 314 Report and Listing Update, April 2024.
https://publicfiles.dep.state.fl.us/DEAR/DEARweb/WAS/Integrated_Report/DEP_2024_Final.pdf.

_____. 2024b. Green Stormwater Infrastructure-A Florida DEP Initiative, 2024.

<https://gsi.floridadep.gov/>

Florida Fish and Wildlife Conservation Commission (FWC) and Florida Department of Environmental Protection (FDEP). 2018. Florida Gulf Environmental Benefit Fund Restoration Strategy. <https://floridadep.gov/sites/default/files/Gulf%20Environmental%20Benefit%20Fund%20Restoration%20Strategy%20Report%20FINAL.pdf>.

Gulf%20Environmental%20Benefit%20Fund%20Restoration%20Strategy%20Report%20FINAL.pdf.

Florida Trustee Implementation Group (FL TIG).2019. Gulf Spill Restoration. Florida Restoration Page. <https://www.gulfspillrestoration.noaa.gov/restoration-areas/florida>.

Florida Trustee Implementation Group (FL TIG). 2024. Gulf Spill Restoration. Florida Restoration Page.

<https://www.gulfspillrestoration.noaa.gov/media/document/fltigfinal-rp3ea508july-2024-1pdf>.

Greening, H., A. Janiki, E.T. Sherwood, R. Pribble, and J.O.R. Johansson. 2014. Ecosystem responses to long-term nutrient management in an urban estuary: Tampa Bay, Florida, USA. *Estuarine, Coastal and Shelf Science* 151:A1–A6.

<https://www.sciencedirect.com/science/article/abs/pii/S0272771414002819>.

Gulf Coast Ecosystem Restoration Council (Council). 2022. Comprehensive Plan Update 2022: Restoring the Gulf's Ecosystem and Economy.

<https://www.restorethegulf.gov/files/2022comp-planupdatefinal1pdf#overlay-context=user>.

_____. 2016. Gulf Coast Ecosystem Restoration Council Record of the Establishment of National Environmental Policy Act Procedures and Categorical Exclusions.

https://www.restorethegulf.gov/sites/default/files/EC_Council_NEPA_Procedures__Record%20f%20Establishment.pdf.

_____. 2019. Gulf Coast Ecosystem Restoration Council Planning Framework.

https://www.restorethegulf.gov/sites/default/files/508_PlanningFramework_Final_201908.pdf.

_____. 2021. Gulf Coast Ecosystem Restoration Council Observation Data Plan Guidelines Version 2.0.

https://restorethegulf.gov/sites/default/files/20210520_Council_Observational_Data_Plan_Guidelines_Version%202.0_508.pdf.

Nagy, R.C., B.G. Lockaby, L. Kalin, and C. Anderson. 2012. Effects of urbanization on stream hydrology and water quality: The Florida Gulf Coast. *Hydrological Processes* 26:2019–2030.

National Research Council (NRC). 2004. Adaptive Management for Water Resources Project Planning. Washington, D.C.: National Academies Press.

Northwest Florida Water Management District (NWFWM). 2017a. Apalachicola River Bay Surface Water Improvement and Management (SWIM) Plan.

<https://www.nwfwater.com/layout/set/print/content/download/15858/110043/version/1/file/Apalachicola+River+and+Bay+SWIM+Plan+November+2017.pdf>.

_____. 2017b. Choctawhatchee River and Bay Surface Water Improvement and Management (SWIM) Plan.

https://www.nwfwater.com/layout/set/print/content/download/16006/110893/version/1/file/Choctawhatchee+River+and+Bay+SWIM+Plan+October+2017_errata2.pdf.

Southwest Florida Water Management District (SWFWMD). 2017a. Chassahowitzka River Surface Water Improvement and Management (SWIM) Plan: A Comprehensive Conservation and Management Plan Revised June 2024.

<https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Weeki%20Wachee%20River%20SWIM%20Plan%20revised%202024%20FINAL.pdf>.

_____. 2017b. Homosassa River Surface Water Improvement and Management (SWIM) Plan: A Comprehensive Conservation and Management Plan Revised June 2024.

<https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Homosassa%20River%20SWIM%20Plan%20revised%202024%20FINAL.pdf>.

_____. 2017c. Weeki Wachee River Surface Water Improvement and Management (SWIM) Plan: A Comprehensive Conservation and Management Plan Revised June 2024.

<https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Weeki%20Wachee%20River%20SWIM%20Plan%20revised%202024%20FINAL.pdf>.

Tampa Bay Nutrient Management Consortium (TBNMC). 2002. Tampa Bay Nutrient Management Strategy 2022 Reasonable Assurance Plan Document. Plan Updated in 2022.

https://drive.google.com/file/d/18HHMx4U6vHNrFyepEFuoTJ_sEKyTA_gu/view

_____. 2025. 2024 Tampa Bay Nutrient Management Compliance Assessment Results.

https://tbep-tech.github.io/tbnmc-compliance-assessment-2024/?_gl=1*112cj0c*_ga*ODg2NDYyMzkzLjE3NTQ2NTk0Nzc.*_ga_SGTY3SQ7MR*czE3NTQ2NTk0NzYkbzEkZzAkdDE3NTQ2NTk0NzYkajYwJGwwJGgw

Tomasko, D.A., C.J. Dawes, and M.O. Hall. 1996. The effects of anthropogenic nutrient enrichment on turtle grass (*Thalassia testudinum*) in Sarasota Bay, Florida. *Estuaries* 19:448–456. <https://link.springer.com/article/10.2307/1352462>.

University of Florida (UF). 2024. Institute of Food and Agricultural Sciences Extension Florida-Friendly LandscapingTM Program. May 2024.

https://ffl.ifas.ufl.edu/?utm_source=FFLDOM&utm_medium=URL&utm_campaign=FFLCOM

Non-Cited Literature:

FDEP. N.D. Basin Management Action Plans: BMAP Webpage with links to all adopted, updated and pending BMAPs in Florida.

<https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bm>

aps

FDEP. 2024a. Integrated Water Quality Assessment for Florida: 2024 Sections 303(d), 305(b), and 314 Report and Listing Update, April 2024.

<https://floridadep.gov/dear/dear/content/integrated-water-quality-assessment-florida>

NWFWMD. 2014. Work Plan: St. Marks River Rise, Wakulla, and Sally Ward Springs MFL Development.

<https://www.nwfwater.com/Water-Resources/Minimum-Flows-Minimum-Water-Levels>

_____. 2017a. Apalachicola River and Bay SWIM Plan.

<https://nwfwater.com/water-resources/surface-water-improvement-and-management/apalachicola-river-and-bay/>

_____. 2017b. Choctawhatchee River and Bay SWIM Plan.

<https://nwfwater.com/water-resources/surface-water-improvement-and-management/choctawhatchee-river-and-bay/>

_____. 2017c. Ochlockonee River and Bay SWIM Plan.

<https://nwfwater.com/water-resources/surface-water-improvement-and-management/ochlockonee-river-and-bay/>

_____. 2017d. Pensacola Bay System SWIM Plan.

<https://nwfwater.com/water-resources/surface-water-improvement-and-management/pensacola-bay-system/>

_____. 2017e. Perdido River and Bay SWIM Plan.

<https://nwfwater.com/water-resources/surface-water-improvement-and-management/perdido-river-and-bay/>

_____. 2017f. St. Andrew Bay Watershed SWIM Plan.

<https://nwfwater.com/water-resources/surface-water-improvement-and-management/st-andrew-bay/>

_____. 2017g. St. Marks River and Apalachee Bay SWIM Plan.

<https://nwfwater.com/water-resources/surface-water-improvement-and-management/st-marks-river/>

_____. 2019. Minimum Flows for the St. Marks River Rise.

https://www.nwfwater.com/content/download/16874/115717/SMRR%20MFL%20Document_FINAL_03182019.pdf

Suwannee River Water Management District (SRWMD). 2017a. Suwannee River Basin SWIM Plan.

<http://www.mysuwanneeriver.com/DocumentCenter/View/12027/Suwannee-River-Basin-SWIM-Plan?bidId=>

_____. 2017b. Coastal Rivers Basin Surface Water SWIM Plan.

<http://www.srwmd.state.fl.us/DocumentCenter/View/12025/Coastal-Rivers-Basin-SWIM-Plan?biId=>

_____. 2024. Suwannee River Basin SWIM Plan.

<https://mysuwanneeriver.com/DocumentCenter/View/18987/2024-Suwannee-River-Basin-SWIM-Plan>

SFWMD. 2021. Technical Document to Support the Reevaluation of the MFL Criteria for the Caloosahatchee River Estuary.

https://www.sfwmd.gov/sites/default/files/FINAL_Caloosahatchee_Tech_Doc_06-18-21.pdf

SWFWMD. 2015. Crystal River/Kings Bay SWIM Plan Revised June 2024.

<https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Crystal%20River%20Kings%20Bay%20SWIM%20Plan%20revised%202024%20FINAL.pdf>

_____. 2018. SWIM Program 2018 Annual Report.

https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/2018_SWIM_AnnualReport_FINAL_Sept2019.pdf

_____. 2023. SWIM Program 2022 Annual Report.

<https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/2022AnnualReportFINAL.pdf>

State of Florida. 2019. Executive Order 19-12

State of Florida. 2023. Executive Order 23-06

Budget

Project Budget Narrative:

The budget for this program consists of \$45,000,000, of which the majority (approximately 90%) will be used for planning or implementation of projects or activities aimed at improving water quality in coastal watersheds of the Gulf Coast. The total amount of funding requested for Category 1 is \$18,000,000. Category 1 funds will be used for State of Florida program administration and project or activity specific planning, engineering and design, and permitting. Program monitoring and adaptive management activities, and data management activities will also be funded with Category 1. Florida is requesting \$27,000,000 in Category 2 funds to implement projects or activities such as construction of stormwater and wastewater facilities, septic to sewer projects, or land acquisition, and will include project or activity specific monitoring and adaptive management activities, and data management activities. More detailed budgets will be developed at the project or activity level when projects or activities are selected for funding under this program, including an appropriate contingency. The percentages listed below apply to the entire \$45,000,000.

Total FPL Project/Program Budget Request:
\$ 45,000,000.00

Estimated Percent Monitoring and Adaptive Management: 5 %

Estimated Percent Planning: 15 %

Estimated Percent Implementation: 80 %

Estimated Percent Project Management: N/A

Estimated Percent Data Management: N/A

Estimated Percent Contingency: 0 %

Is the Project Scalable?:

Yes

If yes, provide a short description regarding scalability.:

Yes, the program could be scaled to allow for more or fewer activities over a longer or shorter duration of time, which would affect the overall pollutant load reductions accordingly. Pollutant load reductions would be based on an average rate per activity or cost per mass of pollutant removed.

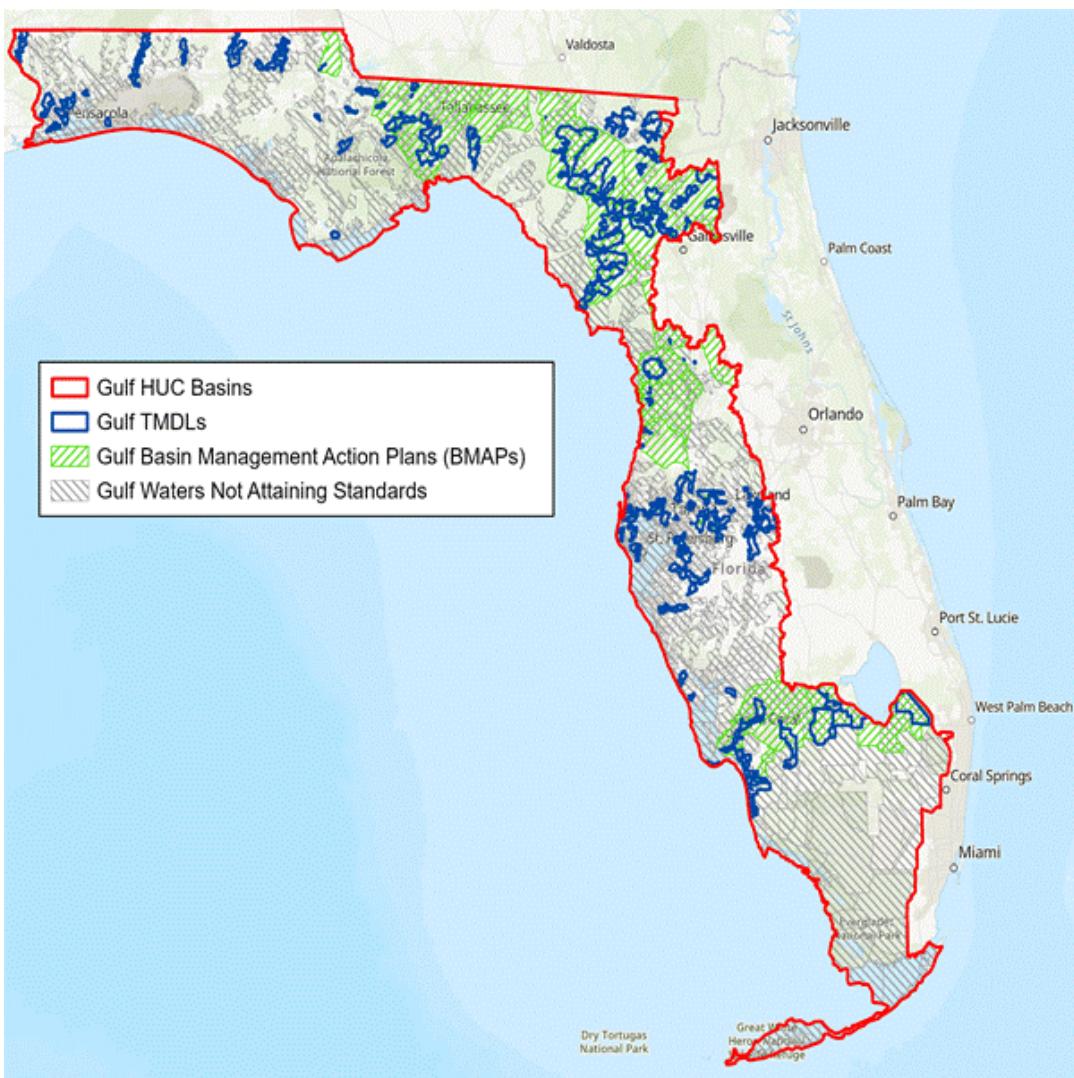
Environmental

Environmental Requirement	Has the Requirement Been Addressed?	Compliance Notes (e.g.,title and date of document, permit number, weblink etc.)
National Environmental Policy Act	N/A	Note not provided.
Endangered Species Act	N/A	Note not provided.
National Historic Preservation Act	N/A	Note not provided.
Magnuson-Stevens Act	N/A	Note not provided.

Fish and Wildlife Conservation Act	N/A	Note not provided.
Coastal Zone Management Act	N/A	Note not provided.
Coastal Barrier Resources Act	N/A	Note not provided.
Farmland Protection Policy Act	N/A	Note not provided.
Clean Water Act (Section 404)	N/A	Note not provided.
River and Harbors Act (Section 10)	N/A	Note not provided.
Marine Protection, Research and Sanctuaries Act	N/A	Note not provided.
Marine Mammal Protection Act	N/A	Note not provided.
National Marine Sanctuaries Act	N/A	Note not provided.
Migratory Bird Treaty Act	N/A	Note not provided.
Bald and Golden Eagle Protection Act	N/A	Note not provided.
Clean Air Act	N/A	Note not provided.
Other Applicable Environmental Compliance Laws or Regulations	N/A	This activity is covered by the Council's NEPA Categorical Exclusion for planning, research or design activities (Section 4(d)(3) of the Council's NEPA Procedures).



Caption : Figure 1 depicts the WQIP boundary which includes all 5-digit HUC8 watersheds that flow to the Gulf of America.



Caption : Figure 2 depicts the WQIP boundary with all 5-digit HUC8 watersheds that flow to the Gulf of America as well as waterways within the boundaries that have designated TMDLs, completed BMAPs and those that have not attained current water quality standards.

Other Uploads

GIS Data_2:

Florida_Water_Quality_Improvement_Program_V2.gdb.zip

Council Staff Review: Florida Water Quality Improvement Program

FPL Internal Staff Review

Project/Program	Florida Water Quality Improvement Program		
Primary Reviewer	Heather Young	Sponsor	Florida
EC Reviewer	John Ettinger	Co-Sponsor	N/A
1. Is/Are the selected Priority Criteria supported by information in the proposal?		Yes	
Notes	This is a continuation of an existing FPL funded program.		
2. Does the proposal meet the RESTORE Act geographic eligibility requirement?		Yes	
Notes			
3. Are the Comprehensive Plan primary goal and primary objective supported by information in the proposal?		Yes	
Notes			
4. Planning Framework: If the proposal is designed to align with the Planning Framework, does the proposal support the selected priority approaches, priority techniques, and/or geographic area?		More information needed	
Notes	Should the two oyster restoration techniques be removed (Restore oyster habitat: Substrate placement, Restore oyster habitat: Living shorelines)? While oyster reef restoration can benefit water quality, there are no oyster restoration metrics included in the proposal, and oyster reef restoration is not described in the abstract, intro, or methods sections. Note: Restore Council staff worked with the state to resolve these comments.		
5. Does the proposal align with the applicable RESTORE Council definition of project or program?		Yes	
Notes			
6. Does the budget narrative adequately describe the costs associated with		Yes	

the proposed activity?	
Notes	
7. Have three external BAS reviews been completed and has the proposal sponsor provided their response?	Yes
Notes	<p>Florida applied BAS reviews that were completed upon the original proposal in Funded Priorities List 3b. This is justified due to the methods remaining largely the same and the scientific integrity of the program potentially increasing, but not decreasing.</p> <p>Note: Restore Council staff worked with the state to resolve these comments.</p>
8. Have appropriate metrics been proposed to support all primary and secondary goals?	More information needed
Notes	<p>Need to determine if oyster reef restoration is intended to be included as a restoration approach along with the corresponding techniques of sediment placement and living shorelines. If it is, then metrics for oyster reef restoration should be added, and the narrative should be revised to describe the oyster reef restoration methodology and how such restoration will result in water quality benefits.</p> <p>Note: Restore Council staff worked with the state to resolve these comments.</p>
9. Environmental compliance: If FPL Category 1 has been selected for the implementation component of the project or program, does the proposal include environmental compliance documentation that fully supports the selection of Category 1?	N/A
Notes	Implementation funds in FPL Category 2.

Best Available Science Review: Florida Water Quality Improvement Program

This program was reviewed for BAS under FPL 3b. Under the 2026 FPL, Florida is proposing a continuation of the program.

The original BAS review as well as the state's response to the BAS comments can be found on the [Council's 2026 FPL webpage](#).