



Gulf Environmental Benefit Fund (GEBF) Florida 2016 Project Pre-proposal

Project Title: Apalachicola Ecosystem Functional Analysis Assessment

Project Location (include watershed, see <http://www.protectingourwater.org/watersheds/map/>):

Estimated Project Cost: \$50,000

Additional Funding Sources (anticipated source and amount, if applicable):

Proposed Project Period: April 2016 – April 2017

Project Lead Agency/Organization: Apalachicola Riverkeeper

ORGANIZATION	CONTACT	EMAIL and/or PHONE	ROLE
Apalachicola Riverkeeper	Dan Tonsmeire	dan@apalachicolariverkeeper.org (850) 508-7787	Administrator/coordinator

Partner Organizations (if applicable):

Pre-proposal Project Narrative

- Project Description:** *Please provide a brief narrative that outlines the conservation outcome(s) of the project and the proposed scope of work for achieving project outcome(s). Briefly describe how the expected outcome(s) will remedy harm to natural resources of a type affected by the Deepwater Horizon oil spill, consistent with the conservation priorities for the GEBF (e.g., barrier islands, beach/dune habitat, coastal marsh, bays and estuaries, coastal and marine living resources).*

The feasibility study would describe and provide initial setup of an Ecosystem Functional Analysis (EFA) for the Apalachicola-Chattahoochee-Flint River System that will focus on recovery (to the extent practical) and future management of the Apalachicola River, Floodplain and Bay.

- Strategic Significance:** *Briefly describe the strategic significance and priority of the project, including how the project relates to established or emerging plans. In Florida, specifically identify connections between the*



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project and the plans being considered as part of the state's GEBF Restoration Strategy (visit "View a list of plans" at http://dep.state.fl.us/deepwaterhorizon/nfwf_projects.htm). The

The project comes at a time when the future of the Apalachicola hangs in the balance between litigation in the U.S. Supreme Court Case and the update of the U.S. Army Corps of Engineers Master Water Control Manual and associated EIS. The project will provide a road map and requirements to develop effective management planning to adjust to the outcomes of those two actions.

- 3. Project Development Work Completed to Date:** *To the extent that preliminary planning or budgeting work for this project has been performed, please briefly describe that work and attach supporting documentation if available. If further planning and development work is required for certain components of the project, please describe the work needs to be performed and when that work is expected to be complete. If an Applicant is invited to submit a full proposal, that full proposal must reflect reasonable management plan, scope and cost certainties regarding the work to be performed. For projects that may require distinct steps to complete, NFWF encourages the submission of separate project proposals for one or more project components. These may include preliminary design, planning and development work needed to inform later project phases.*

The components of the feasibility study would include a Watershed Systems Ecology approach to describe and document:

1. How the system has functioned under past (normal) flow rates, (describe how the food web is functioning including species composition, current flow, and sediment, phosphorus and nitrogen loadings and levels).
2. How the flow rates have diverged from those past flows, (documenting what those changes have been to the extent possible)
3. Confer with meteorologist on climate variability and how the ecosystem impacts could play out.
4. Results applied to the development of a trip-river water use model to see who is using which water sources and how such usage could be adapted to projected climate changes.
5. Project the resilience of the Bay and how it could be managed to result in maintaining its natural productivity.
6. The results will be presented in a conference in 2017 at a national symposium on the Apalachicola. The conference will renew and update a symposium held 40 years ago led by Skip Livingston. Skip Livingston will help with the symposium, but the symposium is not part of this application.

- 4. Supporting Material:** *In order to assist NFWF with scheduling and coordinating the required consultation and technical review activities should a full proposal be invited, please list any supporting materials that would be expected to be submitted at that time (e.g. engineering and design documents, construction plans and specifications, real estate appraisals, etc.).*

Detail of the listed actions above will be provided with lead and cooperating scientist.

- 5. Other (Optional):** *Provide any further information important for the review of this pre-proposal.*