

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2010	2011	2012	2013
Capital Expenditures	_____	<u>\$50,000</u>	_____	_____
Operating Costs	_____	_____	_____	_____
External Revenues	_____	<u>(50,000)</u>	_____	_____
Program Income (County)	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____
NET FISCAL IMPACT	_____	<u>\$0</u>	_____	_____
# ADDITIONAL FTE	_____	_____	_____	_____
POSITIONS (Cumulative)	_____	_____	_____	_____

Is Item Included in Current Budget? Yes ___ No X
 Budget Account No.: Fund ___ Agency ___ Org. ___ Object ___

B. Recommended Sources of Funds/Summary of Fiscal Impact

\$50,000.00 U.S. Fish and Wildlife Service CFDA 15.630

C. Department Fiscal Review: *JP*

III. REVIEW COMMENTS

A. OFMB Fiscal and /or Contract Dev. And Control Comments:

[Signature]
 OFMB *JB 9/20* *pm 9-30-10* *[Signature]* 10/1/10
 Contract Development and Control

B. Legal Sufficiency:

[Signature] 10-5-10
 Assistant County Attorney

This Contract complies with our contract review requirements.

C. Other Department Review:

 Department Director

AGREEMENT NO: 40181AJ215
CHARGE CODE: 41420-1124-0000 W5 (FY10)
AMOUNT: \$25,000.00
DUNS NO: 961644809

COOPERATIVE AGREEMENT

Between

U.S. DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

And

PALM BEACH COUNTY OF BOARD OF COMMISSIONS
PALM BEACH COUNTY ENVIRONMENTAL RESOURCES MANAGEMENT

I. COOPERATIVE AGREEMENT RECIPIENT:

Palm Beach County of Board of Commissions
Palm Beach County Environmental Resources Management
2300 North Jog Road, 4th Floor
West Palm Beach, Florida 33411

Recipient Class: County Government
Catalog of Federal Domestic Assistance Number: 15.630

II. AUTHORITY:

This agreement between the U.S. Department of the Interior, Fish and Wildlife Service (hereinafter referred to as the "Service") and the Palm Beach County Environmental Resources Management (hereinafter referred to as the "Recipient") is hereby entered into under the authority of Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16U.S.C. 661 et. seq.).

III. PURPOSE:

Funds from this Cooperative Agreement will assist in the implementation of the "Pondhawk Wetlands Restoration Project". The objective of this project is to recreate approximately 8.21 acres of wetland restoration area within the boundaries of Pondhawk Natural Area and 2.89 acres of littoral/uplands along a promenade trail. Specifically, the Palm Beach County Environmental Resources Management program will utilize 2010 Coastal Program funds for acquisition of native plant material and contractual work to revegetate 5.09 acres of upland/transitional areas and 6.01 acres of newly restored freshwater wetland and littoral areas.

IV. BACKGROUND

The project area is located approximately 2 to 3 miles from the Atlantic Ocean within Palm Beach County's Pondhawk Natural Area and Blue Lake which is owned by the City of Boca Raton. Pondhawk Natural Area is a 79-acre ecological preserve that was purchased by Palm Beach County in 2002. The site contains coastal scrub, scrubby flatwoods, mesic flatwoods, hydric hammock, and disturbed basin marsh.

Historically there were approximately 30 acres of wetlands on Pondhawk Natural Area which have been eliminated through regional drainage. Freshwater marshes and wet prairies were once found within a mile of the ocean along the entire Palm Beach County coastline. Restoring the 8.21-acre depressional freshwater wetlands to the project site will not only increase biodiversity within the natural area but also return one piece of the landscape that disappeared as the region was urbanized.

Restoration of the uplands, and creating a littoral shelf has the potential to improve water quality, hydroperiod and habitat within the freshwater Blue Lake. The entire project will create approximately 11.57 acres of high quality habitat where degraded, low quality habitat is present today. The project will be completed in two phases: removal of fill and re-contouring of the wetlands, and revegetation of both the upland/transitional and wetland restored areas.

The City of Boca Raton has signed an Interlocal Agreement with Palm Beach County to partner on the project. The City is providing technical assistance for project planning and funds for the restoration activities. The total project cost is estimated at over \$621,000.

V. SCOPE OF EFFORT:

The Service has offered financial assistance for acquisition of native plant materials and contractual activities associated with the project. The County is responsible for overseeing the specific on-the-ground activities and contractual obligations undertaken to achieve the project objectives.

A. The Service shall:

1. Provide funding in the amount of \$25,000.00 to facilitate the "Pondhawk Wetlands Restoration" project, as described in the attached proposal.
2. Provide project evaluation as needed, and provide technical assistance as needed and appropriate.

- B. Palm Beach County Environmental Resources Management shall:
 - 1. Perform, coordinate, contract, and carry out the proposed project as detailed in their attached proposal, Attachment A. Attachment A is hereby incorporated and made part of this agreement.
- C. Project performance will be measured by successful completion of the planting plan as outlined in Attachment A.

VI. PERIOD OF PERFORMANCE:

The period of performance of this agreement is from September 1, 2010 through September 1, 2012.

VII. AWARD AMOUNT:

- A. TOTAL (NOT-TO-EXCEED) AWARD AMOUNT: \$50,000.00
- B. TOTAL AMOUNT FUNDED TO DATE: \$25,000.00
- C. FUNDING INCREMENTS: The Recipient is advised that the Service's obligation to provide funding for funding increments included in this agreement is contingent upon (i) satisfactory performance and (ii) the availability of funds. Accordingly, no legal liability on the part of the Service exists unless or until funds are made available to the Recipient and notice of such availability is confirmed in writing to the Recipient.

VIII. APPROPRIATION DATA:

APPROPRIATION: 41420-1124-0000 W5 \$25,000.00 (FY 10)

IX. PAYMENT PROVISIONS:

- A. Upon acceptance of the terms and conditions of this agreement, the Recipient may submit requests for payment using Standard Form 270, Request for Advance or Reimbursement, no more frequently than monthly. (Standard Form 271 must be used if agreement is for construction.) The Debt Collection Improvement Act of 1996 (P.L. 104-134) requires that all federal payments made by an agency after July 26, 1996, must be made by electronic funds transfer unless the recipient certifies that they do not have an account at a financial institution or authorized payment agent.
- B. The original and two copies of each payment request (SF 270) shall be submitted to the Service Project Officer identified in Article XI.A. of this agreement. Additionally, an interim report and copies of pertinent receipts

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and invoices must be included with each payment request. Upon approval, the Service Project Officer shall forward the payment request and one copy to the Budget, Planning and Financial Services Officer for processing.

- C. Should the County be unable to complete the provisions of this agreement, all monies provided by the Service which prove to be cancelable obligations or unallowable costs in accordance with OMB Circular A-87 ("Cost Principles for State and Local Governments") or the approved budget, shall be refunded to the Service.
- D. This agreement is intended to support a particular project for a specific period of time. Any portion of funds advanced to the Recipient that are not expended at the completion of the period of performance of this agreement shall be returned to the Service, along with any interest earned on that amount.

X. ADMINISTRATIVE OFFICER:

The Administrative Officer for this agreement is:

Janice McNeill
Contract Specialist
U.S. Fish and Wildlife Service
1875 Century Boulevard, Room 310
Atlanta, GA 30345
Phone: 404-679-4056
FAX: 404-679-4057
E-Mail: janice_mcneill@fws.gov

XI. PROJECT OFFICERS:

A. Debbie DeVore
U.S. Fish and Wildlife Service
1339 20th St
Vero Beach, FL 32960
Phone: (772) 562-3909 x324
Fax: (772) 562-4288
Email: Debbie_DeVore@fws.gov

B. Richard Walesky
Palm Beach County of Board of Commissions
Palm Beach County Environmental Resources Management
2300 North Jog Road, 4th Floor
West Palm Beach, Florida 33411

Phone: (561)-233-2400
Fax: (561)-233-2414
Email: RWalesky@pbcgov.org

XII. REPORTING/DELIVERY REQUIREMENTS:

- A. **Interim Reports:** Interim reports will be submitted on a semi-annual basis to the Service Project Officer identified in Article XI.A. of this agreement. The first interim report is due 6 months after the date this agreement is executed. At a minimum, reports will include detailed information on any deviations from the scope of work contained in this agreement; project progress to date; summary of data collected to date; findings with supporting preliminary data and/or analyses; maps containing data points and/or other pertinent information; pertinent digital data; copies of any published journal articles resulting from the funded project; digital photographs; and plans for the upcoming year. All spatial data collected in association with this agreement will be submitted annually in the format of the May 30, 2008, SFESO Spatial Data Submission Requirements (attached).
- B. **Final Report:** Within 90 calendar days after the agreement completion date as defined in the agreement or in the most current modification, the Recipient Project Officer shall submit a final report to the Service Project Officer identified in Article XI.A. of this agreement. A copy of the final report shall also be forwarded to the Service Administrative Officer. The final report will include raw data, digital data, and photographs. All spatial data collected in association with this grant agreement will be submitted in conjunction with the final report in the format of the May 30, 2008, SFESO Spatial Data Submission Requirements (attached). We will work with the Recipient to ensure that these data are for the Service use only and will not be cited without prior approval from the Council.

C. **Federal Financial Report (Standard Form 425)**

Annual

An annual Federal Financial Report (Standard Form 425) shall be submitted within 90 calendar days after the agreement year (i.e. 12 months after the approved effective date of the agreement and every 12 months thereafter until expiration date of the agreement.) Recipient shall submit an *original* to the Service Administrative Officer and a *copy* to the Service Project Officer.

Final

A final Federal Financial Report (Standard Form 425) shall be submitted within 90 calendar days after the expiration date of the agreement or termination

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of support. Recipient shall submit an *original* to the Service Administrative Officer and a *copy* to the Service Project Officer.

XIII. TERMS AND CONDITIONS:

The Department of Interior regulations governing assistance agreements with state, local, or Indian tribe governments at subparts A-E of 43 CFR Part 12 Administrative and Audit Requirements and Cost Principles for Assistance Programs, (plus relevant circulars of the Office of Management and Budget as referenced in these regulations), are applicable to this agreement and are incorporated by reference with the same force and effect as if they were given in full text. Upon request the Service's Division of Contracting and Grant Services will make the full text of these regulations available.

XIV MODIFICATIONS:

Modifications or renewals may be proposed at any time during the period of performance by either party and shall become effective upon approval of both parties.

XV. SPECIAL PROVISIONS:

- A. The Recipient is responsible for obtaining all permits necessary to complete the proposed work.
- B. The Recipient is responsible for obtaining any necessary permission from private property owners to complete the proposed work.
- C. The Recipient remains obligated to all other applicable Federal, State, and local statutes, ordinances, and permitting requirements.
- D. Data collected during the project, including photographic documentation of processes, procedures, and results, may be used by the Service on public documents including reports, websites, brochures, and other outreach and educational products.
- E. The Service will be acknowledged, as a contributing partner, on any signage installed regarding the project. Any publications or presentations produced as a result of this project will also acknowledge the Service.
- F. The Service's liability will be governed by the Federal Tort Claims Act (28 U.S.C. 2671 *et seq.*). The extent of the Recipient's liability shall be governed by the laws of the State of Florida.

- G. The Recipient will comply with sections 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a-10c, popularly known as "Buy American Act").
- H. Recipients of grants/cooperative agreements and/or sub-awards are encouraged to adopt and enforce on-the-job seat belt use and policies and programs for their employees when operating company-owned, rented, or personally-owned vehicles. These measures include, but are not limited to, conducting education, awareness, and other appropriate programs for their employees about the importance of wearing seat belts and the consequences of not wearing them.

IN WITNESS WHEREOF, the parties hereto have caused this Cooperative Agreement to be executed as of the date therein written.

PALM BEACH COUNTY
BOARD OF COUNTY
COMMISSIONERS

U.S. DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

BY: _____
Burt Aaronson, Chair

BY: _____

DATE: _____

TITLE: CHIEF, CONTRACTING AND GRANT
SERVICES DIVISION

APPROVED AS TO TERMS
AND CONDITIONS

DATE: _____

BY: Richard E. Walesky
Richard E. Walesky, Director

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY

ASSISTANT COUNTY ATTORNEY DATE

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ATTACHMENT A

U.S. Fish and Wildlife Service South Florida Coastal Program

PONDHAWK WETLANDS RESTORATION PROJECT PROPOSAL

Contact Information

Applicant: Palm Beach County Board of County Commissioners (local government)

Richard E. Walesky, Director, Palm Beach County Environmental Resources Management (Investigator); 2300 North Jog Road, 4th Floor, West Palm Beach, Fl 33411; (561)-233-2400 phone; (561)-233-2414 fax; RWalesky@pbcgov.org

Frank Griffiths, Environmental Program Supervisor, Palm Beach County Environmental Resources Management (Co-Investigator); 2300 North Jog Road, 4th Floor, West Palm Beach, Fl 33411; (561)-233-2400 phone; (561)-233-2414 fax; FGriffit@pbcgov.org

Lee Lietzke, Environmental Analyst, Palm Beach County Environmental Resources Management (Co-Investigator); 2300 North Jog Road, 4th Floor, West Palm Beach, Fl 33411; (561)-233-2400 phone; (561)-233-2414 fax; LLietzke@pbcgov.org

Project Objectives

The Pondhawk Wetlands Restoration Project will recreate approximately 8.21 acres of wetland restoration area within the boundaries of Pondhawk Natural Area and 2.89 acres of littoral/uplands along a promenade trail. The wetland restoration area will be constructed to replace a historic sawgrass marsh that once ran through the property prior to the drastic drop of the groundwater table due to the regional drainage. The wetland restoration area, which until recently has been dominated by Brazilian pepper (*Schinus terebinthifolia*), will be scraped down to remove the soil to elevations between 12 and 18 inches below the groundwater table. The wetland restoration area will consist of two cells separated by a berm. The northern cell will recreate a seepage slope and will be inundated only during the wet season. The southern cell will be constructed as a depressional marsh with a deep area designed to be inundated year round as deep water refugia.

This project will be conducted in two phases. Phase I will be the earthwork to excavate the 8.21-acre wetland restoration area to the appropriate elevations and move the fill to the Blue Lake shoreline to create the littoral shelf. The wetland restoration area will consist of 4.9 acres of wetlands and 3.31 acres of upland/transitional habitat. The fill will cover approximately 2.89 acres of Blue Lake to create approximately 1.11 acres of wetlands and 1.78 acres of upland/transitional restoration along the trail area; for a total of 6.01 of wetlands and 5.09 acres of upland/transitional areas. Phase II will be the planting of the 5.09 acres of upland/transitional areas, and the planting of 6.01 acres of wetland restoration and littoral shelf creation area.

Project Location and Description

The project area is located approximately 2 to 3 miles from the Atlantic Ocean within Palm Beach County's Pondhawk Natural Area (Attachment 1), and Blue Lake which is owned by the City of Boca Raton. Pondhawk Natural Area is a 79 acre ecological preserve that was purchased by the county in 2002. The site contains coastal scrub, scrubby flatwoods, mesic flatwoods, hydric hammock, and disturbed basin marsh. Historically there were approximately 30 acres of wetlands on Pondhawk Natural Area which have been eliminated through regional drainage. Freshwater marshes and wet prairies were once found within a mile of the ocean along the entire Palm Beach County coastline (Davis 1943). Restoring the 8.21-acre depressional freshwater wetlands to the project site will not only increase biodiversity within the natural area but also return one piece of the landscape that disappeared as the region was urbanized. Restoration of the uplands, and creating a littoral shelf has the potential to improve water quality, hydroperiod and habitat within the freshwater Blue Lake. The entire project will create approximately 11.57 acres of high quality habitat where degraded, low quality habitat is present today. The project will be completed in two phases detailed below.

Phase I

This phase began in January 2010 and is anticipated to be complete by the summer of 2010. Partnership funds are not being requested to perform any of these work activities. Earth moving equipment is being used to excavate and move fill from the wetland restoration area. Survey equipment will be used as the soil is excavated to contour the wetland restoration areas to the correct elevations for the seepage slope and the depressional marsh. As the fill is removed, most of it will be deposited along the shoreline of the manmade Blue Lake to create a littoral shelf and to give this lakeshore a more natural contour. The fill area will also serve as the subbase for a 12-foot wide multi-use trail planned along the shoreline. The placement of turbidity curtains, twice-daily turbidity monitoring, and background sampling outside of the construction area will be conducted in accordance with state and federal guidelines to minimize any environmental impact to Blue Lake.

Phase II

Phase II is the planting portion of the project, and where assistance is being requested from the South Florida Coastal Program. Trees will be planted in the filled area along the littoral zone. Approximately 0.28 acres will be planted with native trees such as red maple (*Acer rubrum*), pond apple (*Annona glabra*), dahoon holly (*Ilex cassine*), red bay (*Persea borbonia*), and cabbage palm (*Sabal palmetto*). Large trees will be selected for this area to create the appearance of a mature forested area. Trees selected will range in size from 3 gallon pots to field grown trees at least 10 feet in height.

Additionally, both the restored wetlands and the remainder of the littoral shelf will be revegetated in Phase II (Attachments 2a & 2b). The wetland restoration project has 5 zones of vegetation planned for the area based on target elevations. The deepest area will be Zone A located in the depressional marsh, with a minimum water depth of 5 feet covering 0.15 acres. This area will be a mix of open water planted with floating species such as fragrant water lily (*Nymphaea odorata*). Zone B, a 0.30-acre transition zone around Zone A, will be planted with emergent vegetation such as spike rush (*Eleocharis* spp.), soft stem bulrush (*Scirpus validus*), and pickerelweed (*Pontederia cordata*). Zone C, covering 4.10 acres, including a significant area

of the seepage slope, will be vegetated with wetland grasses such as sawgrass (*Cladium jamaicense*) and maidencane (*Panicum hemitomon*). Zone D is a 3.31-acre transitional zone surrounding Zone C that will be planted with species such as spartina (*Spartina bakeri*), dune sunflower (*Helianthus debilis*), and saw palmetto (*Serenoa repens*). Zone F will be set aside as an area for future colonization of cutthroat grass. Pondhawk natural area contains the only native population of cutthroat grass and this area will be used to expand the existing population.

Similar zones are planned for the littoral shelf with minor changes in the species composition. Zone A is a 0.23-acre area along the shoreline of the littoral shelf creation area with an expected water depth of 2 to 3 feet. This area will be open water planted with scattered spatterdock (*Nuphar luteum*) and fragrant water lily. Zone B, covering 0.24 acres located both inshore from Zone A and in a wet swale along the pathway will be planted with emergent vegetation such as spike rush, soft stem bulrush, and pickerelweed. Zone C, extending 0.83 acres along the shoreline at higher elevations than Zone B, will be planted with a wide mix of wetland plants including spike rush, pickerelweed, golden canna (*Canna flaccida*), fire flag (*Thalia geniculata*), blue flag iris (*Iris virginica*), sawgrass, giant leather fern (*Acrostichum danaeifolium*), red maple, and red bay. Zone D covers 1.78 acres over the remainder of the littoral shelf, including the areas adjacent to the pathway and surrounding the trees planted in Phase II (Zone E). Vegetation planned for this area includes spartina, dune sunflower, and saw palmetto. The wetlands will be predominately planted w/ liner material, while the saw palmettos, red maple and red bay trees will consist of 1 gallon, 3 gallon and 7 gallon plants.

Project Benefits to Coastal Ecosystems

The wetland creation area will replace a community that has been lost from the area for decades. After the water table was lowered in the region, the project site became vegetated primarily with the invasive exotic Brazilian pepper which provides little habitat to native species. This recruitment of invasive exotic species into desiccated wetlands is a common phenomenon throughout the region. This and similar wetland restoration projects return this missing community back to the landscape, increasing biodiversity in the region for generations to come.

The surrounding upland communities include coastal scrub, scrubby flatwoods, and mesic flatwoods. Returning a depressional marsh to the plant community matrix provides essential habitat components for species such as gopher frogs (*Rana capito*), a species of special concern in the State of Florida that lives primarily in scrub and related upland communities but requires wetland ecosystems for breeding (U.S. Fish and Wildlife Service 1999).

Several other wetland dependent listed species are expected to benefit from the wetland restoration. The wood stork (*Mycteria americana*), listed as endangered on both federal and state lists has already been seen in the project area during Phase I construction of the restoration project. It is anticipated that they will use the restored depressional marsh as additional foraging habitat. One of the principal threats to the wood stork has been the loss or degradation of wetlands in central and South Florida (U.S. Fish and Wildlife Service 1999). Other state-listed wading birds that will also benefit through expanded foraging habitat include the little blue heron (*Egretta caerulea*), the snowy egret (*Egretta thula*), tricolored heron (*Egretta tricolor*), and the white ibis (*Eudocimus albus*). Black-necked stilts (*Himantopus mexicanus*) have also already been utilizing the wetland during the construction phase of project.

A similar wetland creation completed in March 2006 at the nearby Yamato Scrub Natural Area attracted a wide array of species to the area including a half dozen duck species, American bittern (*Botaurus lentiginosus*), the state and federally listed American alligator (*Alligator mississippiensis*), greater yellowlegs (*Tringa melanoleuca*), black-necked stilt (*Himantopus mexicanus*), willet (*Catoptrophorus semipalmatus*), common snipe (*Gallinago gallinago*), and sora (*Porzana carolina*). Nesting ospreys (*Pandion haliaetus*) have utilized this restoration project for 3 years in a row. This wetland restoration also attracted a nesting pair of least grebes (*Tachybaptus dominicus*). This pair successfully hatched 2 chicks. This is the first documented least grebe nest in Florida. Usually a resident of the Caribbean, the least grebe is only occasionally observed in Florida. Species and numbers of dragonfly, pondhawk and insects have also increased dramatically around the restored wetland on that natural area.

Having a diversity of plant communities across the landscape may help animal species adapt to habitat alterations resulting from climate change. While the direct benefits of this restoration project to adaptation to climate change cannot be calculated, the restoration will increase the biodiversity of the area which, along with other restoration projects, may help increase South Florida's resiliency to climate change.

Contributing Partners

The **City of Boca Raton** (local government), as outlined in the Interlocal Agreement between Palm Beach County and the City of Boca Raton, is responsible for the following:

- The City agrees to split the cost 50/50 for the creation of the Blue Lake Pathway along the littoral shelf. (The City's cost will be \$80,000.00).
- The City agrees to work closely with the County to prepare design/development plans for the littoral shelf/shoreline restoration project along the Pondhawk portion of the lake shoreline.
- The City agrees to expeditiously review any engineering design plans that include the Natural Area, as well as those for the proposed Blue Lake Pathway and littoral shelf creation/shoreline restoration project to be built on the City property by the County and that require approval by the City.
- The City will identify a staff member as the contact person to interact with the County in planning for and managing the Natural Area, including the restoration project.

Project Costs

The total cost to complete both phases of the wetland restoration project is \$621,607. The amount of **\$36,000** in partnership funds are being requested to aid in the wetland planting for Phase II of the project.

Phase I

Phase I will include all earthwork and is estimated at \$415,000. No USFWS Coastal Program partnership funds are being requested for this portion of work.

Phase II

Phase II will include the planting of native trees, grasses, shrubs and wetland vegetation.

- Tree planting: \$115,000.00 (6 acres @ \$19,166.66 per acre)
- Grasses/Shrubs: \$26,940.00 (4.49 acres @ 6,000.00 per acre)

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- **Wetland vegetation: \$36,000.00 (6 acres @ 6,000.00 per acre)**
- Staff time: \$28,667.00
- Total estimated Planting costs: \$206,607.00

Statement of Products

Before clearing and construction of the wetland restoration and the littoral shelf, the project area contained approximately 8.21 acres impacted land vegetated with Brazilian pepper and 2.89 acres of reservoir with little value as fish and wildlife habitat. The wetland restoration project will produce 6.01 acres of wetlands and 5.09 acres of upland and transitional plant communities.

Time Frame

The total restoration project is estimated to take a total of around 9 months to complete. Phase I started 1/2010 and is estimated to be completed by 08/2010; Phase II is anticipated to start 09/2010 and be completed 09/2011. Annual monitoring occurs in February and will include updates on the restoration project.

Actions to Date

The County currently conducts several activities on the site which will aid in the overall success of the restoration project and include:

- Initiation of the earthwork portion of the restoration project.
- Hydrologic monitoring- conducted monthly to measure changes in the hydroperiod on the site and will help with measuring success of the restoration project.
- Photomonitoring- conducted annually to help provide a long-term visual record of changes in the vegetative composition and will help with measuring success of the restoration project.
- Invasive exotic vegetation removal and control- the initial sweep in 2006 targeted all exotic species and annual follow-up treatments will be conducted. The initial removal allowed for the earthwork portion of the project to begin.
- Volunteer events- frequently held to assist with trail maintenance, invasive vegetation removal, and various management activities as needed.
- Annual stewardship reports- submitted annually to Florida Communities Trust, are part of the acquisition grant award requirements and include structural improvements, management activities, and restoration plans, activities and updates.

Permits

The following permits/authorizations have been received:

- United States Army Corps of Engineers (Federal)- dredge and fill permit
- South Florida Water Management District (State)- environmental resources permit
- City of Boca Raton (Local)- environmental permit

Literature Cited

Davis, J.H. 1943. The natural features of southern Florida, especially the vegetation and the Everglades. Florida Geological Survey Bulletin No. 25.

U.S. Fish and Wildlife Service. 1999. South Florida multi-species recovery plan. Atlanta, Georgia. 2172 pp.

BOARD OF COUNTY COMMISSIONERS
PALM BEACH COUNTY, FLORIDA

BUDGET AMENDMENT

Fund 3654 Environmental Resources Capital Projects

ACCOUNT NAME AND NUMBER	ORIGINAL	CURRENT	INCREASE	DECREASE	ADJUSTED ENCUMBERED	REMAINING
	BUDGET	BUDGET			BUDGET / Expended	
					9/22/2010	
<u>REVENUES</u>						
<u>Pondhawk Natural Area</u>						
381-E412 3139-Fed Grant Other Physical Environment	0	0	50,000	0	50,000	50,000
TOTAL RECEIPTS & BALANCES	16,401,406	16,401,406	50,000	0	16,451,406	
<u>EXPENDITURES</u>						
381-E412 -Pondhawk Natural Area 6504 - Iotb Non Infrastructure	203,411	203,411	50,000	0	253,411	253,411
TOTAL APPROPRIATIONS & EXPENDITURES	16,401,406	16,401,406	50,000	0	16,451,406	

Environmental Resources
Management

INITIATING DEPARTMENT/DIVISION
Administration/Budget Department Approval
OFMB Department - Posted

Signatures & Dates

Richard S. Wolubny 9/28/10
Janice 9-30-10

BY BOARD OF COUNTY COMMISSIONERS

AT MEETING OF

October 19, 2010

Deputy Clerk to the

Board of County Commissioners