

## **STATEMENT OF WORK**

### **C-139 BASIN BEST MANAGEMENT PRACTICES DEMONSTRATION GRANT 2008 - 2011**

#### **1.0 Objective**

This is a four-year cooperative agreement between the South Florida Water Management District (District) and the Hendry Soil and Water Conservation District (HSWCD) to administer a grant for development of Best Management Practices (BMP) demonstration projects in the C-139 Basin (Demonstration Grant). This agreement provides a vehicle for landowners and stakeholders in the C-139 Basin to receive grants and be reimbursed for eligible and contracted project costs. The projects will involve infrastructure improvements and reporting of technical findings on BMP effectiveness.

HSWCD has assisted the District in the past by working with landowners to verify BMP infrastructure projects under the C-139 and Western Basins Best Management Practices Grant Program. This agreement adds the function of HSWCD coordinating with the District and grantees for reimbursement upon approval of technical reports prepared by the grantees. The scope of these technical reports and reimbursement amounts will be specific to each demonstration project scope and described in the contracts to be signed with each grantee.

#### **2.0 Responsibilities**

##### **2.1 District**

The District has developed Application Guidelines (Exhibit 1), an Application Form (Exhibit 2), an Implementation Schedule, Evaluation Guidelines (Exhibit 3), and a Payment and Deliverable Schedule (Exhibit 4). District responsibilities during the project are:

- Leading the effort to ensure that all items in the Payment and Delivery Schedule are delivered according to schedule.
- Distributing a copy the Application Guidelines and Application Form to landowners and stakeholders in the C-139 Basin.
- Responding to questions made by individual applicants and distributing them to all applicants.
- Publicly noticing all meetings.
- Organizing and participating on the Selection Committee to:
  - (1) Determine project eligibility;
  - (2) Score and rank individual projects;
  - (3) Determine funding for each selected project; and
  - (4) Provide list of projects to be funded to HSWCD Board for approval.

- Timely review technical reports submitted by grantees.
- Coordinate with HSWCD payment to grantees for project components requiring approval of technical reports.
- Conduct field visits on a regular basis to observe projects' progress.
- Coordinate water quality sampling efforts and data analysis where applicable.
- Review financial expenditure reports submitted by HSWCD.
- Coordinate payments to HSWCD according to the Payment and Deliverable Schedule.
- Approve changes to the scope of work of contracts with grantees in coordination with HSWCD.
- Prepare an annual report describing projects funded, acreage served, project costs, and compilation of findings based on technical reports.
- Make modifications to the Application Guidelines (Exhibit 1), Application Form (Exhibit 2), Implementation Schedule, Evaluation Guidelines (Exhibit 3), and Payment and Deliverable Schedule (Exhibit 4) if deemed necessary for project development (e.g., to add funding for subsequent years or selection of additional projects) in coordination with the HSWCD.

## **2.2 HSWCD**

HSWCD responsibilities are:

- Meeting all HSWCD deadlines as described in the Payment and Deliverables Schedule.
- Verifying project progress and completion, and maintaining documentation on file regarding project progress. Providing this documentation to the District upon request.
- Approving the list of projects prepared by the Selection Committee.
- Entering into contracts with Grantees with projects approved by the Selection Committee. Timely reporting on any contracts not executed.
- Assisting Grantees as needed, responding to questions, and resolving problems during project implementation. Consulting with District regarding need for contract revision.
- Reviewing and approving receipts from Grantees based on field verification of project progress and District approval of technical reports.
- Disbursing funds to Grantees.

- Submitting quarterly financial expenditure reports itemizing project-by-project expenses to the District according to the Payment and Deliverable Schedule (Exhibit 1).
- Attending District Governing Board meetings, as needed.

### 3. Implementation Schedule

MILESTONES	COMPLETION DATE	PRIMARY RESPONSIBLE PARTY <sup>1</sup>	
		District	HSWCD
Introductory Public Workshop	May 28, 2008	X	
Mail Application Guidelines and Application Forms	June 2, 2008	X	
Consultation period - Responses to questions by individual applicants will be distributed to all applicants	June 20, 2008 – 2:30 pm	X	X <sup>2</sup>
Issue Public Notice for Selection Committee Meeting	July 1, 2008	X	
Account application as received if before due date.	July 9, 2008 – 2:30 p.m.	X	X <sup>2</sup>
Hold public meeting to evaluate and select demonstration projects.	August 6, 2008	X	
Establish contracts with selected applicants (participants or grantees)	August 27, 2008		X
Assist Grantees as needed, respond to questions, and provide solutions to contingencies during project implementation	Continuous during project implementation.	X	X
Perform project inspections.	Continuous during project implementation.	X <sup>2</sup>	X
Forward technical reports required by contracts with grantees and coordinate approval with the District	Continuous during project implementation.		X
Review and approve invoices for cost reimbursement and disburse payments to Grantees.	Continuous upon invoice submittal to HSWCD by Grantees.		X
Produce annual financial expenditure reports by project	See Exhibit 4		X
Prepare final project report for 2008, 2009 and 2010	See Exhibit 4	X	

<sup>1</sup>Other party can assist or have secondary role, as described in this document.

<sup>2</sup>Indicates secondary responsibility.

If no applications are received by the due date, no projects are eligible, or do not meet the criteria for selection, the District reserves the right to reschedule, or cancel the agreement, and the competition process.

## **EXHIBIT 1: APPLICATION GUIDELINES**

### **BACKGROUND**

The C-139 Basin is the second largest tributary of phosphorus to the Everglades Protection Area (EPA) and is the only tributary currently not in compliance with the phosphorus loading requirements of the Everglades Forever Act (EFA). Since 2002, however, landowners in the C-139 Basin have participated in a mandatory Best Management Practices (BMPs) program for phosphorus control based on standard statewide practices. They have also participated in supplementary initiatives such as the “C-139 and Western Basins Best Management Practices Grant Program” sponsored by the South Florida Water Management District (District). The Grant has cost-shared infrastructure BMPs that meet traditional requirements for water quality control, as required in Environmental Resource Permits (surface water impoundments).

The District’s assessment is that traditional BMPs for water quality control are not sufficient for compliance with the EFA requirements in the C-139 Basin. There are opportunities for BMP optimization that need to be explored to address Basin-specific challenges. Consistent with the adaptive management strategy defined in the EFA, BMP optimization consists of improving BMP implementation techniques or infrastructure towards maximizing the effectiveness of a farm BMP Plan to reduce phosphorus in discharges. Development of demonstration projects for reducing phosphorus in farm discharges is needed to develop more effective implementation. This is consistent with 40E-63, F.A.C., and current EFA requirements for the District to conduct research and testing of BMPs in cooperation with landowners in the C-139 Basin to support an adaptive management approach for Everglades Restoration.

### **OBJECTIVE**

The objective of the C-139 Basin Best Management Practices Demonstration and Effectiveness Grant (Demonstration Grant) is to cost-share projects focused on innovation or optimization of traditional BMPs that are *presumed* to be effective in removing phosphorus, focusing on implementation techniques that will result in the greatest water quality improvement under the Basin-specific conditions based on available technical information. It is also the intent to maximize the use of the funds available for the greatest Basin-wide benefits.

For the project to be most consistent with the objectives of the Demonstration Grant the application must be completed considering the followings:

- An application shall propose field demonstration in accordance with acceptable scientific methods, measurement of BMP effectiveness in reducing phosphorus loadings, data evaluation (e.g., phosphorus, flow, design data), development of

practical and economical implementation methods, and provide for dissemination.

- In order for a project to qualify for funding by the Selection Committee, the application shall provide substantial information on how the project will provide data to support conclusions on whether there is an advantage in comparison to traditional BMP implementation, or alternate projects. This technical justification shall be submitted with the application. Not all projects will be funded. For instance, among projects of comparable scope, projects of lesser cost could be funded.
- An application can include traditional farm infrastructure BMPs that are necessary for technical evaluation (e.g., completion of a mandated surface water impoundment prior to conducting infrastructure upgrades above and beyond permit-required criteria.) If the application is selected for funding, traditional farm infrastructure BMPs may be cost-shared and at lower rates than demonstration BMPs based on funds available after funding of the optimization component of the selected applications.

## **TOPICS FOR BMP DEMONSTRATION**

The District has identified the following priority topics for demonstration; however, others may be submitted for consideration by Demonstration Grant applicants:

- Optimization of phosphorus application rates in vegetable, sugarcane, and citrus operations. The objective is to substantially reduce phosphorus applied in comparison to standard recommendations or industry standards.
- Improving phosphorus application practices and irrigation water management for vegetables (bedding methods, mulching, water table management) to prevent phosphorus losses.
- Defining feasible practices for mining or binding of phosphorus in sandy soils to prevent losses of historically accumulated phosphorus via runoff or seepage.
- Implementing comprehensive water conservation practices including improving water table management, employing low-volume irrigation practices, moisture sensors, seepage canals, improving design and construction of ditch and canal infrastructure, and tail water recovery to minimize groundwater water use and prevent unnecessary discharge to the District's canal system.
- Optimization of surface water impoundments to increase detention time and volume attenuation, reactive phosphorus uptake, and retention of sediment phosphorus.
- Effective control of aquatic weed vegetation control to prevent phosphorus laden particulates, prevent formation high phosphorus flocculants, and mine total

reactive phosphorus through timely removal of mature vegetation, and adequate disposal.

## **GENERAL ELIGIBILITY CRITERIA**

The following criteria must be met based on technical documentation for demonstration projects to be eligible for funding under this program:

- Applicant must have submitted a complete proposal for the project by the due date, including project timeline and deliverables schedule.
- Property must not be targeted for acquisition in conjunction with the Comprehensive Everglades Restoration Project (CERP) or any other government land-acquisition program within 24 months of application.
- Property can not be under enforcement action or notice of violation by a city, county, state, or federal agency.
- Applicant must be in possession of a construction or environmental permit, if one is required, or have written authorization that approval will be granted prior to the proposed start date.
- Applicant must be able to commence work as soon as funds are available.
- Access to project location must be granted to SFWMD personnel or designating agents for field verification of water quality monitoring activities.
- Project Scope of Work (SOW) must advance the body of knowledge on BMPs for phosphorus applicable to the C-139 Basin.
- Project SOW must be for current land uses in the C-139.
- Project SOW must provide a benefit to water quality or quantity in terms of nutrient (phosphorus) load reduction from the region.
- Project SOW must provide information that can assist in the optimized selection and implementation of phosphorus reduction projects, or water management strategies to reduce quantity of water discharged from the region.
- A water quality monitoring program must be proposed to measure the effectiveness of phosphorus load reduction from the project.

## **APPLICATION REQUIREMENTS**

Applications for funding can be submitted by agricultural landowners or operators, BMP technical experts, or agricultural-expert teams for areas within the C-139 Basin. Applications for grant funds must address the items in the applicable form attached to this SOW.

- General description of the proposed project
- What is the basis for the BMP to be demonstrated or optimized?

*If the BMP proposed is not included among the key priority areas, submit supporting information on why the BMP would have broad effects on improving the water quality of the C-139 Basin (e.g., applicability, contribution, associated water quality, existing versus proposed practices.)*

- If the proposal is for BMP optimization, comparison of the proposed approach compared to the traditional methods.
- How will the project estimate the effectiveness of the proposed BMP versus traditional practices?
- How does the project supplement (not duplicate) any previous research? Reference technical documents relevant to the proposed project, if available.
- Briefly describe how the demonstration project will be implemented?
- Describe your water quality and quantity monitoring plan: parameters to be tested, measurement techniques, collection methods and quality assurance objectives. The monitoring plan shall include the following:
  - Data quality objectives (e.g. data type, data use, expected data quality)
  - Data quality indicators (e.g., quantitative and qualitative quality control measures)
  - Field activities (e.g., sampling design, sampling locations, collection methods, equipment)
  - Laboratory Activities
  - Documentation and Record Keeping
- Indicate the estimated project timeline
- What are the proposed status reports and dissemination information (if applicable)?
- What elements may affect the economical or practical feasibility of implementing the project on a full scale, and how will you evaluate these items during the demonstration?

## **APPLICATION PROCESS**

- An introductory public workshop to discuss the project and answer any questions from interested parties will be held by the District on May 28, 2008, 10:00 am, at the Clewiston Field Station located at 2425 Hookers Point Rd, Clewiston, FL 33440.

- Complete applications shall be submitted to SFWMD – Procurement Department by July 9, 2008, 2:30 pm, 3301 Gun Club Road, West Palm Beach, FL 33406.
- Applicants whose applications are complete and meet the Eligibility Criteria will be contacted to provide a presentation on their projects and respond to questions of an Application Review Committee. The project presentation workshop will be held on August 6, 2008, starting at 10:00 am, at the Clewiston Field Station.
- The Application Review Committee will rate and prioritize submitted projects based on the written application, presentation, and answers in the categories and rating described in Attachment 2. This selection meeting will be held on August 6, 2008, starting at 10:00 am, at the Clewiston Field Station.
- Based on the information submitted by the Applicant, and based on a fair and equitable formula developed by the District; an Application Review Committee will rank the projects to be funded and determine the cost share amount.
- A contract will be signed with selected applicants (Participants). Participants will be responsible for implementing the demonstration project and monitoring those projects for effectiveness specific to phosphorus. A scope of work including milestones and reporting requirements, as well as contractual conditions, will accompany the signed contract with Participants.
- Contracts need to be signed no later than August 27, 2008, or the Applicant will lose qualifying status. The contract will establish how funds will be distributed to the Participants (e.g., reimbursement upon construction and certification by the District or a representative, payment upon deliverable of a report, upfront encumbrance for monitoring equipment costs).
- If no applications are received by the due date, no projects are eligible, or do not meet the criteria for selection, the grant competition process may be rescheduled or canceled.

## **SUMMARY SCHEDULE OF TASKS AND DELIVERABLES**

A summary schedule of tasks and deliverables required for reimbursement will be developed for each selected project based on the specific scope of work and reporting requirements. The project will be reimbursed on a percent complete basis or deliverable basis as defined in the contract.



**EXHIBIT 2**  
**APPLICATION FORM**

The C-139 Basin Best Management Practice (BMP) Grant Program is a funding program for BMP demonstration and evaluation of BMP effectiveness. Funding is limited and subject to available funding. In general, qualifying applicants will be required to execute a multi-year contract in order to receive the cost-share reimbursement. Please complete the form below and submit by July 9, 2008, 2:30 pm via mail to the SFWMD – Procurement Department, 3301 Gun Club Road MS 4260, West Palm Beach, FL 33306. If you have any questions or comments please mail them by June 20, 2008 to SFWMD c/o Ximena Pernet, 3301 Gun Club Road MS 4260, West Palm Beach, FL 33406.

Project Name		
Owner/Authorized Agent		
Mailing Address (owner/agent)		
Phone Number and e-mail (owner/agent)		
Section/Township/Range		
County		
Crop Type and Acreage		
Irrigated Acreage		
Water Use, ERP, WOD Permit Numbers (District staff can assist to provide)		
Location of the proposed project (ATTACH MAPS OR DRAWINGS)		
General Description of the proposed project		

<p>What is the basis for BMP to be demonstrated or optimized?</p> <p><i>If the BMP proposed is not included among the key priority areas, submit supporting information on why the BMP would have broad effects on improving the water quality of the C-139 Basin (e.g., applicability, contribution, associated water quality, existing versus proposed practices.)</i></p> <p><b>Attach additional information as necessary.</b></p>	
<p>If the proposal is for BMP optimization, please provide a comparison of how the proposed approach compares to the traditional practices.</p> <p><b>Attach additional information as necessary.</b></p>	
<p>How will the project estimate the effectiveness of the proposed BMP versus traditional practices?</p> <p><b>Attach additional information as necessary.</b></p>	

<p>How does the project supplement (does not duplicate) any previous research? Reference technical documents relevant to the proposed project, if available.</p> <p><b>Attach additional information as necessary.</b></p>	
<p>Briefly describe how the demonstration project will be implemented?</p> <p><b>Attach additional information as necessary.</b></p>	

<p>Describe your water quality and quantity monitoring plan: parameters to be tested, measurement techniques, collection methods and quality assurance objectives. The monitoring plan shall include the following:</p> <ul style="list-style-type: none"><li>• Data quality objectives (e.g. data type, data use, expected data quality)</li><li>• Data quality indicators (e.g., quantitative and qualitative quality control measures)</li><li>• Field activities (e.g., sampling design, sampling locations, collection methods, equipment)</li><li>• Laboratory Activities</li><li>• Documentation and Record Keeping</li></ul> <p><b>Attach additional information as necessary.</b></p>	
--	--

<p>Indicate the estimated project timeline and deliverables schedule.</p> <p><b>Attach additional information as necessary.</b></p>	
<p>What are the proposed status reports and how will information be disseminated (if applicable)?</p> <p><b>Attach additional information as necessary.</b></p>	
<p>What elements may affect the economical or practical feasibility of implementing the project on a full scale, and how will you evaluate these items during the demonstration?</p> <p><b>Attach additional information as necessary.</b></p>	

<p>Please provide an itemized breakdown of estimated project costs, and provide a timeline for construction of the project.</p> <p><b>Attach additional information as necessary.</b></p>	
<p>Please include any additional information that would assist the committee in selecting your project.</p> <p><b>Attach additional information as necessary.</b></p>	

APPLICANT SIGNATURE	TODAY'S DATE
---------------------	--------------

**Attachments to the form:**

- 1.
- 2.
- 3.
- 4.
- 5.

## **EXHIBIT 3**

### **EVALUATION GUIDELINES**

This exhibit describes the method for evaluation of proposed eligible projects in order to rank and allocate available funding. The rationale for the evaluation is based on the Demonstration Grant objective of improving BMP implementation and measuring BMP effectiveness, and the availability of limited funds. General facts of the evaluation process are:

#### **RANKING**

- Demonstration projects will be selected by a Selection Committee made up of one member of the Hendry Soil and Water Conservation District (HSWCD), two members of the District (the funding partner), one member of the Florida Department of Agricultural and Consumer Services (FDACS), and one independent member (not affiliated with the agencies administering this grant program) that is considered a technical source in agricultural Best Management Practices. Selection Committee members cannot be applicants under the Demonstration Grant.
- Projects will be ranked based on information provided on the application forms, a Project Presentation by the applicant, and responses to questions from the selection committee to the applicant during the Project Presentation Workshop.
- The Selection Committee will evaluate how well each applicant has fulfilled the Application Requirements when completing the Application Form, and the public project presentation workshop. These constitute the basis for the ranking.
- Presentation order at the project workshop (who presents first, second, etc.) will be determined by alphabetical order of the applicant's last name, beginning with the letter A.
- Each Selection Committee member will give each project a ranking from 1 (the highest ranked) to the total number of projects (the lowest ranked) on each Evaluation Basis listed below. The selection Committee will discuss the rankings assigned (open to the public). The total score will be the sum of the member's rankings.
- The project with the total lowest score when adding the ranking for each Evaluation Basis will be the highest ranked project and will receive priority for funding, with the projects ranking 2<sup>nd</sup>, 3<sup>rd</sup>, etc. receiving priority in that order.
- The selection panel may fund projects and project components at different cost-share rates.
- Projects of lower priority that cannot be funded because of limited funding will need to re-apply if new funding becomes available.

<b>Evaluation Basis</b> <i>Based on the Application Form, Project Presentation, responses during the Project Presentation, and potential for the project scope to be slightly modified for improvement please rank the following aspects:</i>	<b>Project Ranking (1 to Total Number of Projects)</b>
<b>TECHNICAL BASIS FOR THE PROJECT (one ranking consolidating all questions below)</b> <ol style="list-style-type: none"> <li>1. How strong is the technical justification for this BMP project to meet the goals of reducing phosphorus from the Basin in comparison to other projects?</li> <li>2. Is the BMP project idea one of the priority topics for demonstration described in the Application Guidelines?</li> <li>3. Will the optimized BMP have broad effects on improving the water quality of the C-139 Basin (e.g., applicability, contribution, associated water quality, existing versus proposed practices)</li> <li>4. Please rank the project based on potential for providing BMP optimization, and the comparison of the proposed approach compared to the traditional methods.</li> <li>5. Please rank the project based on how it supplements (does not duplicate) any previous research.</li> </ol>	
<b>PROPOSED EVALUATION METHODS (one ranking consolidating all questions below)</b> <ol style="list-style-type: none"> <li>6. Please rank the project based on how it will estimate the effectiveness of the proposed BMP versus traditional practices?</li> <li>7. Please rank the project based on the description of the water quality and quantity monitoring plan: parameters to be tested, measurement techniques, collection methods and quality assurance objectives. Please keep in mind that the monitoring plan should include the following: <ul style="list-style-type: none"> <li>o Data quality objectives (e.g. data type, data use, expected data quality)</li> <li>o Data quality indicators (e.g., quantitative and qualitative quality control measures)</li> <li>o Field activities (e.g., sampling design, sampling locations, collection methods, equipment)</li> <li>o Laboratory Activities</li> </ul> </li> <li>8. Please rank the project based on the proposed status reports and dissemination of information (if applicable)?</li> </ol>	
<b>COST AND TECHNICAL FEASIBILITY FOR IMPLEMENTATION (one ranking consolidating all questions below)</b> <ol style="list-style-type: none"> <li>9. Please rank the project based on responses to elements that may affect the economical or practical feasibility of implementing the project on a full scale, and how these items will be evaluated during the demonstration</li> <li>10. Please rank the project based on its cost in relation to the information that is expected. How does its cost compare to that of similar projects (if any)?</li> </ol>	



## **FUNDING**

District and applicant cost share will be determined project-by-project based on the ranking assigned and funds availability. If comparable scope projects are proposed, only that of lower cost is likely to be funded. The Natural Resources Conservation Service (NRCS) staff will quantify costs for infrastructure improvements. The following items can be funded up to 100%:

- Infrastructure improvements for BMP optimization above and beyond what would be considered traditional BMP implementation (i.e., not required under current criteria for issuance of an Environmental Resource, Consumptive Water Use, or Everglades Works of the District permits, or traditional BMPs that need no further demonstration),
- Phosphorus and flow monitoring to determine BMP effectiveness, and
- Engineering, scientific, statistical, surveying work in support of BMP optimization component of the project.

Engineering and surveying for traditional BMPs required for permit criteria will not be funded. Infrastructure improvement BMPs to meet current permit criteria will be funded if indispensable for the demonstration project. However, it is anticipated that they will be funded at lower rates, as the limited funds allow.

## **REIMBURSEMENT OF APPROVED COST**

Documentation for eligible expenses must be submitted to the HSWCD for reimbursement. Appropriate documentation includes canceled checks, receipts, invoices, etc. Upon approval of these documents by the HSWCD and the District, payments will be disbursed. The first payment will be disbursed upon installation, construction or implementation has started.

## EXHIBIT 4

### PAYMENT AND DELIVERABLE SCHEDULE

#### Payment

The HSWCD will retain 7.0% of each payment to the landowners for the cost of administering the grant program. This fee will be based on what is actually disbursed to the landowners and not the total payment amount or contract amount. The remaining funds will be for reimbursement to landowners and other stakeholders for contracted and completed work.

#### Schedule

FISCAL YEAR	PAYMENT DATE	AMOUNT	REIMBURSEMENT
2008	Phase 1 payment to HSWCD upon contract signature	\$80,000	50% of Annual Funding of \$160,000 to establish the funds necessary to initiate payments for the demonstration projects (estimated May 2008)
	Upon receipt of first financial expenditure report documenting 80% of initial payment of 80,000 has been disbursed	\$80,000	Estimated September 2008
2009	Upon receipt of documentation that 80% of all previous installments have been disbursed, and submittal of 2008 Annual Expenditure Report	Not to exceed \$170,000	Date to be determined
2010	Upon receipt of documentation that 80% of all previous installments have been disbursed, and submittal of 2009 Annual Expenditure Report	Not to exceed \$170,000	Date to be determined
Final financial expenditure report	No more than 30 days after projects have been completed, all grant funds have been disbursed, or agreement end date, whichever comes first.		
HSWCD return unused funds	No more than 45 days after projects have been completed, or agreement end date, whichever comes first.		

\* Funds for FY2009 and FY2010 do not become available until October 2008 and October 2009