

Florida Gulf of Mexico RESTORE Act Project Submittal
Safeguarding the Wakulla Spring/Spring Creek System, Comprehensive Monitoring Plan

Review by Anita Nash
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Summary

On behalf of the Wakulla Springs Alliance Mr. Ron Piasecki and Mr. Sean McGlynn submitted this RESTORE Act project proposal to Deputy Secretary Bartlett. The submittal includes a January 3rd transmittal letter, a project submittal form and area maps.

Generally this project describes initiation of a comprehensive and ongoing research project focused on monitoring water quality and the health of flora and fauna and the overall ecological system associated with Wakulla Springs, the Spring Creek Group and related waters. The budget indicates an overall budget request of \$2,912,840 with estimated costs for the first year at \$502,640 to be followed by years two through ten at \$267,800 per year.

While the overall project has merit, the particular proposal is overly general and the project may be too broad an undertaking. The organization of the effort; data management, storage and distribution; the specificity of the proposed data and analytical outputs, the relationship of this information to state, regional and local water quality restoration activities and how the activities would be enhanced; and the basis for the cost estimates should be refined to allow additional consideration.

Review Points

1. It is unclear exactly what data and analysis will be provided as a result of this project. There is no comprehensive itemization of parameters to be documented, standard operating procedures to be followed or the precise monitoring regime to be conducted at individual stations. There is no clear indication of how this data will be interpreted or supplied to DEP, regional and local governments or the general public. References to studies using data such as that generally described would assist in designing an effective project.
2. The project summary implies that the ecology of Wakulla Spring, Wakulla River, and estuary is a direct reflection of the nutrient impairment. The stated purpose is to evaluate the effects of nitrate reduction on the ecology of Wakulla Springs and to verify the success of the nitrate reduction strategy as measured by the response of the Wakulla Springs Ecosystem. The intended use of this proposed study is to provide information to support future spring related management decisions. Later, the resulting data is said to be able to support assessment for need for and type of restoration as result of the following: hurricanes (physical shape of river bed), introduction of invasive plants and animals, water quality changes (plant growth or species extinction), water quantity changes, sea level and water temperature (head pressure of the springs, salt water wedges act as plugs in conduits),
3. The technical support team appears impressive.

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4. This reviewer is unfamiliar with established standard operating procedures that directly describe the following:

Submerged Aquatic Vegetation - While it can be helpful in a general sense of understanding the plant cover of the river bed, it should be noted state standards do not refer to this method of survey. FDEP uses LVS and RPS in state numeric nutrient criteria. We have inquired whether the Department has a standard operating procedure for SAV. Standard operating procedures are not identified.

Will the fish surveys follow established FWC standard operating procedures? Standard operating procedures are not identified.

Land and air wildlife observation counts – standard operating procedures are not identified.

5. Project location description wording should include St. Marks River and the estuarine mouth of these rivers based on the maps.
6. Mention of this study providing information to build a “base line” is unclear in relation to the timing of the mentioned Tallahassee Waste Water Treatment Facility upgrades which were in place as of December 2012. Base line may have been used in a liberal sense.
7. It is unclear how physical shape of the riverbed will be documented based on inferred monitoring parameters and documentation.
8. This proposal claims 460 tons of nitrates flow from the spring vent daily which appears to be a gross overestimate. Supporting information on how calculations were made should be provided.
9. Under the funding section there is a statement that the current SAV monitoring has saved the state \$80,000. This should not be considered match as it is part of the park’s required assessment before prescribing hydrilla treatment. It will be continued by volunteers and park staff whether or not this proposal goes through. However they should include volunteer hours.
10. The last statement in the proposal requires clarification: “All biological, hydrologic and water quality data will meet regulatory standards for inclusion in BMAP and MFL.” What regulatory standards will animal and plant surveys meet for inclusion in BMAP and MFL?
11. The appropriateness of using St. Marks Rise as a reference spring should be substantiated.

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12. Water quality and flow are not the only parameters being measured at Wakulla Spring vicinity as of October 2013.
13. While Spring Creek is in the title as part of the Wakulla Spring system, Spring Creek Springs Group is not in the maps of monitoring locations.