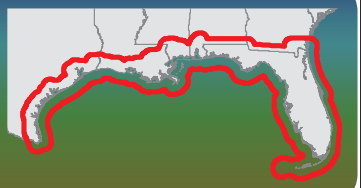
Gulf Coast Ecosystem Restoration Council

Gulf-wide Foundational Investment

Baseline Flow, Gage Analysis and On-Line Tool
To Support Restoration
(EPA_RESTORE_004_000_Cat1/Cat2)



Project Name: Baseline Flow, Gage Analysis & On-Line Tool to Support Restoration
Costs: Category 1: $4,990,000 | Category 2: $810,000
Responsible Council Member: Environmental Protection Agency and Department of the Interior/U.S. Geological Survey
Partnering Council Members: All , with Mississippi watershed focus

Project Details: The U.S. Geological Survey (USGS) and the Environmental Protection Agency (EPA) propose to collaborate on a comprehensive, large-scale project to provide vital information on the timing and delivery of fresh water to the streams, bays, estuaries, and wetlands of the Gulf States.

Activities: The proposed project has activities in two FPL categories. Category 1 provides vital information regarding alteration of the timing and delivery of fresh water to streams, bays, estuaries, and wetlands along the Gulf Coast via an online mapping tool. Consistent streamflow alteration metrics across all Gulf States will help managers identify areas where streamflow alteration is highest at the region, state, or watershed scale and prioritize restoration efforts. Additionally, a large watershed in Mississippi draining directly to the Gulf Coast will be the focus of a streamflow accounting model to evaluate and understand how streamflow alteration at locations in the upper basins may impact the timing and delivery of freshwater flows to the Gulf.

Category 2 activities are proposed for potential future funding. If funded, Category 2 would include the installation and operation of 18 new stream gages, based on a flow alteration gap analysis, to create a more robust gage network and help to minimize flow alteration predictions in future analyses.

Project funds would be expended over a seven-year period. The first through third years would focus on development of regionally consistent streamflow metrics, measures of streamflow alteration, and development of an online mapping tool to identify areas where streamflow alteration is highest and facilitate the prioritization of restoration actions. During the fourth through seventh years, a streamflow accounting tool for a large, focus-area watershed in Mississippi would be created to enable water resource managers to evaluate a range of potential management scenarios, such as modifying the release curves for selected reservoirs upstream to evaluate changes in freshwater delivery to an estuary. If Category 2 is funded, eighteen stream gages would be installed to complement the existing gage network in the Gulf States starting in year 4. Targeting new stream gages in areas and land cover types currently under represented in existing network will improve future streamflow assessments.

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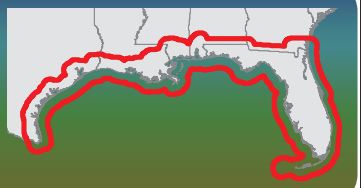

Environmental Benefits: Adequate freshwater flow to the rivers and estuaries is not only critical to the health and function of those ecosystems, but it is also important for the support of a thriving state, local and coastal economy. If both Category 1 and Category 2 activities were implemented, the data and information provided through this proposal would support state and local freshwater flow decisions. The project would promote community resilience in helping Gulf communities in adapting to short and long-term changes in flows, and would improve science-based decision making in targeting and siting restoration work.

Duration: If fully implemented, project funds would be expended over a seven-year period. Category 2 activities, if funded, would take place in years four through seven.

More information on these activities can be found in Appendix K. Gulf-wide; Unique Identifier: EPA_RESTORE_004_000_Cat1 and EPA_RESTORE_004_000_Cat2.