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Lee County Board Of County Commissioners

Blue Sheet No. 20070562

4:300M

1. ACTION REQUESTED/PURPOSE: Direct staff to (1) continue working on cooperative effort with City of Sanibel to hire consultants to complete research on algae bloom dynamics and management alternatives; and (2) seek additional cooperating partners and funding.

Agenda Item Summary

- 2. FUNDING SOURCE: None required at this time. Funding for work is anticipated to come from a variety of sources including City of Sanibel and Lee County. Grant funding will be sought. Specific pricing is dependent on the final scope and budget negotiated with research consultants and will be subject to BOCC review and approval.
- 3. WHAT ACTION ACCOMPLISHES: Reaffirms ongoing efforts to cooperatively hire research consultants to provide necessary data to better understand algae blooms, their negative impacts and provide potential solutions.
- 4. MANAGEMENT RECOMMENDATION: Approve.

5. Departmental Category:		6. Meeting Date: April 10, 2007	
7. Agenda:	8. Requirement/Purpose: (specify)	9. Request Initiated:	
Consent	Statute	Commissioner	
Administrative	Ordinance	Department	Public Works
Appeals	Admin. Code	Division	Natural Resources
Public	X Other	By: Roland	Ottolini, Director
X Walk-On		189	

10. Background: Negative impacts from large accumulations of drift algae on area beaches are well documented. The complex nature of bloom formation, development, persistence, transport, biological interactions and cycling is not sufficiently understood to allow for definitive management decisions to be made. Several local entities desire to gain better understanding of this problem. The City of Sanibel has hosted an ad hoc Task Force to define the questions that need to be resolved. Participation included the Sanibel Captiva Conservation Foundation, PURRE, Ding Darling National Refuge, Audubon, the Sanibel Sea School, City of Sanibel and Lee County staff.

The attached Request for Qualifications and Proposals was jointly developed by the Task Force membership. It details the scope of services anticipated in successful research proposals. The Sanibel City Council reviewed the RFQ document on April 3, 2007. The City approved the RFQ and would like to remain the lead agency for this work but is seeking partnerships for funding and management of the work. The City shares the County concern about the time line and will work with the selected researchers to expedite the deliverables wherever possible.

Formal agreement between Sanibel, Lee County, and any other partners is not required at this time, but is recommended concurrent with the RFQ process to address contract management and funding details.

Attachment: Draft RFQ 11. Review for Scheduling: Purchasing Depart-County Human County ment Other or **Budget Services** Manager/P.W. Resources Attorney irector Contracts Director Analyst Q Risk Grants Mgr NA NA NA 4/4/07 4.4.07 12. Commission Action: RECEIVED BY COUNTY ADMIN Approved by CoAtty **Deferred** pm Denied COUNTY ADMIN Other FORWARDED TO: 4-5-07



INTEROFFICE MEMORANDUM FROM PUBLIC WORKS

DIVISION OF NATURAL RESOURCES

Date: April 4, 2007

TO: David Owen

County Attorney

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Director

SUBJECT: Board of County Commissioners Meeting of April 10, 2007

Request for a Walk-On

As directed by County Manager Donald Stilwell, the attached blue sheet is submitted for the meeting of April 10, 2007 due to the time sensitive nature of resolving the ongoing algae problems.

Thank you for your time and consideration.

Attachments

City of Sanibel

<u>DRAFT</u> REQUEST FOR QUALIFICATIONS AND PROPOSALS FISCAL YEAR 2007

SUBMITTALS MUST BE RECEIVED BY XXXXX XX, 2007

The City of Sanibel is a municipality in the County of Lee, located in southwest Florida. Additional information is available on the City's website at: www.mysanibel.com

Background:

Over the past few years Sanibel Island, as well as much of the Lee County coastline, has experienced an unprecedented explosion in drift algal biomass in the inshore, nearshore, and offshore waters. Recent studies attribute the increase in algal abundance to escalating coastal eutrophication in local waters (Lapointe and Bedford, In Press). Sanibel has a history of not clearing or raking beach flotsam, either by hand or mechanically, to conserve the beaches in their natural condition. This strategy leaves shells undisturbed, allows for undisturbed nesting by shorebirds and sea turtles, and conserves all other natural beach systems including the dunes. The drift rhodophyte bloom and its affects on Sanibel beaches threaten this conservation policy. In an effort to learn more about the abundance and distribution and dynamics of drift macroalgae, the City of Sanibel is seeking research qualifications and proposals to conduct algal research in the waters surrounding Sanibel Island and Lee County.

WE ARE SEEKING PROPOSALS ON THE FOLLOWING RESEARCH QUESTIONS*:

What is the spatial and temporal distribution of macroalgae biomass in the inshore, nearshore, and offshore waters of Lee County? What are the factors (physical, chemical, biological, meteorological) affecting the spatial and temporal variation of the macroalga blooms?

What are the macroalga species present in area waters and what is their relative abundance?

What is the fate of macroalga species once detached from the sea floor? Does growth and reproduction continue to occur?

Is there a relationship between macroalga abundance and parchment worms (*Chaetopterus sp.*)? If so, what is the relationship?

What is the spatial and temporal distribution of nutrients (including both organic and inorganic forms) in the water column and bottom sediments of the Caloosahatchee River and Estuary, and the nearshore and offshore waters of Lee County?

What are the sources of nutrients (including macro and micro nutrients in both organic and inorganic forms) in the water column and in the sediments that may contribute to the growth of macroalga within the study area? What other variables, such as turbidity and color and their relationship with light availability are critical to algal growth in local waters?

Is there a relationship between high volume discharges from the Caloosahatchee River on water column and sediment nutrient concentrations? Where do lake or river born sediments settle out within the estuary? Do they extend to the nearshore and offshore waters? What is their contribution to macroalga growth?

How do physical processes such as currents, wind, tidal cycles, and river flow affect the distribution and fate of nutrients in the estuary and nearshore waters of the study area?

What is the fate of nutrients contained in the macroalga on local beaches? How are these nutrients dispersed? Is gaseous dispersion of nitrogen from decaying algae on the beach significant? What is the potential for these nutrients to fuel future blooms?

What management actions are available to reduce the potential negative impacts from future blooms?

*We realize that the research questions listed above may not be all inclusive, but the Firms=s/Individual=s are encouraged to include any additional research questions that may help to provide insight to the overall scope of the project.

QUALIFICATION STATEMENT

EXECUTIVE SUMMARY

The Executive Summary shall not exceed two (2) pages. The Executive Summary shall include a brief description of the Firm=s/Individual=s understanding of the role and key responsibilities of the Firm/Individual in a potential contract.

PERSONNEL AND EQUIPMENT QUESTIONS

- 1. Organization a brief Corporate (firm, partnership, etc.) history, number of personnel, table of organization, scope of operations, available resources including both physical and intellectual.
- 2. Personnel list all persons authorized to negotiate for your Firm/Individual, provide the names of all Firm/Individual officers or directors, provide the names and credentials of all persons who will be especially committed to working for the Client. Submittals including a team of personnel with a combination of expertise is encouraged and will be considered favorably.

- 3. Provide the appointed name of person or persons to act as a primary contact for all client members.
- 4. Demonstrate that the team has qualifications that cover biological, chemical, and physical research disciplines.

OTHER PROJECT CRITERIA

- Financial Disclosure Firm/Individual shall provide a copy of its most recent Financial Disclosure filing if its work required such filing under the Florida Statutes.
- 2. The Firm/Individual shall identify available hours for Client Activities; examples of reports and analyses; and how the Client accounts will be managed.
- Proposals that require federal, state, or local authorization, such as permits or permission to access or conduct activities on public and submerged lands, must demonstrate that they do or will have the authorizations necessary to complete the project.
- 4. The Firm/Individual shall provide proof of insurance and maintain such insurance as will protect them from claims under Worker's Compensation laws, disability benefit laws or other similar employee benefit laws; from claims from damages because of bodily injury, occupational sickness or disease, or death of their employees including claims insured by usual personal injury liability coverage; and from claims for injury to or destruction of tangible property including loss of use resulting therefrom any or all of which may arise out of or result from the Firm=s/Individual=s operations under the Documents, whether such operations be by itself or any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. This insurance shall be written for no less than the limits of liability specified in the Documents or required by law, whichever is greater, and shall include contractual liability insurance. As a prerequisite to the Client signing the Contract, the Firm/Individual will file with the Client certificates of such insurance, acceptance to the Client; these certificates shall contain a provision for cancellation.

PROPOSAL FORMAT:

Project Title:

Principal Investigator(s): Name/Affiliation, mailing address, phone, fax, and email address.

Project Location: Provide a detailed description of the proposed study area, a map of the project area, referencing regulatory authorization, as necessary. Maps must show where the proposed project will occur in relation to Sanibel Island and the rest of the

southwest Florida coastline

Objectives:

Study Design: Provide as much detail as possible, how the project objectives will be completed, methodology, type of raw data to be collected, how it will be analyzed, summarized and reported.

Deliverables: Clearly specify all deliverables to be provided.

Cooperators/Partners:

Timeline with Milestones: Project timeline will be one year from project initiation. Project Cost/Budget Breakdown: The cost/budget breakdown will not be the primary factor used in the ranking process. Provide an itemized budget, including all indirect or overhead costs; identify funding from other sources and matching funds if applicable including in-kind matching funds and clearly indicate the amount of funding required to complete the work as described.

Literature Cited:

EVALUATION AND AWARD PROCESS:

Qualification Statements will be evaluated and ranked. Projects will be awarded on their scientific merit, anticipated efficacy in providing successful project completion, required deliverables, and available funding. We recommend minimizing overhead, indirect costs, and other expenses that will not contribute directly to accomplishing project objectives. We will contact the principal investigators to obtain additional details regarding their submittal if needed.

We do not have an approved budget for this project but anticipate full funding from a combination of local, state and federal sources.

EXPECTED MINIMUM DELIVERABLES:

Upon accepting a particular proposal, we will require:

- 1. Interim quarterly reports on project progress in accord with defined timelines and a final report upon project completion. Interim reports should include a summary of progress, methodology, results to date and interim discussion on findings. Final reports shall be in the standard form of scientific reporting including an abstract, project description, methodology, results, discussion, conclusions and literature cited.
- 2. Provision of all raw and summary data, including models, spatial data, digital data, maps, and photographs. We request that all manuscripts for publication that result from funded projects be submitted for review to our office prior to submission to a peer-reviewed journal or release to the press. Additionally, we request that the City and all funding partners be acknowledged in any publication or presentation of project results.
- **3.** An explanation of how the research relates to specific management actions including tools to evaluate potential outcomes of alternative management strategies.

- **4.** An executive summary in plain English and not scientific jargon for release to the public at the completion of the project.
- 5. Quarterly presentations and a final report at a regularly scheduled public meeting including the executive summary in writing and a detailed power-point presentation understandable by the lay person.

SUBMISSION:

Submit five (5) hard copies and one (1) digital copy (on a cd in pdf or Word for Windows format) to: The City of Sanibel Department of Natural Resources, 800 Dunlop Rd., Sanibel, Florida 33957; or preferably by e-mail to: James.Evans@mysanibel.com

Questions can be directed to: Rob Loflin, James Evans or Holly Downing of the Natural Resources Department at #(239) 472-3700.

References Cited

Lapointe, B.E. and B.J. Bedford. In Press. Drift Rhodophyte Blooms Emerge in Lee County, Florida, USA: Evidence of Escalating Coastal Eutrophication.